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Developing and implementing a peer tutoring program at the middle school level

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DEVELOPING AND IMPLEMENTING A PEER TUTORING

PROGRAM AT THE MIDDLE SCHOOL LEVEL

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Interdisciplinary Studies

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by

Mark Derryl Witvliet

September 2004

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Approved by:

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Bob London, Ph.D., First Reader   August 3, 2004
                                     Date

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Sam Crowell, Ph.D., Second Reader

ABSTRACT

If structured properly, peer tutoring is one method of teaching that has proven to be effective. For this project, I will first review the literature on peer tutoring, including the history of peer tutoring, the educational theory underlying effective models of peer tutoring, the different models of peer tutoring, the potential benefits of peer tutoring, and the keys to implementing a successful peer tutoring program. After reviewing the literature, a peer tutoring program was developed, critiqued, tweaked, and finally implemented for seventh and eighth grade students.

Students were paired together with one student becoming the tutor and the other the tutee. These pairs of students worked together for thirty-five minutes a day, five days a week, for nine weeks.

The results of the project were positive. The tutors involved in the program stated that it challenged them to think of the material in a new way and it also made school more enjoyable. The tutees showed progress with less late homework and an increase in grade point average.

ACKNOWLEDGMENTS

I would like to thank Bob London Ph.D. for all the time, encouragement, and support he has shown me throughout the duration of this project. I would also like to thank Sam Crowell and Timothy Thelander for the advice and guidance necessary to put the finishing touches on this project.

In addition, I would like to thank the administration, staff, and students of Redlands Christian School. Ray Leenstra and Russell De Kock gave me the opportunity to implement this program at our school. My fellow staff also made sacrifices so that I could put this program into practice. Finally, I would like to thank the students of Redlands Christian. They are the reason I love my job.

DEDICATION

I would like to dedicate this project to my family. To my parents, John and Betty Witvliet, who taught me from an early age the importance of education. I would also like to dedicate this to my wife, Laura. Her support, encouragement, advice, patience, and understanding helped me tremendously as I completed this Master's program.

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CHAPTER ONE

INTRODUCTION

Teaching children in our country is becoming more
difficult everyday. In some schools in California, class
sizes are increasing to thirty or forty students in a
classroom, while the state's budget is decreasing. In
fact, in the proposed budget for the 2003-04 school year,
Governor Davis proposed to cut millions of dollars from
the budget that would be used for education (Newman,
2003). At the same time, educators are feeling pressure
from the politicians and the media to increase scores on
standardized tests.

The questions educators need to ask are how can we
effectively teach all of our children in this context? How
can a teacher work with the students who struggle and give
them the individualized attention they need? How can a
teacher challenge the top students and get them to process
information at a more advanced level? How do you keep
students on task and prevent them from becoming bored with
school?

On a personal note, I currently teach in a middle
school in Redlands, California and have taught at this
school for seven years. My biggest struggle as a teacher

has been meeting the needs of all my students. I want to challenge all of my students without moving too fast that I leave others behind. However, I do not want to go through the material so slow that students are bored, become uninterested, and lose their desire to learn.

As I looked for answers to my questions, I found one program that could possibly answer many of my questions. This method that has proven to be effective, if implemented correctly, is for students to teach one another. Peer tutoring has been used successfully at many different levels ranging from elementary schools to universities. There are also many different models of peer tutoring, all of which can be effective depending on the teaching situation.

In this project, I wanted to take the research already completed, design a program that is consistent with the literature, and implement the program in my setting so that both tutors and tutees would benefit. I really wanted the students to enjoy the program, and at the same time see positive results in regards to their schoolwork.

As I started researching the topic of peer tutoring, I was surprised, delighted, and overwhelmed to find out so many different ways to implement a peer tutoring program.

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I narrowed my focus and looked at five distinct areas of peer tutoring. In chapter 2, I reviewed the research concerning the history of peer tutoring and realized that this has been practiced for a lot longer than I ever imagined. There is also educational theory with underlying approaches to peer tutoring. In addition, there are many benefits of implementing a peer tutoring program for the tutor, tutee, teacher, and the school. There are many different models of peer tutoring that can be effective and so I needed to find one that I felt would work well in my educational setting. The last thing I looked for in my research was common components to many different successful programs.

After concluding my review of the literature, I designed a program that I felt would be effective in my middle school setting. I paired a tutor and tutee together and had them work with one another in study hall for nine weeks. Students would work on the same material and be able to confer with one another during study hall every day.

In the methodology, it states how to test the effectiveness of this peer tutoring program. It is imperative to keep in mind that there are two major goals of implementing this peer tutoring program. First of all,

I wanted to challenge my top students and to make their learning experience more enjoyable. This peer tutoring program forces students to look at the material in a more advanced way as it is more difficult to explain how to do something than just doing it yourself. The second goal of the program is to help students who are not reaching their full potential. In order to help students reach their potential, most of the students needed help with organization, the amount of late work they turned in, and their grades.

Overall, I was very pleased with the results of the program as stated in chapter 4. All of the tutors enjoyed being a part of the peer tutoring program and would definitely be a part of this program again. The tutees also benefited from being in this program. The majority of them had a decrease in the number of late assignments and saw some improvement in their grades.

I was pleased as I watched students help one another with their work. Not only did they help each other with their homework, they also developed a friendship with one another that carried on outside the walls of the school.

In chapter 5, I summarize my results and conclusions. I was very pleased with the peer tutoring program. The results were encouraging and the students really enjoyed

participating in the program. It worked well in the middle school situation that I currently teach and I believe it would have a positive effect on work well in other teaching situations as well.

CHAPTER TWO

REVIEW OF THE LITERATURE

As I began looking at peer tutoring, I quickly
realized I needed to narrow my focus. Peer tutoring can be
used in many different forms and in a variety of settings,
not just educational settings. Due to the vastness of the
subject, I narrowed the focus to look at and research five
different aspects of peer tutoring. I believe these five
areas will give me a good foundation as I begin to develop
my own peer tutoring program.

First, I will look at the history of peer tutoring to
understand where this idea came from and to see how it has
evolved over the years. Second, I will look at the
educational theory that supports developing and
implementing a peer tutoring program. Third, I will
investigate the different peer tutoring models currently
used in education. This should help me develop a program
that is ideal for my teaching situation. Fourth, I will
research the benefits of implementing a peer tutoring
program. I want to see if developing and implementing a
peer tutoring program will answer the difficult questions
I identified in chapter 1. Finally, I will look at the
common components to a successful peer tutoring program.

This information will be vital to developing a successful
peer tutoring program.

History

Peer tutoring is not a new trend in education. "As
Jenkins and Jenkins writes, 'Tutorial instruction (parents
teaching their offspring how to make a fire and hunt and
adolescents instructing younger siblings about edible
berries and roots) was probably the first pedagogy among
primitive societies'" (Kalkowski, 2001, ¶. 1). Later in
history, the role of mentoring and apprenticeship became
more visible as blacksmiths, weavers, and cooks trained
individuals in their respected occupations through a
system of mentoring and apprenticeship.

It was natural then to introduce the concept of
tutoring into an educational setting. Andrew Bell did just
that. At the age of 26, Bell was given a job as
superintendent during the late 1700's for a school of
orphans in India. He was frustrated and dismayed with the
progress of his students and came up with a new system of
teaching. In this system every student had a role in the
class. The class was divided evenly into two groups, the
tutors and the tutees. The tutor's role was to make sure
that their pupil understood the material. Bell quickly

found that the behavior of the students improved as well as the whole learning environment becoming more enjoyable (Allen, 1976; Ehly & Larson, 1980; Goodlad, 1998; Topping, 1988; Kalkowski, 2001). Bell states, "The school is thus rendered a scene of amusement to the scholars, and a spectacle of delight to the beholder.... For months together it has not been necessary to inflict a single punishment" (Allen, 1976, p. 13). Bell published a report of this new method, and a professional educator in England, Joseph Lancaster, quickly endorsed the idea.

Joseph Lancaster opened a school in 1798 and was interested in educating children who normally would not receive any education. By 1801, 350 students were enrolled in Lancaster's school. He quickly discovered that 350 students were too many for one person to teach. Therefore Lancaster implemented a system in which pupils taught each other. He believed that teachers do not necessarily need to be experts.

> Any boy of eight years old, who can barely read writing, and numerate well, is, by means of the guide containing the sums and the key thereto, qualified to teach the first four rules of arithmetic, simple and compound, if the key is correct, with as much accuracy as mathematicians who may have kept school for 20 years. (Goodlad, 1989, p. 25)

In addition, Lancaster claimed that learning is a social act and that teaching is best carried out in social conditions. Lancaster believed that in implementing this system one would be able to teach 1000 students at once (Allen, 1976; Ehly & Larson, 1980; Goodlad, 1989; Topping, 1988).

After peer tutoring got off to a quick start, the spread of this method subsided from the late 1800's until the 1960's. During the 1960's, many different programs that involved children teaching children were implemented in the United States. In the summer of 1967, the National Commission on Resources for Youth started a pilot program in which children who struggled in school were trained to be teachers (Goodlad, 1989). In 1971, Gartner and a few other people were starting to document the resurgence of interest in peer tutoring (Allen, 1976; Goodlad, 1989). In the 1980's, the interest had spread to Great Britain and many other countries around the world. One of the largest peer tutoring programs in the world today is located in Israel. This program called PERACH has an estimated 45,000 students involved in their program (Bloom, 1976; Ehly & Larson, 1980; Goodlad, 1989; PERACH, 2003, Topping, 1988).

Presently, peer tutoring is being implemented in many different forms, including same age programs, college

writing centers, cross-age programs, homework help, and class work peer tutoring programs (Coenen, 2002; Gaustad, 1993; Goodlad, 1989).

Educational Theory

William Fowle took the systems that Lancaster and Bell created and provided educational theory to support implementing peer tutoring programs. In 1866, Fowle looked at these systems and declared that students would make better teachers than adults because they could more easily communicate with one another. He also thought students considered each other's feelings and knew each other's capacities better than adults. In addition, he thought that peer tutoring would make sense educationally, because students who taught retained information better than students who tried to learn using rote memorization (Ehly & Larson, 1980).

Fowle believed that peer tutoring was effective because of the social interaction of the peers. The Russian psychologist, Lev Vygotsky, developed this idea further. One of the major themes of Vygotsky's theoretical framework is the idea that social interaction plays a vital role in the cognitive development of children. He states "Every function in the child's cultural development

appears twice: first on the social level and later on the individual level;" (Social Development Theory, n.d., ¶. 1). Therefore, it is imperative to put children into social settings so that they may begin to understand different concepts and apply them in social settings. If children learn and apply ideas and concepts in a social setting, then they will be able to internalize these concepts, because they are meaningful to the child (Bruner, 1997; Glassman, 2001; Social Development Theory, n.d.).

Another central idea in Vygotsky's theory is the concept known as the "Zone of Proximal Development." The Zone of Proximal Development is a certain time span in which an individual is limited to reach his/her potential for cognitive development in a particular area (Social Development Theory, n.d.). Vygotsky believed using social interaction such as "shielding the learner from distraction...sequencing steps to understanding, promoting negotiation, or by some other form of 'scaffolding' the task at hand" (Bruner, 1997, p. 69) was critical to learning. According to the concept of the Zone of Proximal Development, students' skills concerning appropriate concepts can be developed greater in collaboration than if the student works alone (Bruner, 1997; Glassman, 2001).

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The value and importance of implementing a peer-tutoring program can be seen after looking at Vygotsky's beliefs. He believed that social interaction is very important and vital to learning. In a peer-tutoring program, children are working in social settings that will help them solve problems that they would not be able to solve on their own. They have the help, encouragement, and support of their peers and are pushed to reach their highest level. By implementing an appropriately structured peer-tutoring program, students are more likely to achieve their potential.

Specific Models

Peer tutoring has a detailed history and strong educational theory that supports its existence. Peer tutoring can be implemented in many ways in today's educational setting. The two most common peer-tutoring programs are same age programs and cross-age peer tutoring programs. However, these are not the only ways to implement a peer-tutoring program. Homework helpers, the monitor system, and interactive pairs can all be effective depending on the goals of the program. Each of these forms of peer tutoring is described in this section.

One of the most common models is same-age peer

tutoring. The expert/tutee model is when students of the

same age come together to work through the necessary

material. This can be done during class, after school, or

during special times throughout the day. One student

becomes the expert and tutor, while the other student, the

tutee, receives individual instruction. In the classroom,

students can be paired off or assigned to always work with

the same student. One student helps another with an

assignment, basic skills, or a difficult concept (Allen,

1976; Ehly & Larson, 1980; Gaustad, 1993; Kalkowski, 2001;

Osguthorpe, 1984).

A peer-tutoring program, in which students are the

same age, has many advantages. First, it is much easier to

arrange a time for the tutoring to occur. For example,

tutoring opportunities can occur during class when working

on a mutual assignment, working on a project, or during a

time that is especially set aside. With the demands placed

on teachers, being able to arrange two or more classes

(cross-age tutoring) can be very difficult (Allen, 1976;

Gaustad, 1993; Kalkowski, 2001).

The second advantage of same age peer tutoring is

that it is easier for the students to communicate with

someone their own age as Fowle suggested earlier (Ehly &

Larson, 1980). One reason that peer tutoring can be very

effective is that students feel comfortable with others

their own age. With the proper structure, they feel they

can ask each other any question without feeling

unintelligent. Often students feel embarrassed asking

questions in front of the whole class or to the teacher.

When students work with a tutor in class, there is the

opportunity to ask a question to a peer, which tends to be

a less embarrassing situation for most students.

The third advantage of a same age peer-tutoring

program is that often a sense of community is built within

a classroom. Often students are in the same classes with

the same students. Research has indicated that by

implementing a peer-tutoring program, students care more

for each other, and friendships begin to develop outside

of the tutoring situations (Osguthorpe, 1984). An example

of this occurred last year in the eighth grade classroom

in which I taught. Two boys were asked to work with one

another during study hall each day. One of the boys did

well academically and was respected by his peers. The

other student did not do well academically, and his peers

found him to be annoying. The boys did not know each other

very well, but after working together every day for a few

weeks, a friendship began to build. Soon after that, the

two boys spent some time together outside of school and
their friendship continued to develop.

The second most common peer tutoring program is
cross-age peer tutoring. Often schools have a program set
up in which they use cross-age tutoring. In this method,
students from different ages and grades are paired
together. The older student teaches the younger. For
example, cross-age tutoring occurs when a class of fourth
graders and a class of first graders come together for
thirty minutes a week. The fourth graders spend the time
helping the first graders with their reading and math
skills. During this time, each first grader receives
individual instruction and instant feedback from their
tutor.

The major advantage of a cross-age tutoring program
is everyone in one class can be a tutor. This can be
extremely beneficial for many reasons. First, you can
spend class time preparing the students for tutoring,
which is crucial in implementing a peer tutoring program
(Goodlad, 1998). Each tutor needs to know how to give
proper feedback to his or her tutee. At some time
throughout the tutoring process, students will need to
know how to give praise, encouragement, and constructive
criticism to the tutee. This training could be a class

project. These skills are important in today's world and everyone would be given the opportunity to develop them. Some time can also be given to reflecting on how the tutoring process is going. The class can talk together about specific details that have gone well or need improvement. This time can be a valuable learning opportunity.

Second, the students who struggle academically in a class have the opportunity to teach someone. Studies have shown that many times the tutor is the person who improves the most academically (Bernard, 2002). At first glance, this may not make sense, but this idea goes back to the notion that if you can teach the material well, you must first understand the material. Students need to use higher order thinking skills when they present material in a meaningful way to their peers. "To be able to teach requires a deeper understanding of a math skill or word-attack skills. Thus, being a tutor should enhance a child's own academic abilities" (Pierce, Stahlbrand, & Armstrong, 1984, p. 2). Studies have shown that students with disabilities and others in remedial settings have shown tremendous improvement while tutoring (Osguthorpe, 1984).

Third, it can be very beneficial to have students who are considered at-risk to be involved in a peer-tutoring program. A recent study (Nazzal, 2002) looked at using students who were identified as at-risk for dropping out of school as mathematics tutors. These eighth grade tutors worked with sixth graders in mathematics for six weeks. At the conclusion of this study, there were "positive effects in the tutor's academic performance, feelings of alienation, perceptions of success in school, and perceptions of ability" (p. 78). This study also concluded that behavior improved and tutoring provided extra motivation for students to attend school.

Fourth, a peer-tutoring program can help develop a sense of community, not just in one classroom, but also throughout the school. When students from different grades see each other around the campus, they start to take notice of each other and care for each other. In the school that I work, an eighth grade girl has been working with a group of second graders for the past nine weeks. The second graders love it when the older student comes to the classroom. These students have built a relationship that transcends grade levels. This experience has been wonderful for both parties. All of the students, the

second and eighth graders, enjoyed working with each other and now look for each other on the playground.

The monitor system is similar to a same-age peer tutoring system. In this system, students are placed in charge of a few students. The tutor's task is to monitor the progress of the group of students making sure that they have mastered a particular skill or successfully completed an assignment. This system is often used when students of different abilities are within one classroom. For instance, a multi-grade classroom can effectively use this system as the older students help the younger students with learning basic skills. Also, this type of program can be implemented in a class in which there are a few students who already understand the material or easily grasp a new concept. The students who understand can help a group of students who struggle learning the material. The tutors might change depending on the subject or concept, which could make each child feel important and needed in their classroom setting (Goodlad, 1989).

Another model of peer tutoring involves homework helpers. This form of peer tutoring takes place when the tutor is present and available for a set period of time outside of class. In this model, if students have difficulties with homework, they can receive extra help.

In some programs of this type, students need to setup an appointment and in others they can just drop in and receive help. Many colleges and universities have writing centers where students can receive guidance on writing papers. Others have math tutoring hours, when students can receive help if they do not understand a particular problem or assignment. This is much easier to implement with older students such as those in post secondary settings. These students can typically arrange their schedules easier than young students who may be restricted by their transportation limitations (Goodlad, 1989).

Finally, the last model of peer tutoring involves students who are the same age and is called the interactive pairs model. This method may occur in a classroom when two students of the same ability are paired together. For example if two students finish an assignment, they check to see how they did with their partner, or children can read aloud with one another (Goodlad, 1989).

There are advantages to this type of system. This method is quick and easy for the teacher to implement. Often it is beneficial for the student to receive immediate feedback concerning if they did a particular problem correctly. It can be logistically difficult and

not time efficient for the teacher to check each student's paper, but by using the interactive pairs, students are more likely to receive instant feedback. Also, in this model teachers typically need to give instruction only once or twice.

Benefits of a Peer Tutoring Program

In general, the results of implementing one of the previously mentioned peer tutoring programs are overwhelmingly positive. Everyone who is involved can benefit from this approach including the tutors, the tutees, the teachers who supervise, and the school itself. In this section, I will describe the benefits for each of these groups.

All different methods of tutoring have a positive effect on both the academic and social development of students. In fact, many studies show that the gains for the tutor are greater than the gains for the tutee (Bernard, 2002; Gaustad, 1993; Keim & Tolliver, 1993; Madewall, 2001; Pierce et al., 1984). As stated earlier, this may contradict popular opinion, but this idea goes back to the notion that if you can teach the material well, you must first understand the material. Thus, being a tutor should enhance a child's own academic abilities. A

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study was conducted in which three groups of students needed to prepare for a test. One group read the material only, a second group read the material and was expected to teach the material to someone, but did not. The third group read the material and actually taught the material to someone else. The results were fascinating as the group that read and taught performed better than the group that expected to teach, which in turn performed better than the group that read only (Goodlad, 1998). The study supports the hypothesis that peer tutoring helps the tutor considerably.

The benefits to the tutor are numerous. The first benefit that the tutor receives is academic development. "Results of pre and post-tests indicate that tutoring sessions were beneficial to all students involved" (Pierce et al., 1984, p. 3). Teachers have found that tutors benefit from repeated exposure to previously learned material, which in turn leads to better long-term retention. In addition, students also use higher order thinking skills when trying to present the material in a meaningful way. It takes a well-developed thought process to successfully communicate the material to the tutee. Other academic benefits include students becoming more organized, being able to concentrate better on one topic,

and improving their work habits (Allen, 1976; Cohen, 1982; Gaustad, 1993; Goodlad, 1989).

The second benefit is that the social skills of the tutor also typically improve. Students who are trained as tutors are taught interpersonal skills such as giving encouragement and affirmation (Pierce et al., 1984). These skills are continually being developed, as it is imperative for tutors to give feedback to the tutee. Other social benefits for the tutor include increased positive social interactions between peers, increased empathy toward peers, better communication between peers, decreased inappropriate behaviors, and improved attitudes toward school (Allen, 1976; Coenen, 2002; Gaustad, 1993; Nazzal, 2002; Pierce et al., 1984).

The third benefit of peer tutoring is that the self-esteem of the tutor develops. They realize that they are making a meaningful contribution to other human beings and are members of a productive society (Allen, 1976; Gaustad, 1993; Goodlad, 1989; Keim & Tolliver, 1993). "The experience of being needed, valued, and respected by another person produced a new view of self as a worthwhile human being" (Bernard, 2002, ¶. 1). In addition, as their self-esteem increases, so does their motivation. Students who prepare to and actually teach are more intrinsically

motivated and more actively and positively engaged in the learning environment (Barone & Taylor, 1996).

The fourth benefit that the tutor in a peer-tutoring program receives is a better relationship with the teacher or adult supervisor. Often a student will work closely with a teacher and will start to build a relationship that goes beyond the normal teacher student relationship. This same relationship can be seen with a coach/player or a director/actress. Furthermore, the tutor starts to think like a teacher. This does not necessarily lead to improved test scores, but it does allow the student to understand why the teacher is teaching a particular way, which in turn can lead to better discussions in the classroom (Goodlad, 1989).

Peer tutoring benefits not only the tutor, but also the tutee. Perhaps the greatest academic advantage is individualized attention. The tutee gets instant feedback whether it is praise, encouragement, and/or corrections. The tutee is also more active in his/her learning. They need to participate in the learning process, and receiving individualized attention forces the student to be involved and actively participating. The tutee also receives enhanced learning time, which can be used to reinforce concepts, relearn ideas, and improve skills (Allen, 1976;

Allsop, 1997; Barone & Taylor, 1996; Cassanova, 1990;

Goodlad, 1998). In addition, the tutee's success

determines the pace of learning, which helps the tutee

stay comfortable in his or her learning environment

(Coenen, 2002; Keim & Tolliver, 1993; Pierce et al.,

1984). The tutee also receives the benefits of a positive

role model. He or she sees firsthand the study habits and

work ethic of a successful student (De Marco, 1993).

Furthermore, the individual attention creates an

environment in which more time is spent on task and

students are motivated to strive for success (Coenen,

2002).

There are also social ramifications for the tutee.

There is often a bond formed between tutor and tutee. This

bond often leads to friendship and companionship beyond

the classroom and can create a sense of community

throughout the classroom. There is also an enhanced

awareness and appreciation of others. This can lead to

less derogatory comments and a more positive learning

environment (Barone & Taylor, 1996; Pierce et al., 1984).

Tutees gain academically and socially, but they also

learn more about themselves. For instance, the tutee can

feel a greater sense of responsibility, enhanced

motivation, and increased self-esteem from having other

students take interest in him or her. Moreover, students develop an understanding of fairness, showing kindness, and respect toward others (Allen, 1976; Barone & Taylor, 1996; Gaustad, 1993; Madewell, 2001; Pierce et al., 1984). These characteristics can transfer to outside the classroom and can infiltrate their lives.

If the tutors and the tutees benefit, then obviously the teachers benefit by using a peer tutoring program as well. In these times, many teachers are overwhelmed with more and more responsibility, and peer tutoring gives more opportunity for individualized instruction (Keim & Tolliver, 1993). Moreover, teachers find it exciting to see young students become more responsible and involved in their learning. It is fulfilling for many teachers to move over and become facilitators of learning while students become the leaders and initiators of the learning process (Barone & Taylor, 1996). "We have learned...that tutoring allows us to connect with their (tutee's) struggle to make meaning" (Gillespie & Lerner, 1999, p. 9). The learners also develop positive attitudes, which makes the job more enjoyable for the teacher (Barone & Taylor, 1996; Coenen, 2002; Kalkowski, 2001; Keim & Tolliver, 1993; Pierce et al., 1984).

Another benefit to the teacher is that peer tutoring can lead to a sense of community in the classroom. The classroom is filled with students who want to help and care for one another. Often, a classroom that has a peer tutoring program develops an atmosphere of cooperation and genuine compassion for each other (Goodlad, 1989).

The third benefit for the teacher is that if the students are on task and working well together, they can spend more time working on curriculum, grading papers, and arranging conditions in which students can learn (Keim & Tolliver, 1993). This is very beneficial as class sizes and the demands on teachers are increasing.

Since peer tutoring has benefits for the tutor, the tutee, and the teacher, then the result of a successful peer tutoring program is a better, more efficient school. Although it is difficult to assess the benefits of peer tutoring school wide, an effective peer tutoring program seems to consistently increase test scores and cost-effectiveness.

Many references cited specific instances in which test scores increased. In this review of the literature, four examples will illustrate this point dramatically. First, in one four-year-old program, the participants' math scores rose 4.5% and language scores increased by

9.4%. The average grade in core subjects increased from a D+ to a C+. More importantly, students showed an increased responsibility, improved study habits, and less late homework (Van Zant & Bailey, 2002). In a second study, the students in the experimental group scored between 0.5 and 1.4 grade equivalents and 10 percentiles higher than did the students in the matched control group (Berliner, 1990). In a third study, after using a peer tutoring program for one year, one school reported the following results:

- 82% of teachers and 71% of parents perceived a significant improvement in their students' social skills.

- 73% of teachers and 76% of parents perceived a significant improvement in student's self-esteem.

- 36% of teachers and 38% of parents perceived a large to very large improvement in academic skills.

- 94% of the parents and teachers wanted the program to continue. (Keim & Tolliver, 1993)

Finally, Greenwood and Terry (1993) performed a three-year study in which he monitored students using class wide peer tutoring. He states, "It was truly impressive to observe the continuing, improved performance of the peer tutoring group" (p. 508). He went on to describe the numerous "long-term benefits" of a peer tutoring program such as

significant growth in math and reading skills, and fewer students placed into special education classrooms. These are just a few examples that illustrate how peer tutoring positively effects the students involved.

A school district may observe all the advantages of a peer tutoring program, but be concerned with the cost of implementing a peer tutoring program. However, the cost of starting and implementing a peer tutoring program is minimal. "Peer tutoring is one of the least costly, most effective teaching methods" (Berliner, 1990, p. 17). In fact, experts have compared the cost-effectiveness of peer tutoring, Computer Aided Instruction (CAI), reducing class size and increasing the length of the school day. After reviewing the results, peer tutoring was found to be the most cost-effective strategy of the four (Kalkowski, 2001).

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Key Components to a Successful
Peer Tutoring Program

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There are several characteristics most successful peer tutoring programs have in common. The first of these characteristics is that the tutors are trained (Ehly & Larson, 1980; Jenkins & Jenkins, 1981; Goodlad, 1989). The tutors need to be able to explain the material to the students in a meaningful way. Their explanations need to

be clear and concise so as to not confuse the learner. Peer tutoring is only effective if the tutor can help the tutee understand the material. One effective way to train students to present the material is by role-playing (Jenkins & Jenkins, 1981; Goodlad, 1989). Tutors can come together for a few weeks and take turns tutoring one another. Students receive feedback on the effectiveness of their tutoring, and it gives the tutor an opportunity to practice presenting the material.

Not only does the tutor need to be trained in presenting the material, but the tutor also needs to be trained to give proper feedback (Ehly & Larson, 1980; Goodlad, 1989). Giving proper and prompt feedback is one of the most important tasks of a tutor. Tutors need to learn how to praise a student for their work and effort. It is important for the tutor to let the tutee know if he/she is doing well or if he/she is working hard. Students who struggle need to hear this affirmation on a regular basis and it is the tutor's job to give them this encouragement. In addition, a tutor needs to learn how to give criticism to another student without discouraging the student. Tutors need to be able to correct the tutee without making the tutee feel dumb, stupid, or inferior. Giving constructive criticism is really important to help

the tutee see the mistake he/she is making, yet the tutor

needs to do this tactfully. To illustrate the importance

of giving proper feedback, teachers may show examples

using skits of the students using correct and incorrect

forms of feedback. It also may be helpful to have the

tutors think about his/her past educational experiences

and talk about the specific things they liked and disliked

about the teachers they have had (Allen, 1976; Ehly &

Larson, 1980; Goodlad, 1989; Jenkins & Jenkins, 1981).

A tutor also needs to learn how long to let a student

struggle. This can be very difficult for the tutor as they

may become impatient with the tutee. The tutor should not

get so impatient with the learner that they just do the

work for them. Also, the tutor needs to make sure that the

tutee does not feel the frustration of the tutor as it

might lead the tutee to believe that he/she is stupid and

unintelligent. At the same time, the tutor should not let

the tutee struggle for too long of a period of time. You

do not want the tutee to become so frustrated that he/she

gives up, so the tutor needs to be trained to give proper

cues to the tutee. Knowing how long to let a child

struggle can be difficult for the tutor, therefore,

training is imperative (Allen, 1976; Ehly & Larson, 1980;

Goodlad, 1989; Jenkins & Jenkins, 1981).

Tutors should also be knowledgeable about the purpose of the program. The tutor needs to realize that by participating in a peer tutoring program there is less emphasis placed on competition (Fulk & King, 2001). This can be difficult for a tutor as often the notion of being the best drives them. By becoming a tutor, a student places less emphasis on competition and more time and energy on cooperation. Since traditional educational settings use competition (valedictorian, grade point average, top student awards), it is necessary for the students to understand the differences between cooperation and competition.

The second important characteristic of a peer tutoring program is the need to have training and reflecting time for the tutors throughout the peer tutoring program (Goodlad, 1989; Jenkins & Jenkins, 1981). There needs to be time for the tutors to come together to share their frustrations, inadequacies, and success stories. Tutors can share ideas that went over well when working with their student, and they can also talk about their frustrations. By talking about these experiences, the tutors will develop their own ideas about effective teaching strategies. In addition, students will be able to see other students having the same experiences and realize

that they are not the only ones facing these difficulties. This component is critical in implementing a peer tutoring program as it allows the tutors to continue to develop into successful tutors.

The third component that is crucial in implementing a peer tutoring program is the need to have careful supervision and monitoring (Jenkins & Jenkins, 1981). There will be times in which students become distracted and get off task, it is important for the teacher to make sure the students use this time for which it was intended – tutoring. Also, there may be a group of students who do not work well together. If students are randomly placed together or if students are carefully partnered, there will be times when they do not get along or work well together. The teacher needs to see this immediately and make the necessary adjustments for the benefit of the tutor and tutee, as well as the other groups working around them.

The fourth component in a successful program is to always keep in mind the goal of the program. Each peer tutoring program will be slightly different and it is important to continually remind yourself of the goals for which you started the program. Students need to be reminded of the goals and know what the teacher's

expectations are throughout the program. Often teachers can start out with the goals in mind, but the program changes and really is not doing what it is intended to do. The goals of the peer tutoring program might change, but the teacher needs to know if the peer tutoring program is meeting the goals and expectations that are intended (Fulk & King, 2001).

Another key component of a successful peer tutoring program is for the program to have measurable outcomes. After a period of time, administrators, teachers, and students should see that the peer tutoring program is meeting the needs of everyone involved. Students need to see the results of their labor and know that they are improving academically, socially, or in self-esteem. By assessing students frequently, it gives staff feedback on the effectiveness of the tutors' lessons and can be very encouraging for the tutor (Gaustad, 1993).

Conclusion

At this time, it is important that teachers keep looking for ways to educate each and every child and challenge them to reach their highest potential. It is not getting easier to teach as schools are receiving less money from the state, class sizes are getting larger, and

the demands of standardized tests are becoming more and more prevalent. After examining the history and educational theory behind peer tutoring, one can see a method that challenges the tutor, helps the tutee, and benefits the teacher and school as well.

CHAPTER THREE

METHODOLOGY

The purpose of this project is to develop, implement
and evaluate a peer tutoring program at the middle school
level that is appropriate for my school context. In this
chapter I will discuss the steps taken to insure an
effective program, and how I will look at the evaluation
process to determine the effectiveness of the program.

To develop a peer tutoring program likely to be
effective in my context, I will take the following steps.
First, I will review the literature focusing on the
history, educational psychology, different models, and the
benefits of peer tutoring. Second, I will take the review
of literature and out of that develop a program that is
likely to be effective in my educational setting. Finally,
to increase the likelihood that the peer tutoring program
will be effective, I will ask three educators to read
through a description of the proposed program and give me
feedback concerning the program by way of a questionnaire
(see Appendix A). The educators will meet the following
criteria: at least fifteen years of experience in the
field of education, have successfully completed a Master's
degree or higher in his/her respective fields, and have a

variety of teaching and/or administrative experience. After receiving their feedback, adjustments will be made to the program.

There are two major goals of implementing such a program. First of all, I want to challenge the top students (tutors) and to make their learning experience more enjoyable. This is an opportunity for them to use their gifts and talents to help others in the classroom. The second goal of the peer tutoring program is to help students who are not reaching their fullest potential (tutees). By modeling successful study habits and receiving individual attention, tutees should start to experience success in the classroom.

One way in which I will test the effectiveness of this peer tutoring program is through feedback from the tutors and tutees. Students will be given evaluation forms to be filled out weekly to monitor their progress (see Appendix B & C). The tutors and tutees will fill out an evaluation that explains how they used their time, if problems occurred, how they felt the tutoring was going, if late homework occurred, complaints that they had, and positive results from this time period. Before completing the questionnaire, students will be reassured that this is to help the tutoring process and that they need to answer

all of the questions honestly. The students will be

reminded that the purpose is to make the peer tutoring

program better and that in no way will this affect their

grade. The partners will also be monitored very closely to

make sure that time was being used wisely and that the

match of tutor and tutee was effective. If a problem

occurs, we will try to work out the problem, the partners

would change, or in extreme cases, the tutor and tutee

would be dismissed from the program. Reports will also be

given periodically to administration on the effectiveness

of the peer-tutoring program.

In addition, at the conclusion of the program, tutors

and tutees will be given a questionnaire (see Appendix D &

E). The questions will help the tutors describe their

experience, including if it helped make their educational

experience more enjoyable, and if they have seen

improvement by being involved in a peer tutoring program.

I will develop these questionnaires and submit them to two

other educators for feedback and make appropriate

adjustments to the questionnaires.

Another way in which the peer-tutoring program will

be tested is by looking at the benefits that the program

has on the tutee. All of the students in the study have at

least four common classes: English, history, science, and

mathematics. For the purposes of the study, these four classes will be used to evaluate students in this study. There will be three areas concerning the tutees that will be the focus of the experiment. The first is the number of late or unfinished assignments by the tutee. Students who need tutoring often struggle with turning in their work on time. The subject's late assignments will be counted for both the third and fourth quarter. The third quarter is when the students will not be involved in a peer tutoring program. The number of late assignments will be compared to the number of late assignments for the tutee while participating in the peer tutoring program during the fourth quarter.

Secondly, the organization of the tutees will be evaluated. Frequently, the students who struggle have difficulties keeping track of their notes, assignments, and/or handouts. They are stuffed in books and folders and when the time comes to work with the items, they respond with a phrase like "I don't know where it is." One of the ideas that will be stressed to the tutors is to work on the organization of the tutees. I will observe their organization closely making random checks to determine whether students are able to find the paper that is required. Also, students would need to demonstrate the

ability to keep all of their papers in their proper folder. Our students are given a folder for science, history, math, and English. Students would need to make sure each subject's papers are in the correct folder. Furthermore, tutors will be asked at the conclusion if the tutee's organization improved.

The third item that will be evaluated concerning the tutee is the grades of the student. The grades (in the four similar classes) of the tutees will be averaged over the first three quarters and compared to their work in the fourth quarter. Evaluating progress in this manner is difficult since the tendency is that students' grades drop during the fourth quarter. This may be due to many factors such as more difficult material, lack of motivation, or spring fever. To control this tendency for grades to drop, the grades of the tutees will be compared to a random sample of students. The comparison will be made with the change of the average of the random sample between the quarters and the change with the average of the tutees.

There are three ways to test the effectiveness of the program. Experienced teachers will make sure there are no flaws in the program. Observation and students' response will help evaluate the program from the tutor's and tutee's perspective. The statistical analysis will

indicate whether the program had academic benefits for the tutee.

CHAPTER FOUR

THE PROGRAM AND ITS RESULTS

After reviewing the literature and submitting this to the expert professionals, I developed and implemented a peer tutoring program. In this chapter, I will describe the program I developed and illustrate the results of implementing a peer tutoring program in my classroom.

This peer tutoring program is designed for seventh and eighth grade students who are currently enrolled at Redlands Christian School. In this peer-tutoring program, students (a tutor and a tutee) will be paired together. The tutors will be students who maintain at least a B average, show good study skills, and want to use their gifts and abilities to help other students. The students who meet these criteria will be interviewed to make sure they are willing to participate. Tutors also need to maintain their grades. The tutors must be role models for the other students, so it is imperative they demonstrate a high level of achievement.

The tutees are students who need help in learning the material or reaching their fullest potential. Students with these characteristics will be the ones I target; however, they too will have to go through a selection

process. A committee of five educators will decide which students need the extra guidance and students will be interviewed to ensure they work hard throughout the tutoring sessions.

As stated in the review of the literature, before the tutoring program begins, it is advisable for the tutors to receive training. In the training sessions the following topics will be addressed. First, tutors will discuss how to begin a tutoring session and set a positive tone. Tutors will also look at different ways to give clear directions, confirm correct responses, and show empathy toward the tutee. We will also discuss the fact that it is imperative the tutors do not do the work of the tutee, yet guide the tutee so they understand the material. The tutors will discuss these topics in their training sessions before they actually begin tutoring sessions. These training sessions will occur either at lunch or during study hall before the program starts. Furthermore, after the tutoring sessions have begun, there will continue to be training opportunities for the tutors.

Once a list of tutors and tutees is obtained, and the students have fulfilled the necessary requirements, each tutor will be assigned to a tutee. Pairing students who work well together may be challenging. When pairing

students, I will attempt to partner them with someone with
whom they will work well, and have the same classes
throughout the day. This will help insure that students
have the same homework, tests, and projects. Students will
also have someone in their classes whom they could ask a
quick question even if they are not in a structured
tutoring session.

Tutoring sessions will take place at the end of each
day during study hall, which is thirty-five minutes in
length. The study hall will be in my classroom so I can
monitor the work of the students and answer any questions
the tutors might have. The first thing the tutors and
tutee will do when arriving at a tutoring session is make
sure they have correctly recorded all the assignments.
Students will check each other's homework planners. This
will help the tutee know exactly what needs to be done and
hopefully diminish the number of late assignments.

After students have completed filling out their
homework planners, the tutee will have an opportunity to
ask anything he/she did not understand during the day. The
tutor will then explain the material in a way that will
make it understandable for the tutee. The majority of the
tutoring session will be spent working on their homework.
The tutee and tutor will work on the same assignment

allowing the tutee to ask questions. Also, the students

will stop after a few minutes to check and see if they are

doing the problems or assignment correctly. For example,

if students were working on a mathematics assignment, they

will stop after every five problems to make sure they are

going through the correct steps to solving the problems.

The tutor will stop and see if the tutee knows how to do

the problems, and they will both check to see that they

did not make any careless mistakes. Students will have the

rest of the time to work on their homework in this

fashion. By implementing peer tutoring in this manner,

students will be working on the current curriculum and

working toward mastering this material.

Results of the Program

The program began with twelve pairs of students.

Halfway through the program, one of the tutors needed to

be dismissed due to other commitments during this time

period. Her tutee was given to another group. This was not

an ideal situation, but for the sake of all the parties

involved, it seemed like the best solution to this

problem.

As stated earlier, there were two major goals of the

program. The first goal was to challenge the top students

and to make their learning experience more enjoyable. At
the conclusion of the peer tutoring program, the tutors
were given a questionnaire (see Appendix D). Here are some
of the comments students wrote:

> "I love helping people."
>
> "The peer tutoring program gave me a feel of
> teaching. I want to be a 2nd grade teacher."
>
> "I like helping people; it gave me a really good
> feeling."
>
> "It was a lot of fun helping someone else."
>
> "I liked helping someone who needed it and it
> also helped me learn."

One of things the tutors realized throughout the
program was that they were also helping themselves. Here
are some of those comments:

> "The program helped me realize my mistakes."
>
> "I now catch many of my silly mistakes."
>
> "We actually helped each other. It was not one
> person doing the whole thing."
>
> "It helped me review my math skills"
>
> "It definitely helped both of us."
>
> "I do not make near as many careless mistakes."

To determine whether the peer tutoring program helped
make their learning experience more enjoyable, I asked
them the question, if they had to do it all over again
would they participate in the peer tutoring program. Of
the eleven tutors who completed the program, all eleven
said they would participate in this program again.

The second goal of the program was to help tutees reach their fullest potential. This was evaluated by looking at the tutee and the three things I was testing in this program: the number of late assignments, improved organization, and increased grade point average.

The first of these is the number of late assignments. To determine if there was improvement in the amount of late homework, I looked at the number of late assignments in their four common classes. Each of the students had science, history, English and mathematics all year long. I added the number of times they had late work in these classes for both third and fourth quarter. I then compared the results to see if there was an improvement (see Table 1). If the number of late homework assignments stayed the same or increased, then I placed the student in the category of did not improve. If the number of late assignments decreased by one, then the student is placed in the category slightly improved. If the student reduced the number of late assignments by two or more, then the student is placed in the category improved significantly.

Table 1. Amount of Late Homework

	3rd Quarter	4th Quarter	Change
Tutee #1	1	2	1
Tutee #2	4	1	-3
Tutee #3	3	1	-2
Tutee #4	6	2	-4
Tutee #5	5	1	-4
Tutee #6	1	1	0
Tutee #7	3	0	-3
Tutee #8	4	3	-1
Tutee #9	0	1	1
Tutee #10	4	3	-1
Tutee #11	6	4	-2
Tutee #12	11	14	3

Out of the 12 tutees I had in the program, four
students did not improve at all, two students slightly
improved, and six students improved significantly. If one
were to look at the percentages, 66.6% of the students
reduced the number of late assignments after being
involved in the peer tutoring program.

The second way the tutees were evaluated was by their
organization. As stated in the methodology, there were
three ways in which I monitored their progress. First, I
observed the organization of each of the tutees. Even
though every one of our students are given folders to keep
track of all of their papers, students often just stuff
paper in their books. During the course of the peer
tutoring program, I did not see an improvement in this

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aspect of organization. The students still used their books as a way to keep track of their papers. On more than one occasion, I heard the tutors complain about this to their tutee. Twice the tutees came back the next day with their papers in the correct folder, but the problem was that by the end of the next week, their papers were back in the book.

The second way that I evaluated the tutee's organization was by doing random checks to see if students could find their paper. I was pleasantly surprised as all of the students could find the papers they needed. However, I found this to be inconclusive and a hindrance as the program went along. While all of the students could find the necessary papers, it often took more time than should be necessary. For example, students would be working on mathematics and I would go over and ask to see a particular science paper. This would take time for the student to find the correct paper. They could always find it, but it was not always where it was supposed to be, so students would take a few minutes to go through a stack of papers before they could find the correct one. The bigger problem was this often changed the student's focus. The student who was working well in mathematics before I came over was now distracted. I found that this was not fair to

either the tutee or the tutor and therefore I stopped doing this midway through the program.

Third, I also had the tutor evaluate the tutee on their organization. Out of the twelve tutees involved in the program, four stated that the organization improved and eight said that the organization stayed the same. This was one of the frustrations of the tutors. The tutors always had their materials out and were ready to go, but the tutees often took much longer to get ready to work.

The third way in which the tutees in the peer tutoring program were evaluated was grade point average. As stated in the methodology, this is difficult to compare since grades generally drop during the fourth quarter. Therefore, I took a control group of twelve random students in the seventh an eighth grade (see Table 2). I compared the grades of the tutors (see Table 3), tutees (see Table 4), and a control group (see Table 4) during the third and fourth quarters. The third quarter the students were not involved in the peer tutoring program and the fourth quarter they were. The information is listed in the tables below.

Table 2. Control Group's Grade Point Average

	3rd Quarter	4th Quarter	Change
Control 1	3.10	3.04	-0.06
Control 2	3.43	3.54	0.11
Control 3	3.64	3.73	0.09
Control 4	2.99	3.34	0.35
Control 5	3.40	3.44	0.04
Control 6	3.87	3.86	-0.01
Control 7	2.37	1.81	-0.56
Control 8	3.29	3.09	-0.20
Control 9	3.18	2.81	-0.37
Control 10	2.49	2.16	-0.33
Control 11	2.87	2.67	-0.20
Control 12	3.33	3.20	-0.13
Avg.	3.16	3.06	-0.10

Table 3. Tutor's Grade Point Average

	3rd Quarter	4th Quarter	Change
Tutor 1	3.83	3.77	-0.06
Tutor 2	3.34	3.39	0.05
Tutor 3	3.74	3.76	0.02
Tutor 4	3.87	3.77	-0.10
Tutor 5	4.13	4.04	-0.09
Tutor 6	3.10	2.67	-0.43
Tutor 7	3.87	4.00	0.13
Tutor 8	3.91	3.86	-0.05
Tutor 9	3.49	3.49	0.00
Tutor 10	3.51	3.71	0.20
Tutor 11	3.06	3.39	0.33
Avg.	3.62	3.62	-0.00

Table 4. Tutee's Grade Point Average

		3rd Quarter	4th Quarter	Change
Tutee 1		2.57	2.86	0.29
Tutee 2		2.04	2.04	0.00
Tutee 3		3.24	3.23	-0.01
Tutee 4		2.78	2.67	-0.11
Tutee 5		3.01	3.00	-0.01
Tutee 6		3.20	3.33	0.13
Tutee 7		3.04	3.10	0.06
Tutee 8		2.09	2.81	0.72
Tutee 9		2.91	2.67	-0.24
Tutee 10		3.24	3.47	0.23
Tutee 11		3.73	3.64	-0.09
Tutee 12		2.97	2.61	-0.36
	Avg.	2.90	2.95	0.05

There are two ways in which I interpreted the data.
First, I looked at the averages of the three groups. The
grade point average of the control group went down from a
3.16 to a 3.06. The results of this group are typical for
most students. The students' grade point average usually
drops for a variety of reasons such as the material is
more difficult, there are more extra-curricular activities
in which they may participate, or they are tired of the
daily grind of the school year. The grade point averages
of the tutors stayed the same, while the grade point
average of the tutees actually went up from an average of
2.90 to an average of 2.95. The fact that these averages
stayed the same or went up from third quarter to fourth

quarter indicates that the peer tutoring program was successful for the tutee and the tutor.

The second way I examined the grades was to look at the twelve students from each group individually. I created four categories. The first is for substantial improvement which occurs if the student raised their grade at least two tenths of a point. The second category is for students who improve slightly. The students are place in this category if they raised their grade point average between zero and two tenths of a point. The third category, named slight decrease, is for students whose grade point average dropped between zero and two tenths of a point. The fourth category is for students whose grade point average dropped substantially. This occurred when the students' grade point average dropped over two tenths.

Table 5. Grade Point Average Improvement

	Improved Substantially	Slightly Improved	Slightly Decreased	Decreased Substantially
Tutors	2	3	5	1
Tutees	3	4	4	1
Control Group	1	4	2	5

When comparing the information in table 4, one can see that the number of students whose grade point average decreased substantially is significantly less for the

tutors and tutees. This is important because the tutees are often students who struggle in school and by the end of the year lose focus in their academic achievement. The fact that only one of the tutee's grade point average dropped significantly shows that the peer tutoring program was effective for the tutees.

I asked the tutees a few questions at the end of the program (see Appendix E). One of the questions was if the students felt they had benefited from being involved in this peer tutoring program. All twelve students involved in the peer tutoring program said the program helped them academically. I believe this is important as often attitudes about school can affect the students' effort, which in turn may affect their grades.

In conclusion, one needs too remember the two goals of the peer tutoring program. As stated earlier, the first goal is that I wanted to challenge the top students (tutors) in order to make their learning experience more enjoyable. The second goal of the peer tutoring program is to help students who are not reaching their fullest potential (tutees). After looking at the results discussed throughout the chapter I believe this peer tutoring program was successful. The tutors used their gifts and abilities to help others in the classroom and the tutees

benefited from the extra help. In general, they had less late assignments and their grade point average improved while the control group of students not in the program had their grade point average decrease. Overall, it was rewarding to see the students involved work together and improve.

consistent with the work of Lev Vygotsky and others. I
then researched the different models and benefits of peer
tutoring. This was crucial for me as I wanted to find a
model in which my students would be successful. I
concluded my research by looking at the key components to
a successful peer tutoring program.

After reviewing the literature, I developed a peer
tutoring program that I implemented at a middle school
level. This program ran for nine weeks and involved
pairing students who were in the same classes. Students
worked on their assignments together during study hall and
were able to ask each other questions as they went along.
The tutor also helped the tutee with organization. At the
same time, the tutors tried to help the tutees with any
concepts they did not understand.

When looking at the results of the program, it is
imperative to remember there were two major goals of the
program. The first goal was to challenge the top students
and to make their learning experience more enjoyable. The
overwhelming response is that the tutors enjoyed the
experience. It helped them with their own work as they
often discovered careless mistakes. Just as important was
the fact that the tutors enjoyed being involved in the
peer tutoring program. In fact, if they had the

opportunity to participate in the program again, all of them indicated they would choose to do so.

The second goal of the program was to help tutees reach their fullest potential. Tutees were evaluated on their number of late assignments, organization, and grade point average. The majority of the tutees had less late assignments when they were in the program than they did the previous quarter when not involved in the program. This is often an area with which the tutees have struggled in the past; therefore this was an important benefit of being involved in the peer tutoring program.

The program also looked at the organization of the tutees. Often, papers are stuffed in the textbooks or there is one folder with many papers randomly shoved in. This frequently results in lost papers or assignments that cannot be found. After completing the program, it was inconclusive if the students' organization improved. Often, it improved for a day or two, but the tutees would often slip back into the habits they had previously been accustomed to.

If I had the opportunity to do this project again, I would not focus on the organization of the students. I believe this is an important skill that can be used throughout one's life. However, due to the nature of the

study, there is not enough time to adequately handle the material the students are learning and at the same time develop the skill of organization.

The third area in which the tutees were evaluated was grade point average. The tutees' grade point averages improved, while the control group's grade point averages decreased. This was a positive sign for me. I decided to implement this during the fourth quarter, which is often the most difficult for a variety of reasons. It was significant that even though the material was more difficult and the focus often is gone during this time of year, the tutees were able to raise their grade point average. This increase could be attributed to the student's increased motivation and effort, more individualized instruction, instant feedback, or less late homework. All of these were the benefits of the peer tutoring program I implemented.

I realize this study has a few limitations. First of all, there were only twelve pairs of students who participated in the study. I would have liked to included more students in the program, but for a variety of reasons it seemed like twelve groups of students was a workable number. Second, this program was up and running for only nine weeks. Students were starting to develop a deeper

relationship with one another than just the normal day to day interactions. It would have been advantageous to have this program all year long. This would have had the tutees develop the positive work habits that were modeled by the tutors. Third, this program was specifically designed for the situation I am working. The amount of time students had to work and the model I used may not be the best for all situations.

One interesting thing occurred the year after I implemented this program. Due to a variety of reasons, I was unsure if I would be able to implement the peer tutoring program. I had two students who were not involved in the program ask me if I was going to have the peer tutoring program again. They said that the work was getting more difficult and they would like to be able to ask a peer questions concerning their mathematics work. A couple of weeks later, I had two students, new to the middle school, ask if they could be tutors in the peer tutoring program. One of them had an older sibling who was a tutor in the peer tutoring program. Both students felt they would be able to and wanted to help other students master the material.

Both of these instances in which students came up and asked if they could participate in the peer tutoring

program, whether as a tutor or a tutee, encouraged me. Students felt that the program helped them and they were willing to share this with others not involved in the program. The tutors were able to share with their siblings how good it felt to help another student. After hearing these two comments and looking at the results, I believe this peer tutoring program was a success.

APPENDIX A

QUESTIONS FOR EDUCATORS

Questions for Educators

Over the course of the past year, I have been working on developing and implementing a peer tutoring program. I am looking at implementing this program at the middle school in which I currently teach. I am asking that you carefully read the way I designed the program and give me any feedback that you think would enhance this peer tutoring program.

1. Do you have any experience with peer tutoring programs? If you have any experience please explain.

2. In you opinion, is the program outlined an effective way to implement a peer tutoring program? Why or Why not?

3. Are there any recommendations that you have to make this program more effective?

4. What do you think the outcome of implementing this program will be?

5. Is there any other additional feedback that you would give?

APPENDIX B

EVALUATION FORMS FOR TUTORS

Evaluation Forms For Tutors

Please rate the following questions from 1 – 4

1. Rate how you and your partner used your time this week.

    Did nothing   Used every minute
    1   2   3   4

2. Rate your partner's effort.

    Lazy   Tried hard to understand
    1   2   3   4

3. Rate yourself in your ability to help the other student.

    Wasted his/her time   He/she benefited greatly
    1   2   3   4

4. Explain any problems that occurred this week.

5. Is there anything that went really well? Explain.

APPENDIX C

EVALUATION FORMS FOR PEOPLE RECEIVING HELP

Evaluation Forms For People Receiving Help

Please rate the following questions from 1 – 4

1.	Rate how you and your partner used your time this week.

	Wasted Time							Very effective
	1					2				3					4

2.	Rate how well you think the tutoring sessions are going.

	Waste of time						Very effective
	1					2				3					4

3.	Are you seeing any improvement in your work?

	No improvement					Significant improvement
	1					2				3					4

4.	Explain any problems that occurred during study hall this week.

5.	Is there anything that went really well? Explain.

6.	Is there something that you really don't understand and would like help with?

APPENDIX D

END OF YEAR QUESTIONNAIRE FOR THE TUTORS

End of Year Questionnaire for the Tutors

1. Did you feel that the tutoring session has benefited the person you tutored? (circle one)

   Benefited greatly   Benefited somewhat   Did not benefit

2. Did your tutoring experience benefit you academically?

   Yes   No

3. Was the student you tutored organized at the beginning of the tutoring sessions?

   Yes   No

4. Did his/her tutoring improve throughout the quarter?

   Yes   No

For the next few questions, please write in complete sentences. You may write on the back of the paper.

5. Did the study hall help you in any way?

6. What things did you do to help the students become more successful?

7. What would make the tutoring sessions more helpful?

8. What things did you like about being involved in a peer tutoring program?

9. What things did you dislike about being in a peer tutoring program?

10. If you had the chance to do it all over again, would you be involved in the peer tutoring program?

APPENDIX E

END OF YEAR QUESTIONNAIRE FOR THE TUTEES

End of Year Questionnaire for the Tutees

1.   Did you feel that the tutoring session has benefited you? (circle one)

Benefited greatly   Benefited somewhat   Did not benefit

2.   Did the tutoring sessions help reduce the number of late assignments?

Yes   No

3.   Did you and your partner work well together?

Yes   No

For the next few questions, please write in complete sentences. You may write on the back of the paper.

4.   In what ways did the study hall help you?

5.   What would make the tutoring sessions more helpful?

6.   What things did you like about being involved in a peer tutoring program?

7.   What things did you dislike about being in a peer tutoring program?

8.   If you had the chance to do it all over again, would you be involved in the peer tutoring program?

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