THE EFFECTS OF SELF CORRECTION AND PEER TUTORING ON THE SPELLING ACHIEVEMENT OF SECOND AND THIRD GRADE STUDENTS: A SYSTEMATIC REPLICATION

A Thesis
Presented in Partial Fulfillment of the Requirements for the Degree Master of Arts in the Graduate School of The Ohio State University

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* * * * *

The Ohio State University
1996

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ABSTRACT

This study compared the effectiveness of two instructional strategies, Self Correction and Peer Tutoring. Spelling was the subject area chosen for comparing the instructional strategies in terms of the number of words spelled correctly on weekly posttests and delayed posttests.

Seventeen second- and third-grade students served as subjects for this research. Nine students performed better under the peer tutoring condition and seven performed better under the self correction condition. One student received perfect scores under both conditions. Only two of these students, however, scored higher than their baseline data taken from the tests prior to this intervention research.

This study suggests that these procedures might better be used as supplementary or remedial procedures than as the only method for instructing spelling words.
ACKNOWLEDGMENTS

I express sincere appreciation to Dr. Ralph Gardner, III for his guidance and help throughout this research. Gratitude is expressed to Mrs. Anita Bass for allowing me to work with the students in her classroom and to Dr. Friend for supporting me throughout the ten weeks of instruction at her school. Special thanks are given to my parents, Judy and Larry, for their support, both spiritually and financially, over the past five years as I pursued my dream of becoming a Special Education teacher. Thank you to everyone else, too numerous to mention.
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FIELDS OF STUDY

Major Field: Education
Studies in: Special Education
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CHAPTER 1

INTRODUCTION

There are many procedures and beliefs in the educational system that affect the learning processes of its students. Unfortunately, these procedures and beliefs seem to run in a circular pattern. One of those is the labeling procedure used for educating mentally, physically, and behaviorally disabled, as well as academically at-risk individuals. While these labels may help with deciding where a particular student is on the academic continuum, they often also decide the expectations of teachers and peers. These expectations often have a detrimental effect on how those labeled students perform on academic tasks (Van Houten, 1980). A major point in this paper focuses on the fact that, while teacher expectations may not be the cause of school failure, their teaching methods may be a confounding factor in the high number of students labeled learning disabled who score below their chronological age when it comes to spelling (McNaughton,
Hughes, & Clark, 1994; Carpenter & Miller, 1982; Poplin, Gray, Larsen, Banikowski, & Mehring, 1980).

Review of Literature

The spelling skills of children and adults have been an important focal point of linguists and teachers alike. The formal interest in the uniform spelling of words can first be seen with Noah Webster's Blue-backed speller in the early 1800's using a simple decoding format (Hanna, Hodges, & Hanna, 1971). Since then many strategies and word lists have been developed using any of several approaches to teach individuals how to spell a group of words. Wordlists such as the Dolch and the Kucera-Francis are used in many vocabulary activities as well as for testing devices (Johnson, 1971). Strategies such as distributed practice, self correction, and peer tutoring as well as remedial methods of instruction such as the Fernald method, the Gillingham-Stillman method, the Horn method and the Phonovisual method are also used (Heron, Okyere, & Miller, 1991; Mushinski Fulk & Stormont-Spurgin, 1995).

Even with all of these strategies, many teachers choose the basal or traditional spelling method because of convenience and predictability (Barbe, Francis, & Braun, 1982). While there are variations, for the most
part, a new group of 10 to 20 words are introduced on Monday, words are written several times on Tuesday, the students then write sentences on Wednesday, and look up the definitions on Thursday. On Friday a test is given to gauge the number of words the students learned to spell during that week. These words are generally not tested again, leaving the student with no additional practice (Heron, Okyere, & Miller, 1991).

Cohen (1969), on analyzing the effectiveness of nine different spelling texts for his dissertation, found that these texts were not effectively helping students learn to spell. In a review of this research, Graves (1977) reiterates Cohen's position by stating that "Spelling is for writing. It is not to develop skills in alphabetizing, recognizing double consonants, or identifying affixes and inflectional endings. (p 33)"

Graves states as well that Cohen's data confirmed this by showing "that when words are applied in writing, children are more likely to spell them correctly (p 33)" not by simply doing exercises that have no real relevance to the spelling/writing process.

The strategy chosen to teach spelling words is very important. Fitzsimmons and Loomer (1977) define seven characteristics of an effective spelling program. One of those seven strategies is the use of the list method.
over teaching words in context. Fitzsimmons and Loomer (1978) also cite many early writers who support using lists over context, saying that they are more efficient. E. Horn, a well written author of books and articles on spelling and its procedures, for instance, is quoted by Fitzsimmons and Loomer (1978) as stating in 1936 that, "Words studied in lists are learned more quickly, remembered longer, and transformed more readily to new context. (p 64)" This format can be seen in the use of two instructional strategies, namely Peer Tutoring and Self Correction, the latter of which was named by Fitzsimmons and Loomer as an effective strategy when teaching spelling.

Fitzsimmons and Loomer (1977) state a second procedure as studying words in their entirety rather than trying to break them down into their individual parts. Self correction and peer tutoring, through the use of dictation, encourage this by having the student attend to and write the whole word.

Another important strategy for an effective spelling program lies in the way the students are tested on a group of words. Mushinski Fulk and Stormont-Spurgin (1995), Fitzsimmons and Loomer (1977), as well as many others listed by Fitzsimmons and Loomer (1978) show support to the fact that testing prior to studying
spelling words is a more superior approach because, by eliminating those words spelled correctly on the pre-test, more time can be devoted to learning those that were spelled incorrectly.

One way to combat the expectations and procedural methods of teachers is to use positive feedback to raise the academic proficiency of each labeled student (as well as those not labeled) (Van Houten, 1980). Another is to use active student responding to increase the opportunities a student has to learn.

The National Center for Education Statistics (Smith, 1994), in describing the differences between black and white educational attainment, states that "Academic proficiency is lower for black children than for white children" from age 9 through age 17. Often African American students are a grade level or more behind their same-age peers. Positive feedback from teachers, parents, and peers as well as increased response opportunities could help close this gap.

For feedback to work to its fullest potential it should be precise, quantitative, frequent, and immediate and most importantly positive (Van Houten, 1980). Feedback can be given in several different ways. While the most important is verbal praise, feedback can also be given continuously each time the performance is
emitted or differentially for either improvement over the previous day's score or for improvement over one's best performance (Van Houten, 1980). Feedback can be given by peers through exchanging of papers or by the student themself through a self-correcting procedure (Van Houten, 1980). Feedback that is displayed as hard data can be posted to allow students to see their progress. Tate, Hartley, and Anderson (1973) state that public posting often has a greater positive effect on those at the lower end of the academic continuum as compared to their classmates. This allows those students to meet or exceed the expectations of their teachers and possibly even themselves.

Greenwood, Delquadri and Hall (1984) began using the phrase "opportunity to respond" to define the relationship between the material to be learned and the actual success in learning that material. Active student responding (ASR) is a good procedure to use if high response opportunity is desired. Simply stated, ASR occurs when a student performs an academic task continuously with a measurable outcome.

Two procedures that utilize positive feedback and active student responding are self correction and peer tutoring.
**Self Correction.** Under the self correction procedure for spelling, students are encouraged to check their own spelling attempts, giving themselves immediate feedback on those words. During this procedure, students listen to their list of weekly spelling words on a tape recorder. Students write their attempts on a form and then visually check their responses by comparing them with a key.

McNeish, Heron, & Okyere (1992) compared this procedure with the traditional spelling instruction strategy. Five seventh-grade students in an LD resource room were instructed and tested on twenty words per week using these two methods of instruction. All five students performed better under the self correction instruction, gaining an average of 4.9 more words per week than under the traditional instruction method. Wirtz, Gardner, Weber, & Bullara (1996) also studied the effects of self correction over the traditional method. Six third-grade students who had low spelling scores were the subjects in this study. Weekly and bi-weekly tests were used to measure the number of words the students learned and spelled correctly under each condition. The group learned an average of 53% of their words under the traditional method and 81% of their words under the self correction instruction. Heron,
Okyere, & Miller (1991) give more evidence to the support this procedure has gained as an important factor in spelling achievement by citing much research advocating this process.

**Peer Tutoring.** A second procedure that has gained much support is peer tutoring. Peer tutoring occurs when one student, the tutor, teaches a second student, the tutee. Chronologically and/or developmentally, the tutor may be the same age as the tutee or they may be older. On some occasions the tutor may also be younger than the tutee but this is not seen very often.

During the peer tutoring procedure, two students are paired. These pairs may be made randomly but often times they are paired according to their ability to do the specific task that is being studied. Within a class, for instance, the students involved would be tested on the particular skill being used to see where each stood on a continuum. The students would then be paired by ranking these scores hierarchically and going down the list pairing every two students. Cross age tutoring would involve choosing students from a higher grade level or from a higher level within that task and pairing them with a student who is functioning below the expected level on that task. There are many other ways to pair students when working with peer tutoring.
depending on the task being taught and the ecological situations faced within the classroom.

When students have been paired, the tutors must be trained in how to deliver the problem or spelling word and how to positively correct the tutee's mistakes. This is where praise and positive feedback become a crucial part in the learning process.

Self Correction, as well as Peer Tutoring, gives the student a systematic way to learn while providing a system of reinforcement that encourages the student to make goals and strive to achieve them.

The characteristics defined by Fitzsimmons and Loomer (1977), as well as Greenwood et al. (1984), and seen in the methods of Self Correction and Peer Tutoring, are the underlying tenets of this study. This study provides an extension of the research in the content area of spelling.

Purpose of Study

This study was a systematic replication of two procedural studies: Self Correction and Peer Tutoring. In the present study, seventeen second and third grade students served as subjects. The distinguishing features of this study were the use of peer tutoring and self correction to determine the overall
effectiveness of these procedures when providing spelling instruction. This effectiveness was measured in terms of the number of words spelled correctly on weekly posttests as compared to the number spelled correctly on weekly pre-tests. Maintenance was determined by finding the percentage of words from each condition spelled correctly on delayed posttests.

Research Questions

The following research questions will be addressed in this study:

1. Will students spell more words correctly on weekly spelling tests learned during self correction or peer tutoring conditions?

2. Will students spell more words correctly on maintenance spelling tests learned under self correction or peer tutoring?

3. Will words learned during self correction or peer tutoring be more frequently spelled correctly in the students' writing?

4. Which method do the students prefer: self correction or peer tutoring?

5. Which method does the classroom teacher prefer: self correction or peer tutoring?
CHAPTER 2

METHOD

Chapter Two describes the method used in this study. A description of the subjects, setting, experimenter, dependent and independent variables, materials, procedures, student training, experimental design, and reliability measures will be provided.

Subjects

Permission to participate. Four different sources were contacted before conducting this experiment. First, the Principal of the school was contacted. Second, the classroom teacher was asked to give her consent. The parents and students were contacted for consent (see Appendix A).

Seventeen second- and third-grade students, eleven male and six female, ages 7-9 who were in a regular education classroom served as participants in this study. All the students were African American. While all seventeen students participated, six (Students
4, 7, 11, 12, 14, 17) were selected as primary subjects by the experimenter due to their low pre-test scores.

Spelling scores for each student were taken from the spelling tests from the six weeks prior to this instruction. These scores served as baseline. Table 1 shows a description of the students (i.e., their gender, age, grade equivalent).

Setting

This experiment took place in a regular education classroom at a private Christian school. There were a total of seventeen second- and third-grade students during the period in which this experiment took place. The room was approximately 25' by 25'. On one side of the room there were two rows of four desks perpendicular to a wall-length bulletin board. Across the room from these were two rows of three desks. All of these desks faced a wall-length chalkboard. The teacher's desk was at the rear of the room, behind the rows of four students' desks and a small round table was at the rear behind the rows of three desks. A metal cabinet and two low book shelves lined the wall across from the bulletin board. There were no windows. (see Figure 1)
Table 1

Description of students

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Figure 1. Experimental setting
**Experimenter**

The experimenter was a full-time student at The Ohio State University and had a Bachelor of Science Degree in Education from that university. She was certified in Developmental Handicapped Education and was a Master's Degree candidate at The Ohio State University working for additional certification in Specific Learning Disabilities.

**Definition and Measurement of Dependent Variables**

The dependent variables in this study were the number of correctly spelled words, taken from the students' spelling program, on weekly posttests and delayed posttests. The students' spelling attempts were checked for accuracy against a key developed from the *Webster Dictionary* (Kauffman, 1988). Social validity was assessed via verbal and questionnaire-type surveys.

**Weekly posttest scores.** The word lists used were developed by the classroom teacher from the students' reading books. There was a second grade list and a third grade list (see Appendix B). Twelve words were introduced to the students on Monday by the teacher and in the form of a pre-test on Wednesday by the experimenter. For the pre-test, these words were presented by the experimenter one at a time, each being
followed by a three-second pause, a sentence and then another three-second pause. The word was repeated before dictating the next word. In this instance, because there was more than one spelling level, the pre-test was given simultaneously by grade levels. For instance, the first "word, sentence, word" pattern was dictated for the first group. While these students were writing their word, the same procedure was used to dictate the second group's first word. Answers were written on a sheet of classroom writing paper.

When all twelve words had been dictated for each grade, the tests were collected to be corrected by the experimenter after the session. This was done by writing the correct spelling next to any word that did not match the answer key. A word was considered correct if it was spelled identical to a key with spellings taken directly from the dictionary. A word was considered incorrect if the letters written did not match exactly or if the letters were not legible.

To measure the number of words learned by each target student, a posttest was given on Friday. The words and procedures were identical to those used in the pre-test for that week. Accuracy on both the pre-test and the posttest was determined by comparing student responses to the dictionary spelling on a key. Any
variation in letter order from this template resulted in an incorrect answer.

**Delayed posttest scores - maintenance.** To check maintenance on the words that were spelled correctly on previous posttests, a second posttest was given during the third, seventh, and tenth weeks. These tests were administered individually through the use of a tape recorder. The words were dictated just as in the pre- and posttests (i.e., stimulus word, 3-second pause, sentence, 3-second pause, stimulus word). Because of the ratio of tape recorders to students, this test was delivered to half of the students on Thursday and half on Friday.

The students wrote their answers on a sheet of writing paper. Each test consisted of a maximum of twelve words which the student had spelled correctly on his/her previous weekly posttests. Tests were graded by the experimenter by writing the correct spelling of any misspelled words next to the attempt using a key with spellings derived directly from a dictionary.

**Generalization probes.** To probe for generalization in the use of any spelling words learned under any condition in this experiment, writing samples were observed throughout the course of the experiment,
however, very few contained the instructed spelling words. These writing samples were taken from work in other content areas.

Social validity. Questionnaires were given to all of the students and the teacher following the ten weeks of instruction (see Appendix G and H). Students responded to questions such as: (1) Did you like the self correction or the peer tutoring better?; (2) Do you think these methods helped you to improve your spelling?; (3) If you could, would you use either of these methods in spelling again?; (4) Would you use either of these methods in another subject?

The classroom teacher also responded to a questionnaire which asked: (1) Did you notice an improvement or a decline in anyone's spelling on the weekly tests?; (2) Did you notice an improvement in the students' attitudes toward spelling and spelling tests during either or both of these procedures?; (3) Did you notice a change in the students' work in other areas of instruction?

Independent Variables

There were two independent variables at work in this study: Self Correction and Peer Tutoring.
Self Correction. The self correction procedure used in this study was a systematic replication of that used by Wirtz et al. (1996) and McNeish et al. (1992). Spelling lists were created from the students' spelling programs, one for the second grade and one for the third grade. In the present study, students learned their words by listening to, writing, and self correcting their own spelling words. A form with six columns was used by the students to mark and self correct their answers (see Appendix C). Each student had an individualized spelling list printed in Column 1 of their answer sheet. This was also dictated onto a cassette in the same order. Students folded Column 1 back, listened to their list of words and sentences and wrote their answers on the answer sheet. Self correcting was done by comparing the student's spelling attempts (Column 2) to a column with the correct spelling for each word (Column 1).

If the student's word was correct they placed a "C" in Column 3 next to the attempt or moved directly to the next word. If the student's word was incorrect, the student then wrote the word correctly in Column 3 by looking at the correct spelling in Column 1. Two more columns allowed the student additional practice and exposure to the weeks words. Enough sheets were
provided to give the student ample practice for that week's words. This format was used Wednesday through Friday during the weeks this condition was in use.

An additional procedure was used on Wednesday during this condition to introduce the students to their words. In this procedure the students listened to their list of words and sentences on the tape recorder while visually following along with Column 1 of their answer sheet. They then rewound the cassette and began the weekly procedures. Appendix C shows a sample of the self correction form used in this study.

Peer Tutoring. In this condition, the students learned their words by being paired. Each became both tutor and tutee. The spelling lists were created just as they were during the self correction procedure however each student's words were placed on index cards. On one side was the information the peer tutor was to dictate to the tutee: the target word, a sentence with the target word underlined within it, and the word a second time. The tutor read the word and sentence and then the tutee wrote the target word on their answer sheet in Column 1 (see Appendix D). The tutor then read the word again and gave positive feedback to the tutee according to whether their answer was correct or incorrect.
Materials

Materials in the Self Correction procedure were:

Self correction sheets (see Appendix C).

Experimenter-prepared self-correction sheets were used, on which both the correct spelling was written and the students could write and check their responses.

Tape recorders with headphones. Nine Walkman-style cassette players, five with rewind and fast forward functions and four with only the fast forward function were used. Each cassette player had a set of headphones.

Batteries. Two AA batteries were used in eight of the cassette recorders. The ninth recorder used three AA batteries.

Cassette tapes. Ten TDK ninety-minute cassettes were used during the experiment. The second grade words were recorded on six cassettes and the third grade words on four.

Individual folders. Each student had a green manila folder with pockets made from standard and long envelopes. On the inside left, a standard envelope was cut diagonally and glued back together to make a pocket for an individual progress report. On the inside, a long envelope was cut diagonally, glued back together
and placed vertically on the far right-hand side to create a pocket to keep answer sheets.

**Pencils.** Each student was required to use their own pencil, however additional pencils were used when students did not have one or broke one.

The materials used in the peer tutoring procedure were:

**Self-correction sheets** (see Appendix D). Blank self-correction sheets were used, on which the students could write and check their responses.

**Individual folders.** Each student had a green manila folder with pockets made from standard and long envelopes. On the inside left, a standard envelope was cut diagonally and glued back together to make a pocket for an individual progress report as well as the student's index cards containing their spelling words. On the inside also, a long envelope was cut diagonally, glued back together and placed vertically on the far right-hand side to create a pocket to keep the answer sheets.

**Tutor/tutee reinforcement cards** (see Appendix F). On the inside of each student's folder, a grid was placed above the small pocket. This grid was used as a reinforcement chart during the peer tutoring condition.
A student earned a sticker for the grid if they were randomly observed following all of the procedures.

**Individualized index cards** (see Appendix E). Each student had twelve pink index cards in the small pocket of their folder. On each card was a word, the word used in a sentence, and the word a second time. These were used by the tutor to instruct and correct the tutee's knowledge of the week's spelling words.

**Pencils.** Each student was required to use their own pencil, however additional pencils were used when students did not have one or broke one.

**Procedures**

The following procedures were used in this study:

Two types of spelling instruction were compared in this study: Self Correction and Peer Tutoring.

**Self Correction procedures.** Individualized spelling lists were created for each grade level for each week of this procedure. The experimenter dictated each grade's list of words and their corresponding sentences onto a master cassette using the format: word, 3-second pause, sentence, 3-second pause, word, 3-second pause. The master cassettes were then dubbed onto additional cassettes, for a total of six second grade and four third grade cassettes. Those words were then
written correctly on each student's self correction sheet in Column 1 by the experimenter. Because of the number of students participating, the class was divided into two groups. Students in Group 1 picked up their folder, the appropriate cassette, a tape recorder and a set of headphones upon instruction. Group 2 was given a spelling activity using words from previous weeks. These groups switched after twenty minutes of instruction.

The students readied themselves by placing everything in or under their desk except a pencil, their folder, and other items depending on which group they were in. On Wednesday, the students listened to the cassette once while following along visually with their words in Column 1. They then rewound the tape. After listening to their words on Wednesday, and for the full twenty minutes on Thursday and Friday, the students looked over their words in Column 1 and then folded back Column 1 so that only Columns 2-6 were showing. The student listened to the word, stopped the tape after each sentence, and wrote their response in Column 2. When all twelve words had been written, the student unfolded the paper to reveal Column 1 then he/she checked his/her answers against the correct spellings in Column 1. For each answer that was scored as being
spelled correctly according to the spelling in Column 1, a "C" was placed in Column 3 next to that word. For each answer that was scored as being incorrect according to Column 1, the word was written correctly in Column 3 by looking at Column 1. When all answers had been checked, the student folded Columns 1-3 back, started the cassette and began again spelling all of the words whether or not they were spelled correctly on the first try.

For each study session the target students followed a standard protocol, described below:

1. Target students came in with the teacher and sat down. Upon instruction by the experimenter, students in Group 1 picked up their folders, the appropriate cassette, a tape recorder, and headphones. Following that, Group 2 picked up their folders.

2. Students sat at their desk, took out a pencil, and placed all other material in or under their desk. (On Wednesday, the students were given their pre-test prior to getting their equipment.)

3. Students took out the spelling/answer sheets.
4. Students looked over their words (if Wednesday, students listened to and visually followed their words in Column 1).

5. Students put on their headphones, put their cassette into the recorder, folded back Column 1, and pushed the play button on the recorder, adjusting the volume if necessary.

6. Students listened to the first dictated word and sentence, then stopped the cassette and wrote the spelling word in Column 2.

7. The cassette was then started again and the word was repeated allowing the student to visually check their answer. This procedure was repeated until all twelve words had been presented and recorded.

8. Students then stopped the recorder and pushed the rewind button.

9. Students unfolded their paper and matched their spelling patterns to those written in Column 1.

10. If the student made an error, the word was written in Column 3 next to their word by using the correct spelling in Column 1 as a model.

11. If the student spelled the word correctly, a "C" was placed in Column 3 next to their word.
12. This procedure was then repeated using Columns 4 through 6 and possibly a second sheet until the twenty-minute session had expired.

13. When twenty minutes had expired, a prompt was given by the experimenter and students were to put their answer sheets in their folders. Tape recorders, headphones and cassettes were given to someone in Group 2.

14. This procedure occurred for forty minutes following the pre-test on Wednesday and for forty minutes as well on Thursday and Friday.

Peer Tutoring procedures. During Peer Tutoring, each target student was paired. Non-target students who were participating were paired as well. The spelling lists were created just as they were for Self Correction, however each student's words were placed on index cards. Students came in with the teacher and sat down. On Wednesday, a pre-test was given and then students got their folders upon instruction. They spent five minutes in a Tutor Huddle practicing the words and sentences they would be dictating. During the actual Peer Tutoring session, the tutor and tutee sat across from each other. The tutor held up the first card and dictated the word and the sentence. The tutor then asked the tutee to write the word in Column 1. The
tutor repeated the word and checked the tutee's response with the correct spelling written on the card without letting the tutee see the answer.

If the tutee was correct, immediate positive feedback was delivered by the tutor, a "C" was placed in Column 2 by the tutee, and they moved on to the next card. If the tutee was incorrect, the tutor prompted the tutee to try again in the next column, Column 2. Again, if the tutee was correct, the tutor praised, told the tutee to place a "C" in Column 3, and moved to the next card. If, however, the tutee was incorrect the second time, the tutor turned the card over showing the correct spelling. The tutee orally spelled the word and wrote the word in Column 3 next to their previous attempts. This process was continued until all twelve cards had been attempted. The roles then switched and the tutee became the tutor. Columns 4-6 allowed the students more practice time during each forty-minute session.

For each study session all of the students followed a standard protocol:

1. Students came in with the teacher and sat down.
2. A pre-test was given on Wednesday and then students picked up their folder upon instruction and spent five minutes in a
Tutor Huddle to go over the words and sentences they would be dictating for that week.

3. Tutor/tutee pairs sat at one partner's desk.

4. Students took out a pencil and placed all other material in or under their desks.

5. Tutors took out the tutee's index cards and the tutee took out an answer sheet.

6. Tutor dictated the first word and sentence without letting the tutee see the word (the card told the tutor what to dictate: the word, the sentence, the word).

7. Tutee wrote the word in Column 1 on their answer sheet and tutor dictated the word a second time.

8. Tutor checked the tutee's spelling against the card without letting the tutee see the correct answer.

9. If correct, tutor gave immediate praise, showed the tutee the answer, told the tutee to place a "C" in Column 2 next to their answer and then dictated the second word/card.

10. If incorrect, tutor prompted the tutee to "Try again", dictating the word again for the tutee.

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11. Tutee then wrote the word in Column 2 next to their first attempt.

12. Tutor checked this new spelling attempt against the card without letting the tutee see.

13. If correct, tutor gave immediate praise, showed the answer, told the tutee to place a "C" in Column 3 and then moved on to the next word/card.

14. If incorrect, tutor showed the tutee the correct spelling, asked them to spell it orally and then to write it in Column 3 next to their response. Tutor then moved on to the next word/card.

15. When all twelve words had been dictated and responded to, the roles switched.

16. This procedure was repeated using Columns 4-6 if time was left in the session.

17. After forty minutes, a prompt was given by the experimenter, students put the answer sheets and cards in their folders and put the folders back on the table.

18. This procedure occurred for forty minutes following the pre-test and Tutor Huddle on Wednesday and for forty minutes as well on Thursday and Friday.
Training Procedures

Self correction training procedure. In the self correction procedure, training took place in the experimental setting (the classroom) with the whole class participating. This training occurred one school day prior to the first session in this condition. Students were introduced to the self correction sheet and the tape recorded lists. Instruction was presented through modeling by the experimenter and participation of the students. During training the rules were covered as well as where to find the equipment each day and how to use it (recorders and answer sheets). Students also learned how to match and self correct their answers.

Peer tutoring training procedure. For the peer tutoring procedure, training also occurred in the experimental setting one school day prior to the initial session. During this training session the tutor/tuttee pairs were trained as to the duties and expectations of each. Modeling and participation were used. They were taught the rules for this procedure as well as where to find the materials each day. All students were taught how to dictate the words and sentences and how to give positive feedback. This training session was treated as a dry run through the actual process.
Experimental Design

An alternating treatments design was used to analyze the effects of two distinct conditions of instruction (Self Correction and Peer Tutoring) on the acquisition of spelling words. Self Correction and Peer Tutoring were presented in a randomly assigned sequence across the ten week study such that each condition occurred for five weeks. The random sequence in this study was determined by flipping a coin, with the condition that no more than 2 continuous weeks have the same treatment.

This treatment was deemed appropriate for this study because it could be used without an initial baseline phase, could produce a comparison within a short period of time, and would provide an experimentally sound and efficient method for comparing two treatment conditions, while simultaneously allowing for randomly assigned conditions (Cooper, Heron, & Heward, 1987).

Reliability

Recording reliability. Reliability checks were conducted by a second observer throughout the study, randomly scoring 50% of the weekly pre-test and posttest products. The Webster Dictionary, as the standard for
correct spelling, was used for comparison of students' spelling. An answer key was used for each test.

Procedural integrity. A second observer checked on Wednesday during weeks 2, 3, 5, 8, and 10 to ensure that the procedures in this study were being implemented correctly. The observer was instructed to note whether the following steps were conducted each session:

1. Were the sessions at least forty minutes?
2. Was the experimenter moving around the room monitoring the students?
3. Was the experimenter giving praise?
4. Did the experimenter encourage the students to work throughout the session?
5. Did students know the procedures for each independent variable?
CHAPTER 3

RESULTS

The purpose of this chapter is to report the reliability data, procedural integrity, weekly posttest results, and generality probe.

Reliability Data

Reliability was assessed by having a second observer score 50% of the tests each week as well as the experimenter. Both the pre-tests and the posttests were scored randomly each week. Percentage of agreement was obtained by dividing the number of agreements by the number of agreements plus disagreements then multiplying by 100. An agreement average of 97.9% was achieved on the pre-test data with a range of 83 to 100. For the posttest data, a 97.4% agreement average was reached with a range of 75 to 100. An agreement was scored when both observer and experimenter counted a word as correct or incorrect.
**Procedural Integrity**

Procedural Integrity data was taken by a second observer on Wednesday during weeks 2, 3, 5, 8, and 10 to ensure correct implementation of the conditions. The observer noted correct or complete implementation as 100% during the third week and 80% (4 out of 5) during weeks 2, 5, 8, and 10 (see Table 2).

Table 2

<table>
<thead>
<tr>
<th>Procedural Integrity Data</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>1. Forty minute session</td>
</tr>
<tr>
<td>2. Experimenter moving</td>
</tr>
<tr>
<td>and monitoring</td>
</tr>
<tr>
<td>3. Experimenter praising</td>
</tr>
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<td>4. Experimenter encourage</td>
</tr>
<tr>
<td>work throughout session</td>
</tr>
<tr>
<td>5. Students know condition</td>
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<tr>
<td>procedures</td>
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</table>

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Results of Intervention

Data were collected on individual students during the Self Correction and Peer Tutoring conditions. This data is presented in the graphs that follow. A brief discussion accompanies each student's data. Analysis of success and failure follows.

Subject Summaries

The seventeen students are described in the following section. An individual graph is provided for each subject which displays the students' weekly spelling scores for each independent variable over the ten intervention sessions. The number of words spelled correctly on the pre-test as compared to the number spelled correctly on the posttest for each student is summarized in Table 3. The order of conditions was as follows: weeks 1 and 2, Peer Tutoring; weeks 3 and 4, Self Correction; week 5, Peer Tutoring; week 6, Self correction; week 7, Peer Tutoring; weeks 8 and 9, Self Correction; and week 10, Peer Tutoring.
### Table 3

**Pre-test score/posttest score comparison**

<table>
<thead>
<tr>
<th>Student</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
<th>Week 9</th>
<th>Week 10</th>
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<th>+/-</th>
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<td>12/-</td>
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<td>11/11</td>
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<td>7/12</td>
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<td>5/10</td>
<td>1/9</td>
<td>4/10</td>
<td>12/12</td>
<td>7/8</td>
<td>5/5</td>
<td>2/8</td>
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<td>2/3</td>
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<td>2/11</td>
<td>3/12</td>
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<td>8/12</td>
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<td>-----</td>
<td>2/8</td>
<td>-----</td>
<td>3.6/10.3</td>
<td>+6.7</td>
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</table>

**Group:** 7.4/10.3 6.4/8.8 5.5/9.3 4.5/9.5 8.3/9.2 9.0/10.3 5.2/8.5 5.7/9.2 4.9/8.7 6.2/10.0

**Notes:**
- Pre-test scores.
- Posttest scores.
- Student absent.
Student 1

Student 1's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 1's average score was 96.9% (see Figure 2). Student 1 averaged 93.4% on the posttests taken during the Peer Tutoring condition with a range of 75 to 100. During Self Correction, Student 1's mean score was 100% with a range of 100 to 100. Student 1 learned an average of 1.6 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 1.6 words over the pre-test and for Self Correction, 1.5. On the three delayed posttests, Student 1 spelled 10/12, 9/12, and 11/12 words correctly on the respective tests.

Student 2

Student 2's mean spelling score before this study was 96.6%, with a range of 83 to 100. Over the ten weeks of instruction, Student 2's average score was 94.6% (see Figure 3). Student 2 averaged 98.4% on the posttests taken during the Peer Tutoring condition with a range of 92 to 100. During Self Correction, Student 2's mean score was 89.8% with a range of 75 to 100. Student 2 learned an average of 2.3 words each week.
Student 1

Figure 2. Words spelled correctly by Student 1, on weekly spelling tests.

Student 2

Figure 3. Words spelled correctly by Student 2, on weekly spelling tests.
through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 2.4 words over the pre-test and for Self Correction, 2.3. On the three delayed posttests, Student 2 spelled 10/12, 10/12, and 12/12 words correctly on the respective tests.

Student 3

Student 3's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 3's average score was 94.4% (see Figure 4). Student 3 averaged 89.5% on the posttests taken during the Peer Tutoring condition with a range of 58 to 100. During Self Correction, Student 3's mean score was 98.4% with a range of 92 to 100. Student 3 learned an average of 1.6 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 2.5 words over the pre-test and for Self Correction, .8. On the three delayed posttests, Student 3 spelled 8/10, 11/12, and 12/12 words correctly on the respective tests.
Figure 4. Words spelled correctly by Student 3, on weekly spelling tests.
Student 4

Student 4's mean score before this study was 100%. Over the ten weeks of instruction, Student 4's average score was 72.5% (see Figure 5). Student 4 averaged 71.6% on the posttests taken during the Peer Tutoring condition with a range of 33 to 92. During Self Correction, Student 4's mean score was 73.4% with a range of 42 to 100. Student 4 learned an average of 4 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 4.2 words over the pre-test and for Self Correction, 3.8. On the three delayed posttests, Student 4 spelled 9/12, 9/12, and 7/12 words correctly on the respective tests.

Student 5

Student 5's mean spelling score before this study was 96.6%, with a range of 83 to 100. Over the ten weeks of instruction, Student 5's average score was 81.6% (see Figure 6). Student 5 averaged 66.8% on the posttests taken during the Peer Tutoring condition with a range of 42 to 83. During Self Correction, Student 1's mean score was 93.4% with a range of 83 to 100. Student 5 learned an average of 3.7 words each week through the use of these procedures (the average
Figure 5. Words spelled correctly by Student 4, on weekly spelling tests.

Figure 6. Words spelled correctly by Student 5, on weekly spelling tests.
difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 3.3 words over the pre-test and for Self Correction, 4. On the three delayed posttests, Student 5 spelled 4/5, 9/12, and 10/12 words correctly on the respective tests.

Student 6

Student 6's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 6's average was 89.2% (see Figure 7). Student 6 averaged 90% on the posttests taken during the Peer Tutoring condition with a range of 75 to 100. During Self Correction, Student 6's mean score was 88.4% with a range of 75 to 100. Student 6 learned an average of 4.4 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 4.6 words over the pre-test and for Self Correction, 4.2. On the three delayed posttests, Student 6 spelled 11/12, 9/12, and 11/12 words correctly on the respective tests.

Student 7

Student 7's mean spelling score before this study was 96.6%, with a range of 83 to 100. Over the ten
Figure 7. Words spelled correctly by Student 6, on weekly spelling tests.
weeks of instruction, Student 7's average score was 70.9% (see Figure 8). Student 7 averaged 75% on the posttests taken during the Peer Tutoring condition with a range of 58 to 100. During Self Correction, Student 7's mean score was 66.8% with a range of 42 to 92. Student 7 learned an average of 5.8 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 4.6 words over the pre-test and for Self Correction, 7. On the three delayed posttests, Student 7 spelled 9/12, 7/12, and 10/12 words correctly on the respective tests.

Student 8

Student 8's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 8's average score was 100% (see Figure 9). Student 8 averaged 100% on the posttests taken during the Peer Tutoring condition with a range of 100 to 100. During Self Correction, Student 8's mean score was 100% with a range of 100 to 100. Student 8 learned an average of .6 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of .4 words
Figure 8. Words spelled correctly by Student 7, on weekly spelling tests.

Figure 9. Words spelled correctly by Student 8, on weekly spelling tests.
over the pre-test and for Self Correction, .8. On the three delayed posttests, Student 8 spelled 12/12, 12/12, and 12/12 words correctly on the respective tests.

Student 9

Student 9's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 9's average score was 97.2% (see Figure 10). Student 9 averaged 95% on the posttests taken during the Peer Tutoring condition with a range of 75 to 100. During Self Correction, Student 9's mean score was 100% with a range of 100 to 100. Student 9 learned an average of 1.8 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 2 words over the pre-test and for Self Correction, 1.5. On the three delayed posttests, Student 9 spelled 12/12, 10/12, and 11/12 words correctly on the respective tests.

Student 10

Student 10's mean spelling score before this study was 91.6%, with a range of 75 to 100. Over the ten weeks of instruction, Student 10's average score was 92.5% (see Figure 11). Student 10 averaged 90% on the
Student 9

Figure 10. Words spelled correctly by Student 9, on weekly spelling tests.

Student 10

Figure 11. Words spelled correctly by Student 10, on weekly spelling tests.
posttests taken during the Peer Tutoring condition with a range of 58 to 100. During Self Correction, Student 10's mean score was 95% with a range of 83 to 100. Student 10 learned an average of 5 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 5.2 words over the pre-test and for Self Correction, 4.8. On the three delayed posttests, Student 10 spelled 12/12, 10/12, and 11/12 words correctly on the respective tests.

Student 11

Student 11's mean spelling score before this study was 83.4%, with a range of 75 to 100. Over the ten weeks of instruction, Student 11's average score was 43.2% (see Figure 12). Student 11 averaged 48.2% on the posttests taken during the Peer Tutoring condition with a range of 8 to 75. During Self Correction, Student 11's mean score was 38.2% with a range of 8 to 75. Student 11 learned an average of 1.1 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 1.4 words over the pre-test and for Self Correction, .8. These
Figure 12. Words spelled correctly by Student 11, on weekly spelling tests.
low averages are reflected in the fact that the scores for two posttests were lower than those for the respective pre-tests and there were three weeks when the scores for the two tests were equal. Also, there was limited instruction time one week. On the three delayed posttests, Student 11 spelled 6/12, 6/12, and 4/12 words correctly on the respective tests.

Student 12

Student 12's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 12's average score was 60.8% (see Figure 13). Student 12 averaged 70% on the posttests taken during the Peer tutoring condition with a range of 42 to 83. During Self Correction, Student 12's mean score was 51.6% with a range of 25 to 100. Student 12 learned an average of 4.2 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 4.8 words over the pre-test and for Self Correction, 3.6. On the three delayed posttests, Student 12 spelled 10/12, 8/12, and 5/12 words correctly on the respective tests.
Figure 13. Words spelled correctly by Student 12, on weekly spelling tests.
Student 13

Student 13's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 13's average score was 50% (see Figure 14). Student 13 averaged 52.7% on the posttests taken during the Peer Tutoring condition with a range of 17 to 83. During Self Correction, Student 13's mean score was 46% with a range of 25 to 67. Student 13 learned an average of 1.4 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 2.7 words over the pre-test and for Self Correction, -.5. On the three delayed posttests, Student 13 spelled 9/12 and 6/12 words correctly on the respective tests (Student 13 missed the third test).

Student 14

Student 14's mean spelling score before this study was 0%, with a range of 0 to 0. Over the ten weeks of instruction, Student 14's average score was 11.6% (see Figure 15). Student 14 averaged 13.2% on the posttests taken during the Peer Tutoring condition with a range of 8 to 25. During Self Correction, Student 14's mean score was 10% with a range of 0 to 17. Student 14 learned an
Student 13

![Graph showing number of correctly spelled words over weeks for Student 13 comparing Peer Tutoring and Self Correction.]

Figure 14. Words spelled correctly by Student 13, on weekly spelling tests.

Student 14

![Graph showing number of correctly spelled words over weeks for Student 14 comparing Peer Tutoring and Self Correction.]

Figure 15. Words spelled correctly by Student 14, on weekly spelling tests.
average of 1.3 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 1.4 words over the pre-test and for Self Correction, 1.2. On the three delayed posttests, Student 14 spelled 1/3, 1/5, and 2/5 words correctly on the respective tests.

Student 15

Student 15's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 15's average score was 95.9% (see Figure 16). Student 15 averaged 98.4% on the posttests taken during the Peer Tutoring condition with a range of 92 to 100. During Self Correction, Student 15's mean score was 93.4% with a range of 83 to 100. Student 15 learned an average of 5 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 5.8 words over the pre-test and for Self Correction, 4.2. On the three delayed posttests, Student 15 spelled 11/12, 11/12, and 11/12 words correctly on the respective tests.
Student 15

![Graph showing the number of correctly spelled words over weeks for Peer Tutoring and Self Correction.]

Figure 16. Words spelled correctly by Student 15, on weekly spelling tests.
Student 16

Student 16's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 16's average score was 90.9% (see Figure 17). Student 16 averaged 91.8% on the posttests taken during the Peer Tutoring condition with a range of 83 to 100. During Self Correction, Student 16's mean score was 90% with a range of 67 to 100. Student 16 learned an average of .9 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 1.4 words over the pre-test and for Self Correction, .4. On the three delayed posttests, Student 16 spelled 11/12, 10/12, and 12/12 words correctly on the respective tests.

Student 17

Student 17's mean spelling score before this study was 100%, with a range of 100 to 100. Over the ten weeks of instruction, Student 17's average score was 85.9% (see Figure 18). Student 17 averaged 80.7% on the posttests taken during the Peer Tutoring condition with a range of 67 to 100. During Self Correction, Student 17's mean score was 89.8% with a range of 67 to 100.
Student 16

![Graph showing the number of correctly spelled words over weeks for Student 16, comparing Peer Tutoring and Self Correction.]

Figure 17. Words spelled correctly by Student 16, on weekly spelling tests.

Student 17

![Graph showing the number of correctly spelled words over weeks for Student 17, comparing Peer Tutoring and Self Correction.]

Figure 18. Words spelled correctly by Student 17, on weekly spelling tests.
Student 17 learned an average of 6.7 words each week through the use of these procedures (the average difference between pre-test and posttest). For Peer Tutoring, the student learned an average of 6.3 words over the pre-test and for Self Correction, 7. On the three delayed posttests, student 17 spelled 11/12, 10/12, and 9/12 words correctly on the respective tests.

Analysis of Treatment Success and Failure

Of the seventeen students, only two improved over their respective baseline test scores. Of those same seventeen students, nine got higher test scores under the Peer Tutoring condition, seven got higher scores under the Self Correction condition and one faired equally well under both conditions, receiving 100% under each condition.

Delayed posttests to determine maintenance produced scores indicating less than total maintenance for all but one student. Seven students received a perfect score on at least one of the three tests and thirteen missed only one word on at least one of the tests.

Generalization was measured by observing writing samples. There was, however, fewer than one spelling word used per paper producing little data to reflect on.
CHAPTER 4

DISCUSSION

The purpose of this research was to compare the effects of the self correction versus peer tutoring instructional interventions on the weekly spelling achievement of the students in a second and third grade classroom.

The effects of the independent variables were measured by looking at the number of words spelled correctly on a posttest as compared to the number spelled correctly on a pre-test. Also, the number of words spelled correctly on each test was used to determine which procedure was more effective for each student. These two conditions were randomly administered across a ten week period.

This chapter will discuss each research question, the results and limitations of this study and areas for future research.
Will students spell more words correctly on weekly spelling tests learned during self correction or peer tutoring conditions?

The first research question to be addressed by this study asked whether the students would spell more words correctly on their weekly tests using self correction or peer tutoring. This was measured by counting the number of words spelled correctly on each posttest for each respective condition.

Results show that, of the seventeen students, nine scored higher on the tests taken during the peer tutoring condition, seven scored higher during the self correction condition, and one student scored equally well during both conditions receiving a 100% on every test. All but two students, however, received a lower grade percentage during these conditions than during baseline (tests prior to intervention).

These results can be attributed to several factors. First, the size of the class required the students to share tape recorders during the self correction condition. This reduced the amount of time for instruction during this condition on some days while students traded recorders and rewound cassettes. Also, the repetitiveness of the self correction recordings contributed to down time for several students at various
points during this experiment instead of instructional progress. A major factor in the low scores achieved during the peer tutoring condition was the incompatible peer tutor pairs. This delay caused down time while the students either argued or simply did not participate. A factor that occurred across both conditions was the inconsistent correction of mistakes. This resulted in the students practicing incorrect spellings and subsequently misspelling the word on the posttest regardless of whether they spelled it correctly on the pre-test. These lower grades created a need for extra credit. To satisfy this need, points could be earned by choosing the correct homonym on an index card. There were 140 index cards, each with a sentence on it and word possibilities beneath the sentence. The word possibilities were either homonym groups (ex. their, there, they're) or various spellings of a single word (ex. wead, weed, wed). A sheet was provided so that the students could record their responses.

The number of students in the classroom compared to the number of observers available to monitor the correct implementation of the procedures resulted in both procedural as well as behavioral problems. Collaborative learning, where the answer was given or not corrected, occurred in many peer tutoring groups. This could be a
result of the fact that, for at least 25% of the intervention sessions, there was only the experimenter in the room with the students. This collaborative learning occurred, as well, when both the classroom teacher and the experimenter were in the room.

Will students spell more words correctly on maintenance spelling tests that were learned during self correction or peer tutoring?

The second question to be addressed looks at the number of words spelled correctly on a delayed posttest to determine maintenance. These tests occurred during the third, seventh and tenth weeks and were individualized to each student.

Seven of the seventeen students received a 100 percent on at least one of the three tests and thirteen students missed only one word on at least one of the three tests. Ten of those thirteen missed only one word on at least two of the three tests.

These results were due in part to the fact that several spelling words were repeated from preceding weeks' lists. (The lists were chosen from the student's reading books allowing for repetition.) These results could also have been due to the fact that words that may
have appeared on a maintenance test were learned prior to the weekly posttest.

**Will words learned during self correction or peer tutoring be more frequently spelled correctly in the students' writing?**

The third question involved generalization to other writing. Writing samples were observed from other assignments however there was fewer than one spelling word used per paper producing little data to reflect on. Therefore, no conclusion can be drawn.

**Which method do the students prefer: self correction or peer tutoring?**

Responses were collected from twelve of the seventeen students. Two students preferred the peer tutoring process and seven preferred the self correction. Three students liked both procedures equally. The student preferences appeared to relate to their personality and learning preference. Those who were more willing to help others, or who learned better with a partner, preferred the peer tutoring instructional method. Those students who were more reserved, preferred the self correction method of instruction.
Which method does the classroom teacher prefer: self correction or peer tutoring?

The classroom teacher did not have a preference but noted that there was some improvement in the test scores and attitudes toward spelling for several of the students. Tables 4 and 5 show the results of these questionnaires.

Limitations of the Study

Analysis of treatment success and failures showed that there were several limitations that could have played a part in the results obtained from this intervention. First, there were only three days a week that were available for this intervention due to conflicts with the class schedule. This schedule also changed midway through the ten-week intervention from 1:30 pm to 10:30 am due to a change in the students' academic schedule. A second limitation can be seen in the fact that this intervention occurred over Easter break as well as at the end of the school year. The use of words from the students' readers instead of a standardized spelling curriculum also created a limitation in that it could not be assured that the words learned were at the appropriate grade level. Also, because most of the students were receiving

66
Table 4

Student Questionnaire Results

1. Did you like the Self Correction or the Peer tutoring better?

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<th>PEER TUTORING</th>
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<td>7 out of 12</td>
<td>2 out of 12</td>
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<tr>
<td>Both</td>
<td>3 out of 12</td>
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2. Do you think these methods helped you to improve your spelling?

<table>
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</thead>
<tbody>
<tr>
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<td>2 out of 12</td>
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3. If you could, would you use either of these methods in spelling again?

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<th>YES</th>
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<td>5 out of 12</td>
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<tr>
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4. If you could, would you use either of these methods in another subject?

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<th>YES</th>
<th>NO</th>
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<td>Both 1 out of 12</td>
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</tbody>
</table>
### Table 5

**Teacher Questionnaire Results**

1. Have you noticed an improvement in anyone's spelling on the weekly test?  
   YES

2. Have you noticed a decline in anyone's spelling on the weekly tests?  
   YES

3. Have you noticed an improvement in the students' attitudes toward spelling and spelling tests during either or both of these procedures?  
   YES

4. Have you noticed a change in the students' work in other areas of instruction?  
   YES
perfect scores on their baseline tests, a ceiling effect was created leaving little room for comparison unless the students achieved below this rate.

Implications for Future Research

While there is much research on these procedures as well as the traditional method of teaching spelling, there is still room for more research. For instance, are shorter sessions for more days more effective than longer sessions for fewer days. In this research, the students did better on the weekly tests administered by the classroom teacher, under the traditional method, prior to intervention than on the tests administered by the experimenter during peer tutoring or self correction. A second point to look at, since all of these students were African American, are certain procedures more conducive to learning depending on race and or cultural background. Also, should these instructional procedures be used as the main instructional process or should they be reserved as supplementary or remedial instructional procedures.

Summary

The purpose of this investigation was to look at the effects of two instructional procedures on spelling
achievement as compared to each other as well as the traditional method of instruction in a second and third grade classroom. The results are summarized as follows:

(a) Of the seventeen students, only two raised their spelling grade (over the five week baseline data) during these procedures.

(b) Of the six target students, four went down an average of 29.8 percentage points gradewise and two went up (Student 10 went up .9 percentage points and Student 14 went up 11.6)

(c) Nine Students did better during the peer tutoring condition and seven did better during the self correction condition.

(d) Of the nine students who performed better under the peer tutoring condition, only two preferred that method over the self correction procedure.

(e) Of the seven students who performed better under the self correction condition, four preferred that method over the peer tutoring procedure and one chose both procedures.

Several limitations played a role in the low scores achieved by the students in this study: the amount of time for the actual instruction; the incompatibility of groups during the peer tutoring condition; and the lack
of sufficient monitoring to assure correct answer correction procedures and behavior management.

This study points toward future research in the areas of the amount of time a given session should incorporate and the focus of these procedures as actual learning procedures or as supplementary or remedial practices. These areas could help further the understanding of these two procedures with regard to the spelling achievement of students.
LIST OF REFERENCES


APPENDIX A

Parental Consent Form
Parent Consent Form for Child's Participation in Educational Research

I agree to allow my child to participate in a research study investigating two teaching methods for spelling instruction. This research will be conducted at Mt. Olivet Christian Academy during normal school hours. This research will be conducted by Michele Teke (224-3120) under the supervision of Professor Ralph Gardner, III (292-3308). I understand that the research will be carried out Wednesday through Friday, with each session lasting forty minutes. The research will be conducted from April 1 through June 7.

I understand that my child's identity will not be revealed to anyone not directly involved in conducting the research by means of publication, document, computer storage, or any other form of report developed for this research, unless I give specific permission that he/she may be personally identified. Additionally I understand that I may withdraw my consent for my child's participation at any time.

__________________________
Name of Child

__________________________
Signature of Parent/Guardian  Date

Ralph Gardner, III Ph.D
Associate Professor

__________________________
Michele L. Teke, experimenter
Master's candidate  Date
APPENDIX B

Spelling Lists
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- boast
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- apples
- correct
- spy
- honesty
- alert
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- really
- mercy
- people
- smooth
- prince
- desired
- pout
- broad
- follow
- market
- raise
- risk
- carried
- bridge
- scold
- horses
- scroll
- barley
- magic
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- friends
- flung
- foul
- animal
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- grave
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- circle
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- voyage
- hire
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- darkness
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- despair
- sacrifice
- beautiful
- cycle
- dainty
- ability
- industry
- distress
- mural
- vanish
- hesitate
- remember
- suffering
- adventure
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- innocent
- village
- plantation
- title
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- quarrel
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- lumber
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- mound
- purpose
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- misery
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- shield
- Columbus
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- impression
- pierce
- whisper
- beaded
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- snare
- excuse
- miracles
- describe
- society
APENDIX C

Self Correction Template
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APPENDIX D

Peer Tutoring Correction Template
APPENDIX E

Peer Tutoring Index Card Sample
asleep

He fell asleep during the movie.

asleep
APPENDIX F

Peer Tutoring Reinforcement Card Sample
APPENDIX G

Student Questionnaire
Questionnaire

Circle your best answer for each

1. Did you like the Self Correction or the Peer Tutoring better? SELF CORRECTION PEER TUTORING

2. Do you think these methods helped you to improve your spelling? YES NO

3. If you could, would you use either of these methods in spelling again? YES NO

4. If you could, would you use either of these methods in another subject? YES NO
APPENDIX H

Teacher Questionnaire
Questionnaire

Circle your best answer for each

1. Have you noticed an improvement in anyone's spelling on the weekly tests?
   YES   NO

2. Have you noticed a decline in anyone's spelling on the weekly tests?
   YES   NO

3. Have you noticed an improvement in the students' attitudes toward spelling and spelling tests during either or both of these procedures?
   YES   NO

4. Have you noticed a change in the students' work in other areas of instruction?
   YES   NO