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PEER TUTORING IN A FOURTH GRADE INCLUSION CLASSROOM

by  
Kathleen Weiss

A Thesis

Submitted in partial fulfillment of the requirements of the  
Master of Science in Teaching Degree  
of  
The Graduate School  
at  
Rowan University  
June 14, 2008

Approved by \_\_\_\_\_

Advisor

Date Approved 6/14/2008

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## ABSTRACT

Kathleen Weiss  
PEER TUTORING IN A FOURTH GRADE INCLUSION CLASSROOM  
2007/08  
Dr. David Hesse  
Masters of Science in Teaching

The purpose of this study was to discover what happens in a fourth grade inclusion classroom when peer tutoring is implemented. Peer tutoring was implemented as a test review strategy for five tests. Observations were recorded based on off task behavior, on task behavior, questions asked during the reviews, and students that finished in the allotted time. These results were compared to previous observations that were taken during typical test reviews. During the peer tutoring reviews, an average of 36.4 instances of on task behavior were observed, compared to an average of 23 instances during the typical test reviews. There was an average of 8.2 instances of off task behavior observed during the peer tutoring reviews, compared to an average of 19 instances during the typical reviews. During the peer tutoring reviews, an average of 9.8 questions were asked. During the typical reviews, an average of 13.5 questions were asked. In the typical test reviews, an average of 15.5 out of 18 students finished on time. During the peer tutoring reviews, 14.6 out of 18 students finished on time. Based on this data, it was concluded that peer tutoring is an effective reading strategy. Implications of these results and the use of peer tutoring are discussed.

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## CHAPTER ONE

### Introduction

It is one o'clock on a warm, sunny day and a fifth grade class has just returned from lunch and recess. The teacher begins to teach his sluggish students a complicated math lesson. Though it is like pulling teeth from this group of ten year olds, he completes the lesson and assigns twenty problems for class work. Johnny, understanding the lesson quite well, finishes the work fifteen minutes early and becomes restless. Classified with Attention Deficit Hyperactivity Disorder, he has difficulty controlling himself when he has nothing important assigned to do. He begins poking and prodding at his neighboring classmates who are trying to complete the work themselves. "Sit down and stop being a nuisance," the teacher corrects. Johnny slowly sits back down. Seconds later he gets up, walks over to the window, and starts to point and laugh at the preschool class that is enjoying a second recess. "I do not want to tell you to sit down again," the teachers yells, and Johnny returns to his seat, but not for long. He once again begins to torment his classmates and proceeds to receive a pink slip from the teacher and loses his recess for the following day. Discouraged, he returns to his seat, puts his head down, and refuses to do work for the remainder of the afternoon.

During the time that Johnny has finished his class work, gotten in trouble three times, and received a pink slip, a completely different situation is going on across the room. Lyla is severely struggling to move past number two on the class work. Math is difficult for her and she barely understood the lesson. The teacher helps her with number one, but she is too intimidated by him to ask for more help. Lyla looks up at me and says

through tears, “I just don’t understand. I can’t help it. If I can’t do it now, I am not going to be able to finish the homework and my mom is going to yell at me all night. I know she has to work and is not going to have time to help me.” Through her distracted eyes, I see the wheels in her head turning as she continues to worry about the pile of work that is building before her. Just as she is about to tearfully reveal more of these concerns to me, the teacher announces that it is time to move on to science and all class work that was not completed must be finished for homework. Lyla asks to go to the bathroom and comes back with puffy eyes. I could tell she was crying and I went to her to ensure everything was okay. Trusting, she told me, “I just don’t know how I am going to get through the day when all I can think about is the Math and how far behind I am.”

#### Story of the Question

I have always been interested in the topic of improving behavior problems without using drastic measures such as embarrassment, phone calls to parents, and pink slips. Though I fully understand that these measures are sometimes most certainly needed, I am a firm believer that they are not the teacher’s only options. I feel that certain students respond much better to positive attention for a problem than negative attention. In my individual experiences with children, I always try to use positive attention as my first option because, for some, attention is simply all they need. I believe it can make all the difference in a child’s behavior.

In the above situation, I know Johnny’s behavior would have drastically improved if he had the attention that made him feel important and needed. Having ADHD, he is often the victim of negative attention and reinforcement. He has received a bad reputation and is often not given much of a chance. As a newcomer and unbiased



onlooker to the school, I refused to believe what everyone was saying and really felt I saw a different child than everyone else. I saw an intelligent, happy child who received little attention at home and craved it in school. I saw a child who wanted to get noticed and wanted to help. I saw a student who worked hard all day long but sometimes just could not control himself when the opportunity to turn around and bother his classmates was presented to him. This child touched me and I never ceased from wondering if there was a way to channel his energy into something positive. One day I tried something. I was teaching the Math lesson and he, along with three other students, finished first. I gave them all a red pen and told them to check their classmates' work. It was not moments later that I noticed Johnny saying to a peer with a comforting arm on his shoulder, "There ya' go, do you get it now? I was a little confused at first, too. It's a tricky problem." Not only was Johnny not misbehaving, he was actually teaching another student that frequently struggled with math.

Referring to the above vignette, what would have happened if the teacher had sent Johnny over to help Lyla when he completed his own work? What would have happened if Johnny had a classroom job that made him feel important and special? What would have happened if Lyla had a peer tutor to rely on to help her better understand the class work? Perhaps if Johnny became Lyla's peer tutor, this entire situation could be drastically improved. Feeling needed, perhaps Johnny would not have acted out so much. Often feeling marginalized in the class because of his disability, he may have jumped at the chance to help one of his peers in need and Lyla might gain confidence in math and become better able to finish on her own. Since Johnny understood the concepts so well,

he could have easily conveyed his knowledge to her. Though she may not complete all of the work, she would have the ability to finish on her own and complete the homework.

A common misconception that I, myself, have always had is that students who are “bad” are not smart. In my recent regular education experience, however, I learned that I was very wrong. Some of the most poorly behaved students were among the brightest in the class. It truly amazed me. It was as if there was a rule that stated the more you misbehave during the lesson, the higher your grade is on the test. Then there were those students who sat in the back and never acted out, but were receiving lower grades. It is not to say that all of the smart children in the class misbehave, but I was amazed to see that many of the children who often acted out in class received some of the highest scores. Perhaps it was because it was the beginning of the year and the bright children were bored with the review math and reading lessons so they felt as though they had nothing better to do. They may have been bored in class, so they chatted. They were repeatedly telling the teacher, “we learned this in third grade,” or, “this is *so* easy.” They frequently complained about doing boring “busy work.” They finished their important assignment, so they wondered why they had to do more. And who can blame them. This experience really left me wondering if peer tutoring could decrease behavior problems during various classroom routines.

#### Statement of Research Problem and Question

Peer tutoring is a learning strategy that can be easily implemented in a classroom. Therefore, the research question of this study is, “What happens when peer tutoring is implemented in a fourth grade inclusion classroom?”

## Purpose Statement

Peer tutoring is a learning tool that has been widely implemented throughout our country. It is the process by which students, with the help of their teacher, help another student learn various elements or concepts (Reasoner, 2001). Students learn reciprocally as they coach their peers and correct misunderstandings. Both the tutor and the tutee benefit from this positive experience as they improve their academic and social skills. Peer tutoring aides in enhancing peer relationships as it increases academic potential. Tutoring among peers of the same age is perhaps the most common, while cross-age peer tutoring has also proven to be a resourceful tool for teachers.

Peer tutoring has proven to be successful in many areas of a classroom, most particularly reading. One of the most common peer tutoring programs used in schools for reading is titled Peer Assisted Learning Strategies (PALS). PALS was developed by Douglas Fuchs and Lynn Fuchs, along with their colleagues, at Vanderbilt University in 1998 (Fuchs, Fuchs & McMaster, 2007). PALS involves pairing a low achieving student with a high achieving student and having them tutor each other on an appropriate reading selection (Mastropieri, Scruggs, & Berkeley, 2007).

Peer tutoring has also been effective in enhancing the learning of students with disabilities. In a study to test these effects, class-wide peer tutoring was implemented in four middle school history classes (Mastropieri, Scruggs, Marshak, McDuffie, & Conners, 2006). The students were assigned randomly to either a peer tutoring classroom or a control classroom and both were taught the same material (Mastropieri, Scruggs, & Berkeley, 2007). At the end of this study, it was demonstrated that students in peer-tutoring classrooms outperformed students in other classrooms who received the same

material independently. Students with disabilities received scores significantly close to their typically achieving peers in comparison to students with disabilities from the non peer tutoring classrooms (Mastropieri, Scruggs, & Berkeley, 2007).

Peer tutoring increases the positive behavior with those students classified with emotional or behavioral disorders (EBD). These students, often compelled to be oppositional defiant, are encouraged by peer tutoring. These behaviors tend to lead to troublesome relationships with their teachers, inhibiting them from receiving opportunities to receive positive teacher attention, teacher praise and academic talk (Snyder & Sutherland, 2007).

Lauren Anderson, an elementary special education teacher, used peer tutoring in an attempt to reduce the behavior problems of her aggressive students (Anderson, 2007.)

Initially, her students expressed doubts. Having low self-esteems, they did not see themselves as being able to tutor. However, as the program continued, they were more than open to its requirements. Behavior problems, opposition to assignments, and low self esteem decreased greatly. Academic skills and positive attitudes increased (Anderson, 2007).

Many students have benefited from peer tutoring and have voiced their opinions. Surveys given to students indicated that students preferred peer tutoring to their typical classroom instruction greatly (Snyder & Sutherland, 2007). The students claimed to enjoy peer tutoring and because of the program implemented, they felt more motivated to participate in class and do well in school (Snyder & Sutherland, 2007).

### Organization of Thesis

This thesis examines peer tutoring and the possible effects of student learning. Chapter two discusses literature that pertains to peer tutoring. It examines the existing

studies conducted on peer tutoring and the results they have produced. Chapter three will discuss the methodology of the study that will take place in a fourth grade inclusion classroom. Chapter four will present the findings of this study and chapter five will discuss the implications of the study and how it can be used in the classroom.

## CHAPTER TWO

### Review of the Literature

Peer tutoring is a teaching strategy that has been utilized by classroom teachers for a number of years. It is a tremendous way for teachers to use their own students as resources in both the regular and special education classroom. Peer tutoring is the process by which students, with the help of their teacher, help another student learn various elements or concepts (Jones, 2001). Students learn reciprocally as they coach their peer and correct misunderstandings. Both the tutor and the tutee benefit from this positive experience as they improve their academic and social skills. Peer tutoring aides in enhancing peer relationships as it increases academic potential. Tutoring among peers of the same age is perhaps the most common, while cross-age peer tutoring has also proven to be a resourceful tool for teachers.

Peer tutoring can be useful to teachers in various aspects of the classroom. This literature review will discuss the dimensions of a classroom that are affected by the implementation of peer tutoring. The first section focuses on peer tutoring and how it affects reading. The second section discusses how peer tutoring impacts students with disabilities. The next section talks about students with emotional and behavioral disorders and how they respond to the implementation of peer tutoring. The fourth section discusses student reactions and opinions about peer tutoring versus their typical classroom instruction. The fifth section of this literature review focuses on cross-age tutoring and how it can affect both special and elementary school students.

## Peer Tutoring and Reading

Peer tutoring is most widely used in reading. One of the most common programs used in schools is titled Peer Assisted Learning Strategies (PALS). The program has been researched for nearly fifteen years. From this research, it was proven that this peer tutoring program improved the learning of all students in a classroom, from low-average to high-achieving (Fuchs, Fuchs & McMaster, 2007). PALS was developed by Douglas Fuchs and Lynn Fuchs, along with their colleagues, at Vanderbilt University in 1998 (Fuchs, Fuchs & McMaster, 2007). It has been used with children from Kindergarten through high school. Pairs of students are formed, according to ability, beforehand by the teacher. Most likely, pairs include one strong and one weak reader and they work together for about thirty five minutes each day. (Mastropieri, Scruggs, & Berkeley, 2007). The stronger reader begins, reading a passage aloud to the lower achieving student, also known as the tutor. The tutor corrects all mistakes that are made by the reader. When they are finished, the roles reverse and it is the weaker reader's opportunity to read (Mastropieri, Scruggs, & Berkeley, 2007). At the end of the five minute reading sessions, the students engage in a two minute conversation where each student asks the other what they learned and what was important in what they read (Mastropieri, Scruggs, & Berkeley, 2007).

The research has proven that PALS is a positive way to promote literacy among delayed students (Fuchs, Fuchs & McMaster, 2007). In a large study, twelve schools in urban and suburban districts were separated by both student achievement and socioeconomic status. Next, they were randomly assigned to be a PALS school or a control school. Twenty control classrooms continued their normal reading routine while

another twenty implemented the PALS program for fifteen weeks. Prior to the study, all classrooms were on a fairly equal level in terms of demographics, teacher experience and student reading achievement. At the conclusion of the study, however, it was noticed that students in PALS classrooms outperformed the control classrooms in terms of reading comprehension (Fuchs et al., 1997). The effects of these studies remained true for both low achieving and high achieving students. It also included students with learning disabilities who had been mainstreamed into regular education classrooms (Fuchs, Fuchs & McMaster, 2007).

#### Peer Tutoring and Students with Disabilities

Because of the Individuals with Disabilities Education Improvement Act, schools are obliged to place students in the least restrictive environment possible and encouraged to include them in the general education classroom to the fullest extent possible (Mastropieri, Scruggs, & Berkeley, 2007). Therefore, teachers must devise programs and activities that help students with disabilities to fit into the classroom both academically and socially. The implementation of peer tutoring can improve learning for all students, particularly those with disabilities.

Class-wide peer tutoring was implemented in four middle school history classes (Mastropieri, Scruggs, Marshak, McDuffie, & Conners, 2006). There were fifty five students involved in the study. Of the fifty five, fifteen students had disabilities. Students with disabilities were paired with typically achieving pairs and they worked together throughout the entire study. Researchers, in cooperation with the classroom teachers, developed study guides and review sheets that included important information that would be on end of the year high stakes tests (Mastropieri, Scruggs, & Berkeley,



2007). At the end of this study, it was demonstrated that students in peer-tutoring classrooms outperformed students in other classrooms who received the same material independently. Students with disabilities received scores significantly close to their typically achieving peers in comparison to students with disabilities from the non peer tutoring classrooms (Mastropieri, Scruggs, & Berkeley, 2007).

#### Peer Tutoring and Students with Emotional or Behavioral Disorders

Students who have emotional or behavioral disorders (EBD) are often extremely difficult to educate in the classroom. They have low self-esteem, aggressive behavior, and often no motivation to learn. Teachers are often at a loss in coming up with the appropriate behavior intervention and academic plan. The student's negative attitudes lead to problematic relationships with their teachers, inhibiting them from receiving opportunities for positive teacher attention, teacher praise and academic talk (Snyder & Sutherland, 2007). When peer tutoring is implemented in a classroom that includes students with emotional or behavioral disorders, students are taught to monitor their own and their peer's progress. As a result of self and peer monitoring through peer tutoring, their teachers are provided with the opportunity to give individual support and attention to those students who need it (Snyder & Sutherland, 2007).

A study, conducted in 2002 by Gunter et al., was designed to examine the effects of the implementation of peer tutoring in a classroom that included students with EBD (Snyder & Sutherland, 2007). This was done in conjunction with self graphing of disruptive behavior, active responding, and reading fluency (Snyder & Sutherland, 2007). The study included four students from a self-contained middle school classroom located in a large school in a southern United States city. The hypotheses of this study, as

outlined by Angela Snyder and Kevin Sutherland (2007) were that students would have the following:

- increased active responding,
- decreased disruptive behaviors, and
- increased reading fluency during reciprocal peer tutoring with self-graphing rather than during typical classroom instruction.

Results of the study showed that during the time when this behavior intervention was implemented, the disruptive behavior of the students with EBD decreased, while their active responding increased. Each student involved in the study made progress on words read correctly per minute, as their errors per minute decreased. On days during the intervention when the peer tutoring program was not implemented, however, three out of the four students demonstrated increases in disruptive behavior (Snyder & Sutherland, 2007).

In a second study published in 2003 by the Journal of Educational Psychology, Ginsburg-Block and her co-authors found that peer tutoring provided many non-academic benefits for students. As they studied thirty six students involved in peer tutoring programs, the researchers discovered that students spent a significantly greater amount of time on task throughout the school day. Also, they were more motivated in the classroom and used better social skills when dealing with their peers (Viadero, 2007). Peer tutoring benefited these students in a way that even caused them to voice their satisfaction and approval of the program.

## Students Opinions on Peer Tutoring

Following the study conducted by Gunter et al. (2002), satisfaction surveys were given to the students. These surveys indicated that students preferred peer tutoring to their typical classroom instruction greatly (Snyder & Sutherland, 2007). They said they enjoyed tutoring their peers as well as self-monitoring their behavior through graphs on the computer. In addition, they admitted that they were more motivated to participate in academics after the peer tutoring was implemented in their classroom. Most likely, as students took to the intervention components, they were more likely to be motivated to learn. Their aggressive behaviors and aversive attitudes were overcome, even if temporarily, during the intervention phase.

## Cross-Age Tutoring

Cross-Age tutoring is used less frequently in schools than the typical same-age peer tutoring. However, it has demonstrated very positive results for students with disabilities, low self-esteems, and behavior problems. “Children with different needs and abilities have a lot to teach others through cross-age tutoring” (Anderson 2007).

Anderson involved one of her lower achieving students in tutoring a younger child and many of her fellow teachers did not consider it feasible (Anderson, 2007). Despite this skepticism, she continued to believe that students of all ages and abilities are able to reap the benefits of tutoring exercises and programs implemented in their classroom.

Anderson developed a cross-age peer tutoring program in the attempt to reduce the behavior problem of her students who were oppositional, alienated, and defiant (Anderson, 2007). When first told of the idea, her students were shocked. Having low self-esteems, they did not find themselves fit to be tutored. However, as the program

continued, they were more than open to its requirements. Each student received training in tutoring before the program. As a class, they would practice how to tutor younger children. During the training, Anderson taught them how to respond when the tutees were reluctant or unresponsive (Anderson, 2007). She placed one fifth grader with a first grade student and another, brighter fifth grade student with a fourth grader. A third fifth grade student, who lacked social skills but was very intelligent, worked with two second graders on reading and math (Anderson, 2007). Anderson met with students once a week to review the lessons they created themselves and guide them through questions, concerns, and progress (Anderson, 2007).

Though the cross-age peer tutoring program that was implemented in Anderson's classroom was not a cure for all of her behavior and academic problems, she uses it as an integral part of her daily routine. Behavior problems, opposition to assignments, and low self esteem decreased greatly. Academic skills and positive attitudes increased (Anderson, 2007). Her goal is to reintegrate every one of her children into the regular classroom and the skills they are learning through cross-age peer tutoring are assisting in this goal. Anderson claims that for the first time in her class history, all students are at the same stage of reintegration (Anderson, 2007).

Cross age tutoring encourages students to have positive attitudes toward students who are younger or older than themselves. It enhances the relationships and fosters cooperative learning among them. Students who participate in cross-age tutoring learn through teaching (Anderson, 2007). From "teaching" a younger child, tutors develop a stronger sense of control within themselves. They feel that they are necessary and are helping the smaller child.

## Conclusion

When implemented correctly, peer tutoring can be a wonderful teaching tool for teachers. Peer tutoring can encourage low achieving students in reading as it simultaneously enhances the knowledge of higher achieving readers. As the pair of readers disguise themselves in the roles of “coach” and “player”, they have fun as they learn and aid their partners in correcting their mistakes. In teaching students with learning disabilities, peer tutoring can enhance teacher instruction as it offers positive reinforcement and boosts the confidence of children. Also, having the students work in pairs gives the special education teacher the much needed time to give individualized attention to those who crave it or to those who are struggling. Peer tutoring can also affect students with emotional or behavioral disorders when implemented in their classroom. Suffering from behavioral problems, these students may feel important when given the job to be a tutor. It can make them feel like they are needed, which in turn may encourage them to behave better in the classroom.

Students and teachers alike seem to be positively affected by the implementation of peer tutoring. Same-age peer tutoring, most often occurring inside the classroom, is when students tutor their same age peers. Cross-age tutoring, on the other hand, occurs across the school and involves older students being given the responsibility to tutor younger students in subjects they may be struggling in.

## CHAPTER THREE

### Methodology

#### Introduction

This research study is designed to enhance the current research that has been done on peer tutoring. It aims to discover what actually occurs in an inclusion classroom when peer tutoring is implemented.

#### Study Setting and Participants

Green Township (name is fictional to protect confidentiality) is located in Atlantic County in the Atlantic City metro area. The population of Green Township was 30,726 in 200 and it is 67 square miles. Of the 30, 726 people that live in Green Township, 24, 404 are white; 3,185 are black; 66 are American Indian; 1,552 are Asian; and 2,076 are Latino or Hispanic. The average household income in 2000 was \$51, 550, compared to the national average of \$41, 994. The average age of the occupants of Green Township was 35 years old. There are a total of 12,046 housing units of which 1,713 are renter occupied. The median value of the houses in this town is \$119,000. The median price asked for vacant housing is \$144,600. The average monthly cost of houses with mortgage is \$1,300. There are an average of 2.86 household members and an average of 6.23 rooms in the houses. The average number of vehicles per household is 1.27.

The Blue Elementary School holds all of the fourth and fifth grade students from the district. There are 1,148 students at the school. There are 78 classroom teachers and the student to teacher ratio is 14.7 to 1. The school day begins at 8:30 and ends at 2:45. There is internet connectivity in every classroom and a computer lab containing 4

computers is shared between every 2 classrooms. At the school, 702 students are white; 184 are Hispanic; 123 are black; and 134 are Asian. There are 591 males and 555 females. It is a Title I school with 199 students eligible for free lunch and 95 students eligible for reduced priced lunch.

There are approximately eighteen students involved in this study. All students in a fourth grade inclusion class were solicited to participate, but only those who returned a permission slip signed by a parent or guardian were able to participate. The participants were both male and female and either nine or ten years old. Approximately two thirds of the students were Caucasian, one sixth were Hispanic and one sixth were African American.

#### Methodology

In this study, peer tutoring will be used as a supplemental test review. In addition to the typical test review that students receive for various tests, a peer tutoring review session will be facilitated for students. Students will be taught as a class how to correctly be tutors and tutees. It will be thoroughly explained to them prior to beginning and they will be shown multiple examples until it is ensured that they understand it.

Students will be strategically paired prior to the implementation. They will then use games, review sheets, and flashcards during the test review. When a student is the tutor, it will be their job to help their partner with the information. They will be given the correct answers so that they are able to properly encourage the tutee. When time is called by the teacher researcher, their roles will switch and the tutee will become the tutor.

For the social studies test reviews, hints cards were used. Each pair was given a set of cards that had various concepts and vocabulary words from the chapter. The

correct answer was written at the top of the card, so that the tutor was able to see it immediately. Following the answer were three hints, clearly labeled. The tutor read the first hint and gave the tutee about ten seconds to answer. If they did not know the answer or answered incorrectly, the tutor read the second hint. Once again, the tutor gave the tutee ten seconds to answer. If the correct answer was still not attained, the tutor read the final clue. On each card, the clues became gradually easier. Therefore, by the third clue, the tutee should have been able to answer the question. If they were not able to, the tutor told them the correct answer and returned to that card at the end. Below is an example of a social studies peer review note card.

Chart 1: Social Studies Note Card

<p style="text-align: center;"><b>ANSWER: Christopher Columbus</b></p> <p>HINT # 1 – He was a famous explorer sent from Spain.</p> <p>HINT # 2 – He traveled to America with his crew on three ships - the Nina, the Pinta, and the Santa Maria.</p> <p>HINT # 3 – He was thought to have discovered America.</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

A peer tutoring grammar test review was conducted prior to the students being tested on the correct usage of good, better, best and bad, worse, worst. Once again the pairs of students were given flash cards. The tutor began by saying the sentence “Tell me if this sentence is correct.” He would then read a sentence. The tutee had to say whether or not the sentence was correct. If it was not, they had to rephrase it so that it was grammatically correct. Below the sentence was the correct answer. If the sentence was



correct, the card read “Yes, it is correct.” If it was not correct, the card showed how the sentence should have been read. Below is an example of one of the note cards.

Chart 2: Grammar Note Card

Tell me if this sentence is correct.

I am the better soccer player on my team.

*Correct Answer: I am the best soccer player on my team.*

The spelling and vocabulary peer tutoring test reviews were fairly easy to implement. For spelling, the pairs of students were simply given note cards with each spelling word written on them. The tutor read the spelling word to the tutee who attempted to spell it correctly. If they got it right, the tutor congratulated him and encouraged him to keep up the good work. If the tutee did not spell it correctly, the tutor told them the correct spelling and returned to that word at the end. After both students had a turn being the tutor, they played spelling concentration with the remainder of the time. The vocabulary test review worked similarly to the spelling review. The pairs of students were given note cards with each vocabulary word written on the front. On the back, the definition how it appeared on the test was written. The tutor began by reading the each definition. A sufficient amount of time was given to the tutee to guess the vocabulary word. After the tutor completed all of the cards reading the definition first, they switched methods and read the words first. The tutee was then asked to provide the tutor with a definition of the word that was read.

Two typical test reviews were observed for the purpose of this study. The first review observed was for a science test on Heat. Students were given a review guide, very similar to the test, which they were asked to complete using their book. What they did not finish in class, they took home to complete for homework and to study from. The second typical test review I observed was prior to a spelling test. The students were given about twenty minutes in the morning to look over their words and quiz their group members if they wished.

Below, table 1 shows the dates, subjects, and amounts of time that peer tutoring test reviews were implemented and observed:

Table 1: Peer Tutoring Test Reviews

DATE	LENGTH OF REVIEW	SUBJECT OF REVIEW
Thursday, April 4th	45 minutes	Social Studies
Friday, April 5th	30 minutes	Social Studies
Thursday, April 11 <sup>th</sup>	20 minutes	Vocabulary
Thursday, April 11 <sup>th</sup>	20 minutes	Spelling
Thursday, April 17 <sup>th</sup>	25 minutes	Grammar

Table 2 below shows the dates and times of typical test reviews that were observed:

Table 2: Typical Test Reviews

DATE	LENGTH OF REVIEW	SUBJECT OF REVIEW
Thursday, February 28th	40 minutes	Science
Thursday, April 4 <sup>th</sup>	20 minutes	Spelling

## Data Collection

Before any types of data were collected for this study, an introductory letter was sent to students' parents or guardians. This letter informed them of the project, explained the study to them and requested their written permission to allow their child to be a participant.

This study is a primarily qualitative teacher research study. According to Maykut and Morehouse/2003, the data of qualitative research is most often people's words and actions. This requires methods that allow the researcher to capture language and behavior. The book offers several useful ways of gathering these forms of data. They include participant observation, in-depth interviews, group interviews, and the collection of relevant documents (Maykut, Morehouse, 2003). All but one of these methods was able to be used in this study. The teacher researcher relied heavily on participant observation and interviews. She also collected documents from the students when she felt that they were helpful or useful to her research.

Maykut and Morehouse also discuss that the qualitative researcher can be part of the investigation in one of three positions – A participant observer, an in-depth interviewer, or a leader of a focus group that removes him/herself from the situation to rethink the meanings of the experience (Maykut, Morehouse, 2003). In this study, the teacher researcher is both a participant observer and a leader of a focus group. She observed students during each test review that was conducted and took detailed, thorough notes. She also led the group that was being researched as she conducted and implemented all and reflected on the results of the reviews and the implications of the results.

The primary data collection methods to be used involve teacher observation, journaling, and teacher interviews. Students will be observed during a typical test review and a peer tutoring test review. The teacher researcher will look at on and off task behavior, students that finish in the allotted time will be noted, as well as the number of questions asked by pairs of students. During the observation, this information will be documented on a chart. The teacher researcher will also write any significant notes on the bottom of the chart. An observation chart will be completed during every peer tutoring test review. A sample of the observation chart is below.

Chart 3: Sample Observation Chart

<u>OBSERVATION</u>	<u>NUMBER OF INSTANCES</u>
OFF TASK BEHAVIOR	
ON TASK BEHAVIOR	
STUDENTS FINISHED IN ALLOTTED TIME	
QUESTIONS ASKED BY GROUPS	
NOTES	

After all charts are completed and all peer tutoring test reviews are finished, the teacher researcher will examine the charts and compare and contrast those completed during peer tutoring test reviews and those completed during the typical test review. She will compare the behavior of the students during each review. She will also compare the number of questions asked and the number of students that were finished in the allotted time. This information will be gathered so the teacher researcher can compare and contrast the two test reviews and the behavior of the students.

The second data collection instrument that will be used is a teacher research journal. The teacher researcher will record her thoughts, questions, observations, and feelings regarding the implementation of the study. She will write in this journal immediately after each peer tutoring session and write down her feelings about the session in their entirety.

The final data collection instrument that will be used during this study will be open ended interviews with the teacher researcher's cooperating teachers. These interviews will offer the teacher researcher insight as to whether or not the teachers found the peer tutoring test review useful and effective. Two teachers will be interviewed. One is a special education teacher that is in the inclusion classroom for half of the day providing in class support for those students that are classified. The other teacher to be interviewed is a regular education fourth grade teacher. The interview questions will be open ended, allowing the teachers to offer as much information, advice, and feelings about peer tutoring as they wish. The teachers will be asked the following questions:

1. What is your opinion on the implantation of peer tutoring as a test review in the fourth grade classroom?

2. Do you think the peer tutoring lessons were beneficial to the students in preparing for their tests? Why or why not?
3. Do you feel that the students were actively engaged during the reviews that included peer tutoring?
4. Based on their reactions, do you think that the students enjoyed the peer tutoring or do you think they would have preferred to have solely used their typical review?
5. While they were peer tutoring, did you observe more on or off task behavior from the students?
6. Do you believe that the peer tutoring test reviews effectively reinforced the material for the students?

#### Data Analysis and Handling

The observations, teacher research journal, and open ended teacher interviews are all used to draw conclusions about what happens when peer tutoring is implemented in a fourth grade inclusion classroom. This data will be analyzed by using written observations by the teacher researcher, direct quotes from the teacher researcher's cooperating teachers and notes taken in a teacher research journal. The data will be organized and thoroughly examined. The teacher researcher will use this data to compare and contrast peer tutoring test reviews to the typical test reviews the fourth graders receive. She will look for elements that demonstrate which test review is more successful, which one the students enjoy more, and which one leads to more on task behavior from the students.

Throughout this study, confidentiality will be strictly maintained. Interviews will be anonymous and student's names will not be used in any way. Observations and written reports taken by the teacher researcher will not include names of students or teachers.

The data collected from this study will be kept secure at all times. Immediately following the completion of observation charts and the teacher interviews, the data will be transferred to one document. The teacher researcher will place this document in a secure folder in her house. The data will also be transferred onto the teacher researcher's computer, which needs a password to grant access.

All research records from this study will be maintained for three years following the study. Following this three year period, all documents from this research will be shredded. This is the only means that is needed to destroy my research because all documents will be handwritten.

## CHAPTER FOUR

### Findings

This section of this chapter will discuss the findings of my study. I recorded teacher observations of off and on task behavior, questions asked by pairs, and the amount of students that finished within the allotted time. I also used an open ended teacher interview and my own teacher research journal to document the results.

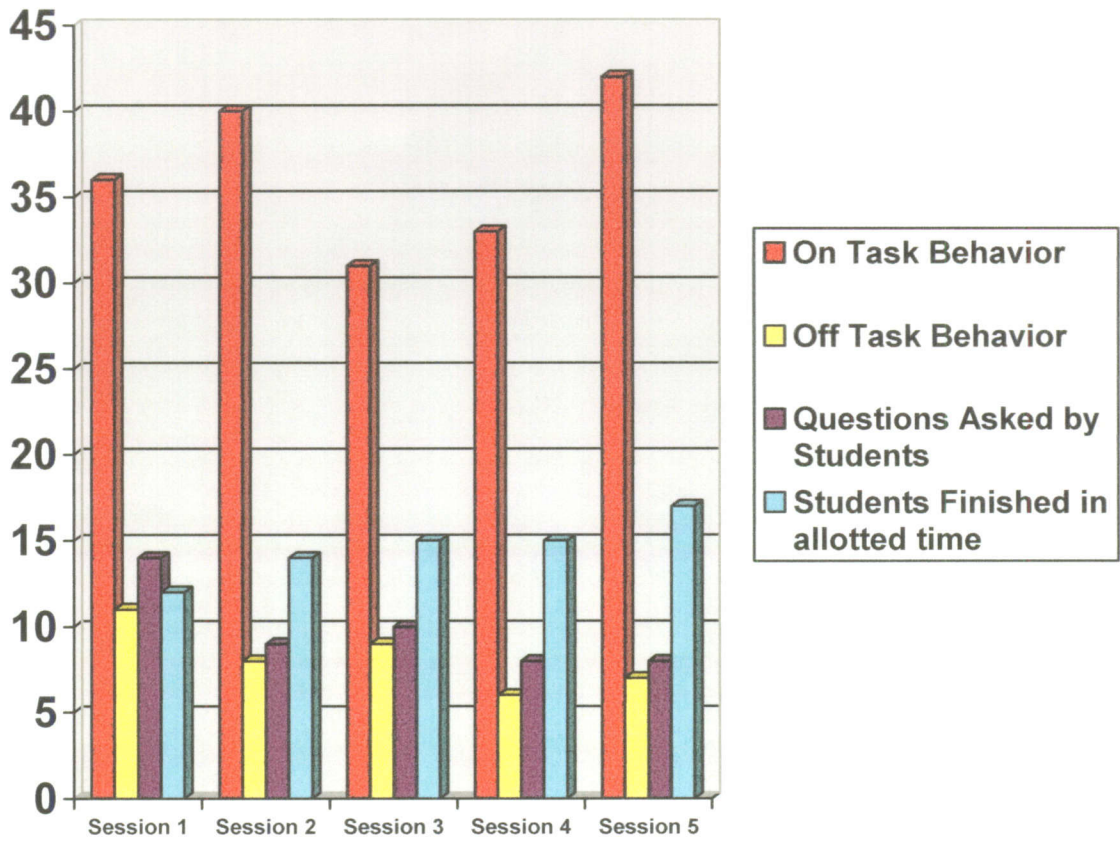
#### Observation Charts

During each of the five peer tutoring test review sessions that were implemented in the classroom and two typical test reviews, the researcher charted the behavior of the students on an observation chart. A check mark was made in the off task behavior box every time a student, pair, or group was observed being off task. The researcher would correct the student(s) and redirect them back to their assignment. When she returned to observe their group a second or third time, even it was only minutes later, and they were exhibiting off task behavior again, a second checkmark would be made in the off task behavior box. Similarly, a checkmark was made in the on task behavior box every time the researcher observed a student or students showing on task behavior during the peer tutoring review. She followed the same procedure for the second and third time she observed the groups as she did for off task behavior. A checkmark was made in the questions asked box every time a student asked me a question. If five students asked the same question, five checkmarks were made. Finally, a checkmark was put in the students finished in allotted time box for all the students who completed the review in the time



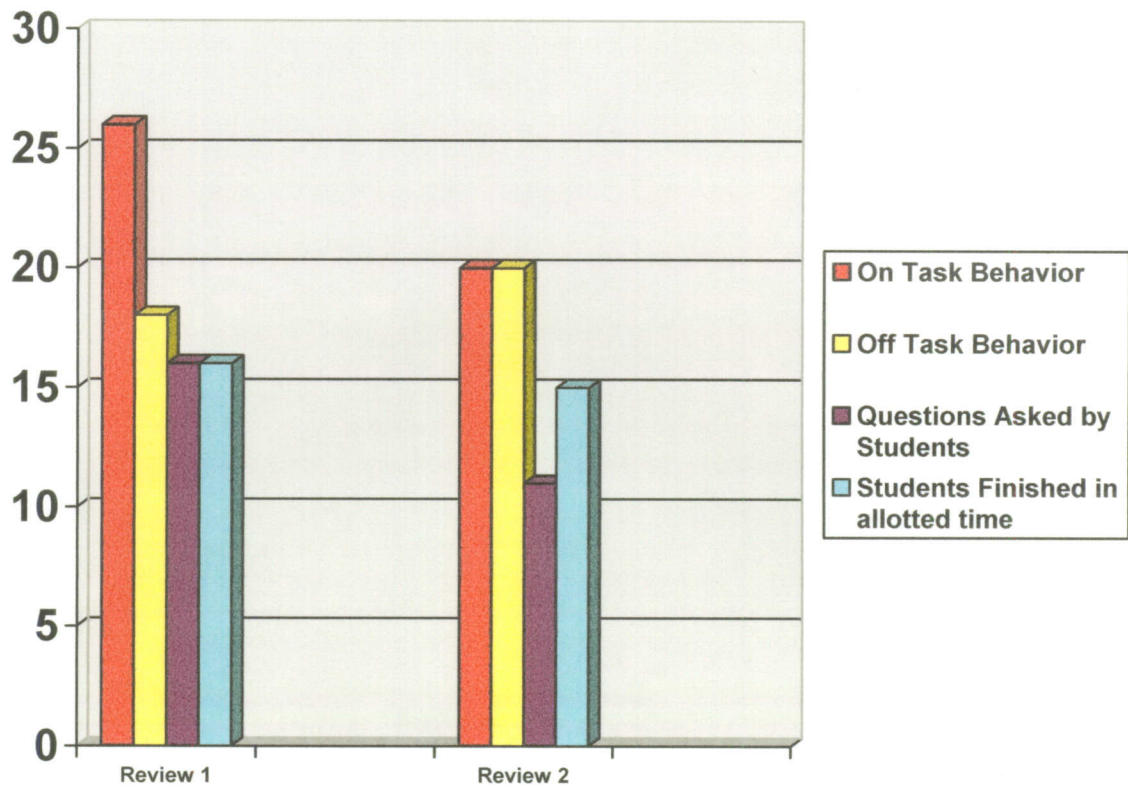
they were given. Data for five peer tutoring sessions was recorded. Chart 3 below summarizes this data.

Chart 4: Peer Tutoring Observations



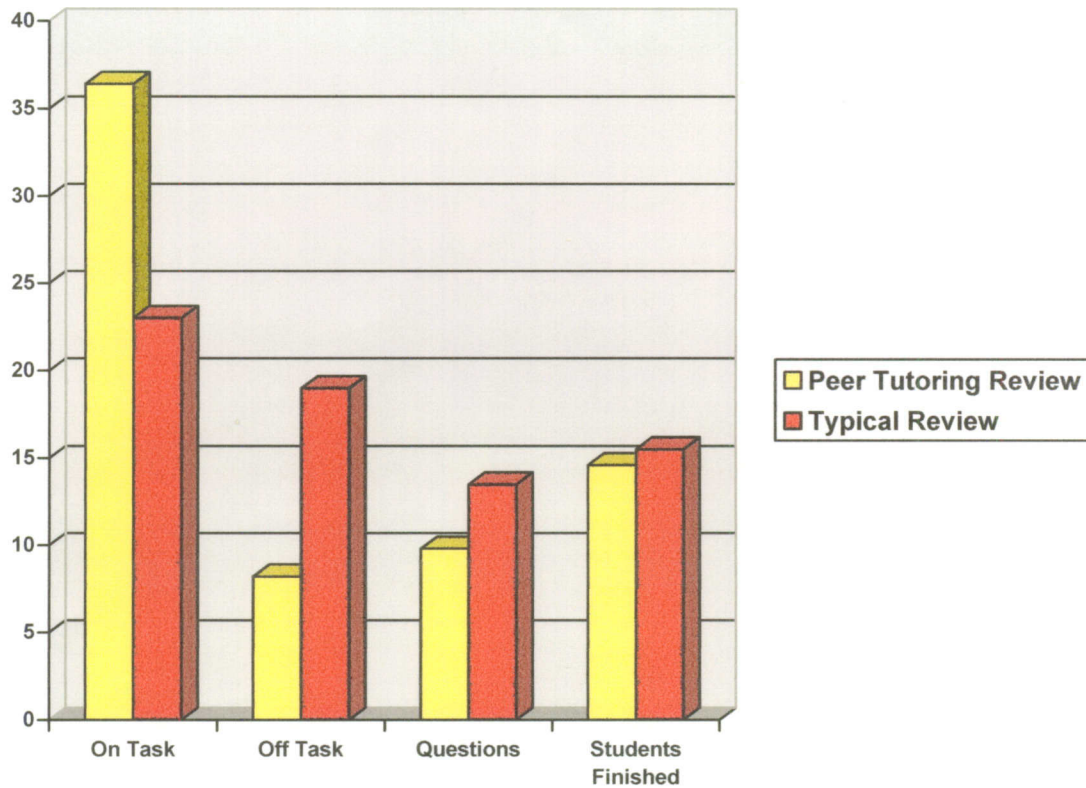
The same observation procedure was followed when the two typical test reviews were observed. Chart 4 below summarizes those results.

Chart 5: Typical Test Review Observations



During the five peer tutoring test reviews, an average of 36.4 instances of on task behavior and an average of 8.2 instances of off task behavior were observed. An average of 9.8 questions were asked by students and an average of 14.2 students finished in the allotted time throughout the sessions. During the typical test reviews, an average of 23 instances of on task behavior and an average of 19 instances of off task behavior were observed. An average of 13.5 questions were asked during the typical reviews and an average of 15.5 students finished within the allotted time. Chart 5 below shows the comparison of averages from the peer tutoring test reviews and the typical test reviews

Chart 6: Comparison of Averages



#### Open Ended Teacher Interviews

At the conclusion of the peer tutoring review sessions, both of the researcher's cooperating teachers were interviewed. One was the General Education Teacher in the classroom and the other was the Special Education Teacher. Below, the teacher interview questions are listed. They are followed by the answers from both the Special Education Teacher and Elementary Education Teacher.

1. What is your opinion on the implantation of peer tutoring as a test review in the fourth grade classroom?

Special Education Teacher: This was a great idea! I will use it to review in the future.

Elementary Education Teacher: In my opinion the implementation of peer tutoring as a review for a test was wonderful! Students were attentive and all participated.

2. Do you think the peer tutoring lessons were beneficial to the students in preparing for their tests? Why or why not?

Special Education Teacher: Yes. They help reinforce the skills and knowledge that the students need to know.

Elementary Education Teacher: I do think the peer tutoring lessons were beneficial for the students in preparing for their tests. I feel this way because all of the information on the test was in some way represented during the review.

3. Do you feel that the students were actively engaged during the reviews that included peer tutoring?

Special Education Teacher: Yes, the students were actively engaged throughout the activity.

Elementary Education Teacher: I do feel like the students were engaged during the review that involved peer tutoring. It was absolutely wonderful to watch them interact and help each other.

4. Based on their reactions, do you think that the students enjoyed the peer tutoring or do you think they would have preferred to have solely used their typical review?

Special Education Teacher: The students really enjoyed this type of review.

Elementary Education Teacher: I truly feel that the students enjoyed the peer tutoring as opposed to a typical review. It was pretty obvious because the students were much more excited about the peer tutoring.

5. While they were peer tutoring, did you observe more on or off task behavior from the students?

Special Education Teacher: The students were on task the entire time.

Elementary Education Teacher: I observed more students on task. I actually did not see any students off task.

6. Do you believe that the peer tutoring test reviews effectively reinforced the material for the students?

Special Education Teacher: Yes, this was a great way to reinforce the material for the tests.

Elementary Education Teacher: I definitely believe that peer tutoring reinforced the materials for the test. I will definitely use again for a test review.

The cooperating teachers answered these questions thoroughly and honestly.

Overall, they both had an extremely positive opinion about the peer tutoring program that was implemented in their classroom. When asked to compare the peer tutoring test review to the student's typical review, both teachers agreed that students preferred the peer tutoring review as opposed to their typical review.

#### Notes from Journal

The researcher was surprised at how well the students responded to the peer tutoring activities. She wrote in her journal how she did not realize how enthusiastic and excited they would be for the opportunity to be a tutor. It was blatantly obvious that

completing these peer tutoring assignments was beneficial to the students' level of self confidence. The researcher wrote in her journal how she had each group of students set up two chairs. Though the chairs looked exactly the same, the researcher called one chair the "tutor chair" and the other the "student chair." It was written that the students took this so seriously, making sure they changed chairs when their roles changed. The final entry in the teacher research journal said that, overall, this study went better than expected. The students stayed on task, enjoyed the assignments, and benefitted greatly from the social and academic skills practice. The researcher wrote that she could not have been happier with the results of this study.

The teacher researcher wrote in her journal about her hope to help the students in the class who did not have parents at home that were able to help them study. A few students in the class spoke English as a second language. Therefore, their parents did not speak English and were unable to read the review sheet to help them study. Others in the class came from broken homes where no one was there to help them study or review their spelling words. These children are young, only nine or ten, and they need some type of reinforcement. The peer tutoring reviews gave them this reinforcement. They served as a backup to the review sheets. If students studied the review at home, the peer tutoring sessions were an added bonus to their knowledge of the information. If they did not study at home, the peer tutoring sessions were their only reinforcement for the test or quiz.

#### Study Difficulties and Surprises

The attempt to begin this study presented the researcher with a huge problem.

The administration at the school in which the researcher was doing her field work would not approve her to conduct the research. They did not feel that it was appropriate for a student teacher to do this type of research. After reading a thorough proposal written by the researcher and after much review, the administration approved the study. However, the researcher was not allowed to interview, survey, or question the students. Therefore, the researcher was unable to receive feedback from the students and interpret their opinions about the peer tutoring reviews. To overcome this obstacle, the researcher added questions about the student's responses in the teacher interviews and focused more on the observation charts and the student's behavior.

## CHAPTER FIVE

### Discussion

This study on peer tutoring taught the teacher researcher many things. First, and perhaps most importantly, she learned how beneficial peer tutoring can be when used as a supplemental review in an inclusion classroom.

The question of this research was, “What happens when peer tutoring is implemented in a fourth grade inclusion classroom?” The researcher discovered that when peer tutoring was implemented in a fourth grade inclusion classroom, it was very successful. Students benefitted from a variety of ways. The reviews were structured, relevant, and well planned, thus allowing students to stay focused and on task with few distractions.

Peer tutoring benefitted the students in two ways, academically and socially. First, it helped them in the academic area. They received an extra half hour or hour to review for their tests. During this time, they were given complete and organized reviews that included all information that would be presented on the test. Their typical review was a study guide given to them a week before the test. Though this helped some students, others did not have the time or help at home to study.

The peer tutoring test reviews seemed to be more beneficial to the students than their typical test reviews. It was found that during the peer tutoring reviews, a significantly increased number of students were observed staying on task than during the typical test reviews. During the peer tutoring reviews, an average of 36.4 instances of on task behavior were observed, compared to an average of 23 instances during the typical



test reviews. This shows that the structure and rigidity of the peer tutoring reviews gave students more of an opportunity to focus and stay on task. The typical reviews, with their lack of organization and preparation, allowed students' minds to wander. This conclusion was further backed up by the instances of off task behavior that were observed during each review. There was an average of 8.2 instances of off task behavior observed during the peer tutoring reviews, compared to an average of 19 instances during the typical reviews. That is more than double the number of instances that occurred during the typical reviews. The peer tutoring reviews, as said before, were structured and well planned. They covered many bases and had the students actively engaged the entire time. The teacher researcher was constantly walking around to observe and help when needed. The students were so excited and involved that perhaps they didn't think to misbehave or act out. On the other hand, the typical reviews were slightly boring and monotone, which is often the root of off task behavior.

The comparison of questions asked during the peer tutoring reviews to those asked during typical reviews was also significant. During the peer tutoring reviews, an average of 9.8 questions were asked. During the typical reviews, an average of 13.5 questions were asked. One would think, however, that since peer tutoring was a new skill acquired by the students, there would be far more questions during the peer tutoring reviews. The typical reviews yielded questions involving who can work with who, who looked at who's paper, can pairs of groups be formed, who lost the review sheet, and how much time was left. They were often rhetorical or nagging questions that perhaps stemmed from a lack of concentration or boredom. The questions asked during peer tutoring reviews were fewer and more in-depth. They were good questions, involving the

correct way to peer tutor. The comparison of the amounts of questions asked demonstrated that students were more actively involved during the peer tutoring reviews than the typical reviews.

More students finished in the allotted time during the typical test reviews. In these reviews, an average of 15.5 out of 18 students finished on time. During the peer tutoring reviews, 14.6 out of 18 students finished on time. Though not a drastic difference, it can be attributed to the complexity and thoroughness of the peer tutoring reviews. Therefore, the students took longer to complete the peer review than the typical review which consisted of filling in the blanks on a worksheet or to study words from a paper. Another factor that contributed to more students finished on time during the typical reviews was that, since students were not completely engaged, they simply raised their hand when the teacher asked who was finished in order to get it over with.

The peer tutoring review sessions also helped the students gain social skills. In an inclusion classroom, it was not atypical that many of the students had difficulties communicating and working with their peers. Many of the classified students preferred to work alone in a secluded area of the classroom rather than with others. The researcher saw this as a problem and felt that working together in pairs would help the students receive the interaction that they needed. At first, some of the students had difficulties working together with another student that they did not choose themselves. There were several arguments in the beginning, such as students insisting that incorrect answers that they gave their tutor were correct. Some students did not, at first, like being told by a peer that they were incorrect. The researcher would explain calmly to these students that this information was on the test and it was necessary for them to know the correct answer

so that they could receive a good grade. This calmed them down and half way through the first session, the arguments seemed to dissolve. Students were practicing being encouraging and helpful, which are essential social skills for a fourth grader. It was hoped that, with much practice and many sessions of peer tutoring, these positive social skills would extend to other areas and situations both inside and outside of the classroom.

As it was said before, a few classified students in this class preferred to work alone in quiet, secluded areas. Having everyone work with a partner in various areas of the classroom did not provide these students with the quiet space they wished to work in. During the first session, they constantly complained that it was too loud and that they could not hear their partner. They repeatedly yelled “ssh”, complained to the researcher, and became angry with their peers. When the second session began, these complaints came forth once again. The researcher stopped the session and had a discussion with the class as a whole. She told the students that they needed to use “inside voices” so that everyone in the class could complete the assignment. The researcher put on soft classical music in the back of the class room. She told the students that if they could not hear the music at any time, they were talking too loud. The music relaxed the students who did not like noise and gave the others something to gauge the sound of their voices. It worked extremely well and was used for the remainder of the sessions.

This study taught the teacher researcher many things about students’ abilities to be enthusiastic and excited about a given assignment. Since it was a bit confusing at first, the students looked at it as a challenge and they really rose to the occasion. They took their jobs seriously and really fell into the role of either tutor or tutee.

## Study Limitations

The major limitation of this study was that the students were not able to be surveyed or questioned in any way. This forced the researcher to neglect the students' perceptions of using peer tutoring as a test review. It did not allow her to modify the sessions and assignments based on what the students said about the previous sessions. Though the researcher viewed the study as a success, she could not support that statement with the students' opinions. Whether or not the students enjoyed the peer tutoring reviews is an important aspect of the study in the researcher's opinion. She also felt that whether or not they found peer tutoring to be useful for the tests was important. However, she was not able to ask them these questions so she was unaware of how they felt about the reviews.

A second limitation of this study was the inability for the researcher to determine if the students actually scored better on their tests when the peer tutoring reviews were used. She could not compare their scores to previous tests because the information and questions were different. She also could not split the class, giving one half of the class the peer tutoring review and the other the typical review. While it may not be fair to give separate reviews to two groups of students, it also was not feasible because it was an inclusion class. The abilities, levels, and learning styles of the students were drastically different. This difference would inevitably make the results inaccurate. The researcher did observe unusually high scores on tests and quizzes that the students prepared for with peer tutoring, but was unable to determine if this was statistically significant because of the lack of a control group, baseline, and varied information and texts.

## Teaching Implications

It was concluded in this study that peer tutoring is very successful when implemented in a fourth grade inclusion classroom. The peer tutoring reviews yielded more on task behavior and less off task behavior than the typical reviews did. After reading this study, a teacher could easily implement peer tutoring test reviews in her classroom. She could use the suggestions listed in this study, or create her own reviews using various games and flash cards. Peer tutoring can be used in a variety of ways. It is a great teaching tool and resource for teachers and an exciting learning strategy for students.

After reading this study, teachers would have a basic understanding of how peer tutoring works and what subjects and areas it works best in. She could then create her own peer tutoring test reviews and use them instead of typical worksheet reviews or as a supplement, which was done in this study. A teacher could use peer tutoring reviews to further reinforce material that she is going to test her students on.

In this study, peer tutoring was used as a test review strategy. However, peer tutoring is certainly not limited to being used in this way. Peer tutoring can also be used as a teaching tool during everyday instruction. During reading, for example, students could work together in pairs and, in taking turns being the tutor, coach each other on fluency, vocabulary, and comprehension. Peer tutoring could be used during centers, during reinforcement time, or during whole class instruction.

Teachers who teach their students how to be peer tutors will be fortunate enough to have the flexibility to implement the strategy when it is needed. Once it is a skill the students learn, they will be anxious to use it. If the teacher is teaching a difficult lesson or reading a difficult story, she can simply set aside time for peer tutoring to reinforce the

material. Also, peer tutoring is a fun activity that requires no cost and yields no mess. Though it does require some planning and preparation by the teacher, it will become easier each time she implements it.

#### Recommendations for Future Research

If further research were to be done on peer tutoring in an inclusion classroom, several suggestions would be made. First, it would be recommended that the research be completed in a location where student's perceptions could be used. Therefore, it must be a setting where students are allowed to be surveyed and/or interviewed. This would provide information that this study lacks. It would make the research more thorough and more accurate. It is also recommended that the study extend for a longer period of time. This would provide the researcher with the opportunity to use peer tutoring reviews for more than one test in each subject area. In this study, time constraints only allowed the researcher to use this review strategy for one test in each subject. She had nothing to compare results with or see if the reviews were working.

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