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An Investigation into the Placement of Fifth Grade Students with Third Grade Students in a Peer-tutoring Environment

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SUNY COLLEGE AT BROCKPORT

**An investigation into the placement of fifth grade students with
third grade students in a peer-tutoring environment: Does this
have positive self-concept benefits for either or both?**

By

Debra E. Perry

**A thesis submitted to the Department of Education and
Human Development in partial fulfillment of the
requirements for the degree of Masters of Science in
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Abstract

This study was designed to see if positive self-concept benefits could be gained in a peer tutoring setting by either or both the tutor and the tutee.

The subjects consisted of 14, third and fifth grade students from a rural elementary school in Western New York. The students were given pre and post tests of the Piers-Harris Children's Self-Concept Scale to assess their overall self-concept. Students meet for ten weeks in their tutor/tutee pairs. Data were also collected from journal entries and interviews. The experimental study was analyzed using quantitative methods.

Results from the t test indicated that there were no statistically significant mean score differences between pre and posttests of the self-concept scale. However, observations made through journal entries and interviews showed some gains in self-concept.

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CHAPTER I

Statement of the Problem

Purpose

The purpose of this study was to see if positive self-concept benefits can be gained in a peer-tutoring setting by either or both the tutor and tutee.

Need for the Study

As curriculum is heightened and time is not, teachers find it harder and harder to give one on one instruction to individualize children's needs. Many times teachers have aides that help fill this void. But, due to funding deficiencies, many of their jobs have been cut and the few aides that the schools have are spread thin. Trying to solve the problem with the resources they have, many educators are turning to peer tutoring as a way of filling this void.

Current research has shown that peer tutoring is an effective way to give one on one instruction (Chun Chun & Winter, 1999; Eiserman, 1998; Lazerson, 1980; Sheldon, 2001). However, it needs to be carefully planned out to have a true positive effect for everyone. The relationship between the tutor and the tutee needs careful consideration in order to be beneficial for both. While in the beginning this arrangement may seem to require a considerable amount of time the pay off, if carefully planned, should be great.

Research Question

Can placing a fifth grade student with a third grade student in a peer-tutoring environment have a positive gain in self-concept for either or both?

Definition of Terms

Peer Tutoring: Children teaching other children characterizes peer tutoring. There are different types of peer-tutoring. For the purpose of this study a cross-age tutoring type will be used. Cross-age tutoring involves tutors and tutees of differing age and grades.

Self-concept: Self-concept is defined as the way children feel about themselves. This definition comes from and correlates with the Piers-Harris Children's Self Concept Scale.

Limitations of the Study

The number of students in the study limits this study. A large number of students might make the study more reliable, however, research has recommended to start with a smaller number in order to have success in a peer-tutoring program and expand over time (Sheldon, 2001).

Absenteeism of some of the students may inhibit the time and quality that the students may have in forming a positive self-concept in order to see gain in this study.

CHAPTER II

Review of Literature

Overview

Educators are always looking for ways to individualize children's needs. With classroom curriculum expanding and the time educators are allotted to meet today's standards, individualizing students' needs is often a difficult task. Many classrooms have help from teacher aides, however, lack of funds sometimes take this resource away from them. Peer tutoring can aid in this problem. Educators are looking at peer tutoring as a cost and time efficient method of individualizing a child's education (Fasko, 1996; Solomon, 2001).

Defining Peer-tutoring

Peer-tutors are, of course, no substitute for fully trained educators. Conversely, they fill an important role. "In Washington State, The Power of Peer Tutoring, 1997, Peer - tutoring is defined as children teaching other children (Sheldon, 2001). Many believe that tutoring is beneficial only to the tutee; on the contrary a successful peer tutoring relationship can be beneficial to both the tutor and tutee. A peer tutoring pair can be the same age or cross-age. With same age peer-tutoring the tutoring pair is the same age or at the same grade level. Johnson

and Johnson (1985), as cited by Thorpe and Wood (2000), define cross-age tutoring. They stated:

Cross-age tutoring is a form of cooperative learning in which an older student, often one who can benefit from additional reinforcement, is paired with a younger student who may or may not be in need of remediation. (2000, p. 239)

Set-up

If implemented properly teachers can turn to students to help other students in tutoring programs. This is by no means a time saving tactic for the teacher. It takes time, organization and a positive outlook to activate a positive tutor/tutee relationship (Sheldon, 2001). Peer tutoring can be looked at as a time investment with positive results.

Effective tutoring takes time and careful planning from the teacher. Research has shown criteria that should be in place for a good tutor/tutee relationship to be formed. Many factors need to be taken into account. First a program style should be considered. There are three types of peer tutoring from which to choose. Peer tutoring that involves tutees with similar age and grade levels; cross-age tutoring involving tutors and tutees of differing grade levels; and, a combination of the both (Eiserman, 1998; Sheldon, 2001).

The next step is tutor/tutee identification. It is recommended to start with a small number of students and expand over time (Sheldon, 2001). Space should

be taken into consideration on deciding the best possible work place for the student and number of tutor/tutee pairs.

Conducted studies show matching tutors and tutees on specific social attributes such as sex, age and/or ethnicity have positive results (Fresko & Chen, 1989; Sheldon, 2001). Fresko and Chen (1989) concluded that this type of matching serves to reduce social distances between tutor and tutee. The similar attributes between a tutor and tutee should produce a more relaxing and cooperative atmosphere while dissimilar attributes yield discomfort (Archibald, 1976 as found in Fresko and Chen, 1989). In a study conducted by Lazerson (1995), it is suggested to pair students behaviorally. Teachers should try to mix and match, such as a hyper student paired with a withdrawn child. Never should a hyper child be paired with another hyper child.

Other factors to consider are how and when to monitor, program session and length and tutor training (Sheldon, 2001). It is stressed that young people need to be trained as a tutor (Bailey & Van Zant, 2002; Chun Chun & Winter, 1999; Eiserman, 1998; Jennings, 2001; Sheldon, 2001). Reported research findings (Fresko & Chen, 1989) indicated that trained tutors are more effective than untrained tutors. In the study (Rekrut, 1994), *Peer and cross-age tutoring: The lessons of research*, Rekrut observes that highly successful programs train tutors in three areas. The first is in interpersonal skills such as how to help without telling, ways to give encouragement, using positive statements about tutee

work and attitudes. The second is management skills such as how to sit with a tutee (usually side by side for paired reading, for example), having proper materials for the lesson and finding a quiet work place. Content skills is the third, which includes preparing lesson activities in advance, prior reading of what tutee and tutor will read together, thinking up questions for parts of a story and creating follow up activities. For young children it is stressed that the tutors should be given a stable role rather than one that varies day to day (Eiserman, 1988). Once appropriate behavior is explained and modeled, rewards for appropriate behavior should follow (Cohen, Kulik & Kulik, 1982). Rewards could include positive feedback and “thank you” parties (1982).

Benefits

There are academic benefits to those being peer tutored(Eiserman, 1988). The skills taught or reinforced are individualized to meet each tutored student’s needs. There are high levels of immediate and positive reinforcement available to the student, a heightened opportunity to respond for the tutee and higher response rates (Chun Chun & Winter, 1999; Cohen, Kulik & Kulik, 1982). Cohen, Kulik and Kulik’s meta-analysis findings concluded that peer tutoring allows for individualization, increased time on task and immediate error correction for tutees. The tutors can gain benefits academically as well. According to the study

conducted by Lazerson (1980), tutors can reinforce their own knowledge when they prepare the materials to teach.

Positive outcomes of peer-tutoring is supported by L.S. Vygotsky's theory on learning and development. It reflects the belief that most of what a person knows about language is learned through the use in the presence of others. (Dixon-Krauss, 1995) The most popular Vygotskian idea in western education is the zone of proximal development. Dixon- Krauss states:

According to Vygotsky, learning occurs as the child gradually internalizes higher level thought processes that are activated through social interaction with an adult or collaboration with capable peers and in this case tutors. These higher level thought processes include logical memory, reflective awareness and deliberate control by the learner. (1995, p.46)

There is a relationship that is not only beneficial to the tutee, as many seem to believe, but for the tutor and teacher. Sheldon states that, "Peer tutoring not only helps provide an extra source of instruction for tutees, it also helps to fortify concept and skill among the tutors while enabling the teacher to utilize their class time more effectively." (Sheldon, 2001, p.33) It improves the socialization skills and relationships between the tutor and tutee, which also carries outside of this relationship. Peer tutoring is also associated with an increase in student achievement, problem solving skill, independence and self-initiative for tutors and tutees says Sheldon. All major research reviews on the

effectiveness of peer tutoring in reading have shown that tutors accelerate in reading skill at least as much as, if not more than, the tutee.

Putting a student with a tutor not only helps academically, but it has a long history of improving everything from achievement scores to self-esteem to peer relationships (Thorpe & Wood, 2000). Viewing self-esteem's importance in an academic setting Yarrow states:

People's destiny is guided largely by the way in which they learn to value themselves at an early age, when the dimensions of their self-esteem are first defined. A shift in the educational paradigm – treating a child's social and emotional growth with the same seriousness as his or her academic growth – can, over a period of time, transform the culture of the classroom, the school and the entire community. (2001, p.32)

Tutees are able to feel more comfortable with their peers. A peer tutor increases level of trust, comfort and relaxation of their tutee (Coenen, 2002). Research on the effects on tutors concluded that cross-age tutoring significantly increases the tutor's empathy, altruism and self-esteem (Yogev & Ronen, 1982). Leland and Fitzpatrick (1993) in a cross-age literacy study involving sixth graders and kindergartners reported that the participants showed an increased enthusiasm for reading. Further the students perceived their work together as time off and fun. Peers with age closeness lead the tutor to explanation of material in age appropriate terms that the tutee will better identify with. (2002) Tutees may feel

peer tutors to be less threatening than working with an adult (Bailey & Van Zant, 2002; Coenen, 2002; Jennings, 2001).

There are several benefits to be gained by the tutor that enhances his/her self-confidence and self-esteem. Many peer tutors' self-esteem rises with the thought: "*I must be good if I can teach!*" (Lazerson, 1980,p.1) Tutors do not have to be the brightest in the class. Crowder, an NEA member, emphasizes that the students do not have to be straight A students. But they do have to enjoy working with others and they have to be trustworthy. According to Coenen, tutors can obtain learned qualities such as patience, being firm, empathy towards teachers, understanding of children with difficulties and leadership skills (Coenen, 2002). Tutoring may give more ease to talking to someone. Tutors might also find the experience rewarding by telling people they are tutors and when the person they tutored does well on a class assignment in which they helped.

Negative Aspects

There are negative aspects of a peer-tutoring program. Inconsistent tutoring is worse than none at all. It can create more confusion to the tutee than assistance (Lazerson, 1980). For an untrained tutor, it can lead to frustration. For the tutees, infrequent contact can cause frustration and dissatisfaction. The tutees could even experience jealousy of those tutor/tutee pairs that are engaging successfully (1980). Another drawback is lack of teacher involvement. It can have negative effects on tutorial relationships (Jennings, 2001). Peer tutoring pairs can become off task without proper guidance. Henriques (1997) concludes that there is not often enough space to afford the one to one privacy for students to work together.

CHAPTER III

The Research Design

Purpose

The purpose of this study was to see if positive self-concept benefits could be gained in a peer-tutoring setting by either or both the tutor and tutee.

Research Question

Can placing a fifth grade student with a third grade student in a peer-tutoring environment have a positive in self-concept for either or both?

Methodology

Subjects

The participants of this study were 14 third and fifth grade students from a rural elementary school in western New York. Seven of the students were from third grade classrooms and the other seven from varied fifth grade classrooms. Students from the third grade classrooms are considered low-average students who do not meet the criteria for needing special services. However, they are struggling learners and could use gains in positive self-perceptions. The fifth grade students were considered average/low-average who could use a boost academically and gains in positive self-perception. The subjects were paired for cross-age tutoring in a quieter, less distracting setting than a classroom such as school library or hallway.

Materials

A survey of students' strengths, weakness and teachers' perception of students' self-concept was given to teachers of participating subjects. (Appendix

A) This provided information for the researcher to pair up tutor and tutee relationships.

The students, both third and fifth grade, were given The Piers-Harris Children's Self-Concept as a pre and posttest. It was given orally. This assessment consists of 80 questions that can measure a child's overall self-concept. Results are then divided into six subsets of self-concept. These subsets include: behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction.

Folders were made for each tutoring group that gave plans of instruction and tutoring journal sheets (Appendix B) that share both tutors' and tutees' reflections on each sessions outcome.

Procedures

Teachers were asked to fill out a survey of perspective tutors/tutees so the researcher could first identify the subjects. Next, the students were given a pre-test of the Piers-Harris Children's Self-Concept Scale in two groups, third graders and fifth graders. The test was given orally; some explanation of questions needed to be given. The researcher paired tutors with their tutee on needs based on results of teacher survey and same gender.

Tutors were trained and given model lessons before meeting with their tutee in one group setting. Training included showing tutors the folder and how to implement the needs of their tutee. Tutors were given a model lesson using one of the tutors as the tutee role and the researcher as the tutor role to show how a typical session may develop. The school's vice principal attended the session to offer words of encouragement and reinforce the responsibility, upon which these students were about to embark.

Tutors and tutees then met three times a week for twenty minutes and followed through on plans on individual needs set up by classroom teacher of the tutees. Tutors and tutees filled out a tutoring record journal at the follow up of each session. The researcher monitored and adjusted sessions for the duration of one marking period.

In conclusion of the conducted research, the researcher administered the posttest of the Piers-Harris Self- Concept Scale. A comment sheet was handed to classroom teachers to see if any observable differences have manifested with these students. The researcher, in a group setting, collected the thoughts and feelings of the tutors and tutees about their experience.

Analysis of Data

This data from the experimental research study were analyzed using quantitative methods. The pre and post data were collected and analyzed for comparisons of growth and losses in self-concepts. Tutor and tutee journal records, teacher comment sheets and researchers observation notes were used to determine if any trends of self-concept behavior occurred.

CHAPTER IV

Analysis of the Data

Purpose

The purpose of this study was to see if positive self-concept benefits can be gained in a peer-tutoring setting by either or both the tutor and the tutee.

Null Hypothesis

There will be no statistically significant difference between the mean of the pretest scores of tutees and tutors and the mean of the scores of the posttest scores of the tutees and tutors.

Analysis of Data

Mean score averages were calculated from pretest and posttest data of the Piers-Harris Children's Self-concept Scale. Average scores are usually considered to be those between raw scores of 46 to 60. A pretest mean raw score of 41.29 showed the tutees to be below average and a posttest score of 48.43 placed them at average. For the tutors, a pretest score of 65.89 and posttest score of 69.00, placed the tutors in the above average range.

A correlated t test (dependent means) for the difference between the two means was used to compare the mean pretest score of the tutees' self-concept versus their mean posttest score. The same test was used again for the tutors. A calculated t score of 1.04 was obtained for the tutees and a score of 1.20 obtained for tutors. Since the critical value of t for 6 degrees of freedom is 2.45 for tutees and tutors and since the t obtained was 1.04 (tutees) and 1.20 (tutors), the null hypothesis is retained. See Tables 1 and 2 for reference.

Table 1

Pretest and Posttest Scores of Tutees

Test	d.f.	Mean raw scores	S.D.	Correlated t test values
Pretest	6	41.29	13.35	1.04
Posttest	6	48.43	14.92	

Critical $t = 2.45$

Table 2

Pretest and Posttest Scores of Tutors

Test	d.f.	Mean Raw scores	S.D.	Correlated t test values
Pretest	6	65.89	7.64	1.20
Posttest	6	69.00	6.56	

Critical $t = 2.45$

Observations

Although gains were not shown to be statistically significant, the researcher felt that journal records and interviews showed favorable responses for the peer-tutoring program and gains were being made slowly. In many of the students' journal records, statements such as, "It made me feel good to help" and "I like my tutor because she made me feel smart" or "My tutor really helped me today" came up repeatedly.

During a post program interview the researcher asked how many of the subjects would like to continue with peer tutoring and all, without much thought,

wanted to continue the program. When the researcher asked why they wanted to continue the tutors responded that they liked to help and it was fun. The tutees responded to the same question with statements like: “ It made me feel special” “It helps you to be smarter”, and” I like the extra help”.

CHAPTER V

Conclusions and Implications

Purpose

The purpose of this study was to see if positive self-concept benefits can be gained in a peer-tutoring setting by either or both the tutor and tutee.

Conclusion

The results of this study regarding the effect peer tutoring has on the tutor and tutees' positive self concepts has not shown statistically significant gains as previous research has shown. Still, there is a small difference in average mean pre and post scores that show some gains for both the tutor and tutee, indicating a trend in this direction. Perhaps these scores may have been at more extremes if number of subjects have been increased and allowing more time for peer tutoring relationships to form before posttest data were collected.

Greater gains may also have been met if subjects were chosen from a pool of those tested below average on the Piers-Harris self-concept scale. The researcher chose subjects by teacher recommendation, in which they were perceived as needing a self-concept boost. The fifth grade subjects of this study on average tested in the above average range in pretest and posttest scores.

Implications for the Classroom

Peer tutoring is a viable solution for meeting students' individual needs. Careful planning and training were a must for the success of this program. Carefully chosen partners can contribute to its higher success rate.

All subjects, when interviewed by the researcher, expressed excitement with this program and had a desire to keep on tutoring. The tutees liked the added academic attention and working with an older peer. It was interesting to observe that some of these students felt targeted and/or embarrassed when pulled by a classroom aide for help. However, while working with their tutor, they found themselves the envy of other classmates and a socially acceptable thing to do.

During discussion with fifth grade teachers, they felt their student as a tutor was well worth being pulled from class and never a hindrance. Some even indicated that the tutors gained more responsibility. They were held accountable to hand in their homework prior to a tutoring session, remembered their scheduled times and were able to follow through on academic requests for their tutees.

Peer-tutoring enables a teacher to customize each student's learning in order to fit his/her needs. It provides students with an opportunity learn in a non-threatening environment that encourages social interaction.

Implications For Further Study

Positive self-concept goes a long way towards a student's success academically. Nurturing a student's self-concept through peer-tutoring is a viable way achieving this. Further investigation is needed.

1. What are the long-term effects on a tutoring program?
2. How often and for how long should tutors and tutees meet in order to be successful?
3. What subject matter has a stronger effect with success in a peer-tutoring setting? Is computational math better than language arts activities?
4. In cross age tutoring what age difference is most effective? One year apart, two years apart or three years apart?

For further study, the following changes in this study are recommended:

1. A larger sample size for tutee/tutor pairs.
2. Choosing subjects after giving pre-test using the Piers-Harris Self-Concept Scale.
3. Conducting the study for a longer duration period of more than ten weeks.

(Appendix A)

Name of Student referred: _____

Name of student's Classroom teacher: _____

Grade Level _____ Role of Tutor/Tutee (Circle one)

Student's Strengths:

Student's Weaknesses:

Teacher's perception of student's self-concept:

Additional Comments:

Tutoring Journal Record

Name: _____

Week of _____

This is what we did Monday:

Statement about me:

Statement about my partner:

This is what we did Wednesday:

Statement about me:

Statement about my partner:

This is what we did Friday:

Statement about me:

Statement about my partner:

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