

Running Head: EFFECTS OF CROSS-AGE TUTORING

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Reading Attitudes of Elementary School Students

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INTRODUCTION

The most challenging aspect of being a first grade teacher is ensuring that all children are well on their way to becoming competent readers. Young children, who experience problems in reading, quickly fall behind their more skilled classmates in their ability to decode and comprehend text. Reading is a foundational skill in all children's academic careers; whether they become strong or weak readers has considerable bearing on their success in school and beyond (Ruchs, 2002). Furthermore, research has shown that systematic instruction in word recognition skills and fluency development is critical to early reading success for many readers (Mathes et. al., 2003).

According to the Ohio Department of Education, Cleveland Municipal Schools have a 58.2% passing rate in the 3rd Grade Reading Proficiency Test in the year 2004 (<http://dnet01.ode.state.oh.us/DistrictRatings>). Additionally, the National Center for Educational Statistics reports that the results of the 1998 reading assessment are mixed. At grade 8, the 1998 average reading score was higher than the 1992 and 1994 scores. In contrast, although the scores increased between 1994 and 1998 for students in grades 4 and 12, these increases showed no net gains over the 1992 average scores for reading. In 1998, performance at or above the *Proficient* level—the achievement level identified as the standard all students should reach—was attained by 31 percent of students at grade 4, 33 percent of students at grade 8, and 40 percent of students at grade 12. The data shows cumulative percentages of students "at or above" each

achievement level. A large proportion of students at each grade did not reach the *Proficient* level of reading performance

([http://www.governmentguide.com/govsite.adp?bread=\\*Main&url=http%3A//www.governmentguide.com/ams/clickThruRedirect.adp%3F55076483%2C16920155%2Chttp%3A//www.ed.gov/](http://www.governmentguide.com/govsite.adp?bread=*Main&url=http%3A//www.governmentguide.com/ams/clickThruRedirect.adp%3F55076483%2C16920155%2Chttp%3A//www.ed.gov/)).

### Significance of Study

The past several years have marked a renewed interest in the reading success of young students, specifically in the primary grades. Several national organizations and panels have been created to conduct national research on “scientific methods” in teaching reading to young children. Most notably the National Reading Panel conducted a level 1 research study on the best ways to teach children how to read. On the basis of a detailed analysis of the available research that met NRP methodological criteria, the Panel concluded that guided repeated oral reading procedures that included “guidance from teachers, peers, or parents had a significant and positive impact on word recognition, fluency, and comprehension across a range of grade levels” (NRP, 2000, p. 12).

With this renewed vigor and importance on each child’s reading fluency by the end of 3rd grade, several grass roots organizations have popped up across America that utilize volunteers as reading tutors. These tutors incorporate the idea of using one-on-one tutoring sessions in which the tutor provides individualized instruction to below level reading students. Some local and national organizations include OhioReads, ClevelandReads, the HOST Program, STARS, PALS, and AmericaReads.

Often times, teachers do not have the time to devote one-on-one attention to individual students. Both Vygotsky and Piaget note the importance of social interactions as having positive effects on students' learning (as cited in Ormrod, 2004). As such, the social constructivism perspective advocates that people "work together to make sense of their world" while "helping one another, they may be able to interpret and understand the book in ways that they may not have been able to do on their own" (as cited in Ormrod, 2004, p. 180). Furthermore, children can accomplish tasks with the help of others only when they work on tasks that they cannot do alone or tasks that are in their zone of proximal development (as cited in Ormrod, 2004). Mathes and Howard (2003) report that with peer-tutoring "instruction is typically delivered to actively engage children in learning" and that "students learn by reconstituting prior knowledge as they encounter new information, primarily through collaborative talk with others" (pg. 463). Children can take greater responsibility for their learning while teachers serve as facilitators by arranging the learning environment and curriculum to enhance learning.

In answer to the problem of a shortage of instructional time and high student-teacher ratio's, schools can take advantage of their own students by acting as peer tutors, to effectively tutor their low achieving students while inadvertently helping the tutees to learn and grow both academically and socially. Much research suggests (NRP, 2002, p. 12) that children, who are read to often, are better able to attain reading fluency. Effective practices in reading also include individualized and small group instruction. In relation to Lev Vygotsky's Developmental Theory of Learning, in that "adults in a society foster children's learning and development by engaging children in

meaningful and challenging activities and help them perform those activities successfully” (Ormrod, 2004, 169). Furthermore, one could assume that not only adults but older children could successfully provide “scaffolding” techniques to allow for student learning. The purpose of this study will focus on the following questions:

1. Can cross-age tutoring help to develop positive reading attitudes in elementary school children?

Additionally, numerous studies have examined the impact of peer and cross-age tutoring and the positive effects of student reading achievement, pro-social classroom behaviors, positive social interactions amongst peers, positive feelings of social responsibility towards community and others, and the positive effects of student / tutor self-esteem. Future studies could examine these critical aspects of tutoring programs.

## REVIEW OF THE LITERATURE

The literature review is divided into seven sections. First I will provide a definition of peer tutoring and a brief explanation of various tutor models in current practice. Second, I will report on the positive reading achievement in students after participating in a cross-age peer tutoring program. Next, a study focusing on the effects of positive social interactions of autistic children will be examined followed by the effects that Classwide Peer Tutoring had on the number of words spelt correctly with students with learning disabilities. Finally, the effects of student attitudes will be examined after participating in peer tutoring in regards to increased attitudes of reading for both tutee and tutor.

### **Tutor Models**

Damon and Phelps define peer tutoring as, “an approach in which one child instructs another child in material on which the first is an expert and the second is a novice” (Kalkowski, 1995). However, many various styles of peer tutoring exists, that is, not all of the tutors are experts (as we can see with the various volunteer tutoring programs which everyday citizens tutor students), many of the tutors are the same age, hence cross-age tutoring becomes peer tutoring, and many tutors are simply randomly assigned. Kalkowski (1995) traces peer tutoring back to Greece in the first century A.D., through Rome and Germany and finally to America.

Among the features of tutoring programs associated with the most positive gains are extensive training for tutors, formal time commitments by tutors, structured tutoring sessions, careful monitoring of tutoring services, and close relationships between classroom instruction and curriculum and the tutoring services provided. Students with severe learning disabilities require special tutoring services, which can be provided by professionals, combined with nonprofessionals under careful supervision.

#### *Tutor Centered Model*

The Peer Research Laboratory at the City University of New York has been designing a new tutor model. The model theorizes that, “If the tutor role is so effective, why not build on this and give all students the opportunity to be a tutor” (Gartner, & Riessmen, 1993, p. 1). This model is different from the traditional tutor role as expert and shifts the tutoring role as a central instructional strategy, integrating tutoring into an everyday classroom activity and employs tutoring as a peripheral and remedial activity. In this model, the tutoring process is viewed as developmental, in

which all tutors have an opportunity of being tutees as part of their apprenticeship for becoming tutors. Thus students' learning is multi dimensional; as they are able to learn the subject matter that is being tutored, they learn how to be a tutor, how to listen and communicate effectively, and most importantly they will "learn about learning" (Gartner & Riessman, 1993).

Various learning strategies are implemented in this model such as indirect and informal learning, the relationship between cognitive and social development, individualized learning, student centered learning, and the use of pacing, repetition, and reinforcement. Some benefits of this model include reflective learning, removal of negativity that is usually associated with receiving help - as everyone is giving and receiving help, and creation of student-centered, peer-focused schools.

### **Reading Achievement**

Research has consistently shown that well-designed tutoring programs that use others as tutors can be effective in improving children's reading skills. Students with below-average reading skills who are tutored show significant gains in reading skills when compared with similar students who do not receive tutoring from high-quality tutoring programs (Cohen, et. al, 1982). Locally, the OhioReads program reports that "statewide OhioReads schools improved their proficiency test scores at a higher rate (13.34%) than schools without the program (10.9%)" (Ohio Reads Initiative, 2003, p. 1).

A small rural elementary school in South Texas conducted a study to determine if "cross-age peer tutoring of fifth graders with learning disabilities and kindergarten students would have an effect on reading attitudes and reading achievement"

(Davenport, Arnold, & Lassman, p. 3). The study was a measure of the attitudinal impact of a cross-age tutoring program designed to address the literacy needs of fifth grade students diagnosed with learning disabilities as well as provide an enriching literacy program for kindergartners. It was also intended to measure the effects of the program on the reading skills of the special education students. The study used the Elementary Reading Attitudes Survey to measure the reading attitudes of the fifth grade and kindergarten students. It was given to both sets of students before the program was implemented and again four weeks later. The differences between attitude toward recreational and academic reading were examined. The data indicates that both groups expressed an overall positive attitude towards reading after both administrations of the survey. In addition, the Brigance Comprehensive Inventory of Basic Skills, Revised Edition was given to the fifth grade students to assess word recognition and reading comprehension skills. It is evident that the special education students also made some progress towards reading achievement. In addition the data shows that the special education students were successful in tutoring their younger peers.

The survey results in this study point toward an emerging awareness of themselves as readers. The study reports that data from a study on cross-age reading suggests that “reading to a younger child helps an older student with reading problems develop positive reading behaviors. When 6th grade students were paired with kindergarten children to read and write collaboratively on a regular basis, students’ attitudes toward literacy improved (p. 10). Furthermore, a meta-analysis on cross-age tutoring shows that students who serve as tutors tend to make significant gains in

achievement and that attitudes towards school and learning increase positively for all students involved in cress-age tutoring.

### **Positive Social Behaviors in Students**

A study done by Thiemann and Goldstein examined the effects of two social interventions, peer training and written text treatment on the social communication of 5 elementary students, ages 6-9 years old and enrolled in 1st or 2nd grade, with pervasive developmental disorder. Each child with the autism was paired with 2 peers without disabilities to form 5 triads. In Intervention 1 (peer training), peers were taught to use 5 facilitative social skills over 5 days. Each triad met 3-4 times per week for 10 min baseline social activities and 25 min for WTT (i.e., 10 minutes of instruction using written text cues, 10 min engaged in a social activity, and 5 min of adult feedback).

After peer training, 4 children with autism increased or used more stable rates of initiations and contingent responses overall. Once Intervention 2 (direct instruction using written text cues) was implemented, increased use of 3 different communication skills was observed across all 5 participants. In addition, social validity outcomes revealed improved quality of child-peer interactions, 2 teacher reports of improved social skill development, and improved acceptance and friendship ratings for the children with autism. Results support the use of written text cues to improve children's social communication with peers, and suggest that combining approaches may be necessary to improve the quality of children's relationships.

### **Students with Disabilities**

In another study by Burks (2004), *Effects of Class wide Peer Tutoring on the Number of Words Spelled Correctly by Students with LD*, the effects of a class wide peer tutoring program, the number of words spelled correctly were analyzed with students with learning disabilities. The author contends that in today's classroom, any given number of varieties of disabilities may be present and require different teaching methods to ensure individualized instruction. The study took place in an elementary resource room and consisted of four to six students. Three of the students were identified as LD. The students ranged from 10-11 year old fifth graders.

The students first took part in traditional academic instruction in two baseline phases, which included writing the spelling words, using shaving cream, crossword puzzles, and taking spelling tests. In the CWPT 7-week intervention phase, the following strategies were used: a pair format, social and point reinforcements for responding correctly and correcting errors, and distributed practice over new content introduced each week, immediate error correction, and public posting. Students were randomly divided each week into a tutoring pair. One student in each pair served as a tutor for 10 minutes, while the other tutor was tutee. After 10 minutes, they switched roles for another 10 minutes. The tutor read the assigned spelling words to the tutee, who was supposed to write down the words. Once the tutee wrote down a word, the tutor checked it for spelling accuracy. If the spelling was incorrect, the tutee had to spell the word correctly three times. Each tutor/tutee received 2 points for each word spelled correctly, 1 point for corrected spelling words, or no points if the student could not spell a word correctly after the third attempt or refused to spell it. Using the CWPT protocol, the teacher gave 1 or 2 extra points to teams that were on task and

demonstrated appropriate behavior. The objective was for each team to obtain as many points as possible during their allotted time.

After the tutoring session, the students added up their points and recorded the total on a scoreboard that was visible to all students. At the end of the week, the teacher gave the spelling tests. The next week, the process began again with a new set of spelling words. All students increased in the number of correct words spelled correctly during the CWPT intervention. The results suggest that CWPT may be an effective strategy for teaching spelling words to students with LD. The positive aspects of the CWPT are efficiency, more time for teachers to move around room and control behaviors, flexibility, and generalized age groupings.

This program taught students without learning disabilities facilitative social skills such as start talking, keep talking, compliment, answer questions, look, and wait. In addition to learning new strategies with peers in small group settings, the students with PPD engages in longer conversations by taking more verbal turns at the end of treatment. These findings are significant in regards to the lack of skills in communication with students with this population (p. 140). The students with PDD showed more positive attitudes toward their classmates and the teacher reported an increase in age-appropriate social skills.

### **Reading Attitude**

In a study by Davenport, Arnold, and Lassman (2004) students' attitudes toward recreational reading and academic reading were compared and examined using the Brigance Elementary Attitude Survey. The data indicates that both the 5th grade learning disabled and the kindergarten students expressed an overall positive attitude

towards reading after both administrations of the survey. The special education students showed a better attitude towards academic reading than recreational reading. The kindergarten students showed a better attitude towards recreational reading than academic reading. After the second administration of the survey, the special education student's scores slightly decreased and the kindergarten student's scores were nominally increased. The data from this study suggests that the special education students were successful in tutoring their younger peers. The surveys support the fact that the attitudinal impact of the cross-age tutoring program on recreational reading attitudes was positive for the tutors and the tutees. The teachers also reported that "the older tutees gained greater self-confidence, younger students found positive role models and both groups improved academically" (Davenport et. al, 2004).

## Methodology

### *Participants*

The study took place in a private, chartered Islamic school in Cleveland. Two classes were examined, a 1st grade class with fourteen students who were tutored by a split 4th/5th grade class with seven students. The school had implemented the program "Book Buddies" in the beginning of the year. The program was planned to provide opportunities for tutors and tutees to interact and experience literacy together by means of the older students to read to, provide reading strategy tips, and to help the younger students with writing assignments. Although all grades and classrooms participated in the program, only the 1st and 4th/5th grade classrooms were examined. The racial makeup of the students is as follows, 31% Asian, 55% Caucasian, and 14% African American. Five students are ESL. One teacher has a BS degree in early

childhood and is licensed to teach pre-k through 3rd grade and the other teacher holds four year degree in education from India that has been accredited in the United States. They teach the 1st and 4th/5th grade classrooms respectively.

### *Instrumentation*

A quantitative examination of student reading attitudes was observed using The Reading Attitude Survey from the America Reads Handbook and was distributed before the first session on October 7, 2004 and again on November 29, 2004. The Reading Attitude Survey is a norm-referenced measure that contains 8 statements about students' personal attitude of reading. Each statement is followed by three blanks ranging from "yes", "no", and "maybe". Students are instructed to check the answer which best expresses their feelings about the statement. Students were instructed that there were no right or wrong answers and it was a simple matter of choice as to how they personally felt about the statement. A tally number of responses were then counted for yes, no, and maybe responses.

### *Procedures*

The students were told by the classroom teachers that they would be reading with their book buddies every Friday. Before each session, the teachers would give various lessons on reading strategies, proof-reading skills, grammatical writing rules, and book selection ideas. The two classes met for 30 minutes each week in the library. Each session varied in activities. The first 3 sessions focused on the 1st grade students reading skill leveled books to their book buddy. Books that focused on word families and sight words were used during these sessions. The older students were to help the 1st graders use reading strategies to decode text. A visual aid of a poster entitled

“Hung up on a Word” was used and tutors were to refer to the poster when a 1st grader got “Hung up on a word”. Reading strategies such as sounding out the word, thinking if the word made sense, sounding out the first letter/sound of the word, and skipping the word and coming back were on the poster and discussed before each session. The next 2 sessions focused on the 4th/5th grade students reading aloud to their 1st grade book buddy. The following 2 sessions focused on the 4th/5th grade students helping the 1st graders to edit their student authored books.

### Findings

The reading attitude surveys provide quantitative estimates of students’ attitudes toward reading. This survey is a means of monitoring the attitudinal impact of the cross-age tutoring program. To describe the students’ attitudes towards reading and in response to the question of this paper, “Can cross-age tutoring help to develop positive reading attitudes in elementary school children?” two out of the eight questions on the Reading Attitude Survey were reviewed and analyzed. Students were split into two groups, the tutors or the 4th/5th graders and the tutees or the 1st graders. Next, the students’ responses were categorized into “improved”, “decreased”, and “stayed the same”.

The first question, "I think I am a good reader" received various responses. The tutor’s responses all stayed the same. They all felt that they were good readers. However, the tutees responses varied. Five students stayed the same, one student answering “maybe”, and four students answering “yes” to being a good reader on both the pre and post survey. Three students’ attitudes decreased in believing that they are a good reader. One student answered “yes” on the pre survey and “maybe” on the post

survey, the second student answered “maybe” on the pre survey and “no” on the post survey, and the final student answered “yes” on the pre-survey and “maybe” on the post survey. Finally, five students’ reading attitudes improved in the belief that they are good readers. Four students answered “maybe” on the pre survey and “yes” on the post survey while one student answered “no” on the pre survey and “maybe” on the post survey.

In response to the second question, “I am getting better at reading” all of the tutors’ answers stayed the same with one stating that he was not getting better at reading, and six stating that they were getting better at reading. In regards to the tutees results, ten students’ attitudes stayed the same with one students answering “maybe” they were getting better at reading and nine students answering that “yes” they were getting better at reading. Finally, three students showed improvement in the belief that they were getting better at reading with one student answering “no” on the pre survey and “maybe” on the post survey, one student answering “maybe” on the pre survey and “yes” on the post survey and one student answering “no” on the pre survey and “yes” on the post survey.

In addition to the Reading Attitude Surveys, teachers informally observed student behaviors toward the cross-age tutoring reading program. All students were eager to go each Friday and continuously remembered and asked when it was time to go to “Book Buddies”. The tutors showed dispositional attitudes of being proud by stating to teachers, “I helped my book buddy finish his book”. When asked how they felt about the program, tutors replied, “I like to help the students read”, “I helped my book buddy learn”, and “I like reading to my book buddy”. The tutors also discussed

the program with their parents as many parents asked about the program during parent/teacher conferences. The tutees also became excited when it was time to go to book buddies by showing much enthusiasm and excitement. They would remark, “Oh when we finish spelling, it will be time to read with out book buddies”. The students also remark, “I saw my book buddy over the weekend”.

### *Limitations*

In the absence of a comparison group, it can not be determined that the participation in the tutoring program was responsible for the increase and/or the maintenance of positive reading attitudes. The lack of an adequate control group, the small number of students involved and the short time span between testing limits the validation of the implications made. Further research is needed to measure the effects of cross-age tutoring on reading achievement for students, positive social interaction, and positive feelings of social responsibility towards community and others. The survey used could also be improved. Many of the students may have answered questions according to how the teachers would have liked them to respond to their answers. Many of the younger students cannot fully read directions yet and an oral survey could have been implemented. Better surveys exist and could have been implemented.

### Implications

The purpose of this study was to measure the effects of cross-age tutoring on reading attitudes. The results from this study indicated that the cross-age tutoring program had a positive effect on reading attitudes of the students. Some of the survey results point to an emerging awareness of themselves as readers. Although some of the

survey questions showed a decrease in reading attitudes, perhaps the students are becoming more aware of how readers behave, what strategies they use when reading, or the critical elements of what being a good reader means. Some students answered “maybe” in reply to getting better at reading. This implicates that they are still discovering what being a good reader does or ways that they behave. This could be a result of observing their older tutors reading orally to them. The increased time in actively engaged reading opportunities and other literacy-related activities promoted reading growth for many students.

Another positive aspect of the study was the efficiency of time spent with one-on-one attention to the tutee. In a busy classroom, students become easily unfocused and do not finish reading and writing assignments. When participating in the tutoring program, students quickly finished writing assignments and reading books with their tutor because of the uninterrupted attention that the older students could devote to them. The eagerness and excitement also added to the motivation levels of students. As Kalkowski states in regards to the benefits of peer tutoring, “repeated studies have shown that peer interaction is conducive, perhaps even essential, to a host of important early achievements; children’s understanding of fairness, their self-esteem, their proclivities toward sharing and kindness, their mastery of symbolic expression, their acquisition of role-taking and communication skills, and their development of creative and critical thinking can leave little doubt that peer relations can greatly benefit children’s social and intellectual development” (p. 8). Clearly cross-age tutoring can be a useful strategy in promoting positive reading attitudes in some elementary school children.

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