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# THE EFFECT OF GRADING THE WORK OF FOURTH GRADE STUDENTS' IN RED INK AND THEIR ACADEMIC SELF-ESTEEM

by Jennifer L. Walton

#### A Thesis

Submitted in partial fulfillment of the requirements of the Master of Science Degree of The Graduate School at Rowan University

June 28, 2001

Approved by

Professor

Date Approved JU

#### **ABSTRACT**

Jennifer L. Walton, The Effect Of Grading The Work Of Fourth Grade Students' in Red Ink And Their Academic Self-Esteem, 2001, Dr. Randall Robinson, thesis advisor, Rowan University Master of Science in Teaching Elementary Education

The purpose of this study was to determine the effect of fourth grade students' academic self-esteem when marking their work in red ink versus blue or black ink, on their academic self-esteem. It was hypothesized that there would not be a significant difference in the academic self-esteem of fourth grade students whose work was marked in red ink, compared to their work that was marked in blue or black ink.

The study was a quasi-experimental design, examining students in a fourth grade classroom. Nineteen students participated in the study. Prior to the pretest, student work had been marked in blue or black ink for a period of six months. The students were pretested using a Self-Esteem Inventory Test created by Stanley Coopersmith. After the pretest was administered, students' work was marked in red ink for a period of four weeks. A posttest was given after the four-week period, the same Self-Esteem Inventory Test by Stanley Coopersmith was used. A t-test was administered to determine the significance of the mean of the pretest and posttests scores for the fourth grade class where alpha = 0.05 (alpha value). The t-test revealed no significant difference between the mean pretest and posttest scores of the fourth grade class.

#### MINI-ABSTRACT

Jennifer L. Walton, The Effect Of Grading The Work Of Fourth Grade Students' in Red Ink And Their Academic Self-Esteem, 2001, Dr. Randall Robinson, thesis advisor, Rowan University Master of Science in Teaching Elementary Education

Does grading all students work in red ink effect their academic self-esteem? Nineteen fourth grade students were investigated to determine if grading their work in red ink would have an effect on their academic self-esteem. No significant difference was found between the scores on the pretest and posttest, to support that grading students' work in red ink has a negative effect on their academic self-esteem.

#### **ACKNOWLEDGEMENTS**

The writer is indebted to the following people who played an invaluable role in the completion of this thesis:

Dr. Randall Robinson, Graduate Advisor, Rowan University, whose advice and availability were critical. His assistance, encouragement and patience facilitated the successful completion of this thesis.

Mrs. Lourdes Zych, who granted me the ability to modify the classroom grading procedure, and made the implementation of this study possible.

My devoted family, Thomas Walton, Mary Devane Walton, Suzanne Walton JD, and Julie Walton, whose immeasurable support, encouragement, understanding and love were invaluable in contributing to this finish product.

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#### Chapter I

#### Scope of the Study

#### Introduction

With the classroom dynamics changing S. Huey (2000), discussed the move towards inclusion; thereby the make-up of the education system is being altered.

According to (Consulting Psychologists Press, Inc., Self-Esteem Inventories (S.E.I), 1989) there is an increasing frequency of parent and student complaints about the lack of motivation and noninvolvement in learning, and about student's disinterest with what occurs during the school hours. It is important for educators to foster a stable classroom environment in which students will learn, feel welcome and can grow.

Through the literature evaluated there were differing opinions on grading a student's work (including homework, papers, test and quizzes) in red ink. Some researchers, for example Harriet Semke (1984) discussed that the color of the ink (red) reduces the students' self-esteem (as it relates to academic self-confidence). Imagine a student receiving a test with red ink all over it. Immediately their stomach sinks and they feel at a loss. What if that same test had been graded in blue ink? Would their heart not sink? Amelia Newcomb (1998) discussed that a student's self-esteem is associated with effective functioning; therefore there should be a significant relationship between a student's school performance and self-esteem. Examining the results of grading a students' working in red ink versus black ink or blue ink through this study will help determine what effects, if any, the color of ink has on a student's self-esteem. This is

however, an aesthetic issue. Additionally, Harriet D. Semke, Kay DuVal, Amelia Newcomb and Michael Manafo have proposed alternatives to grading in red ink, which was also explored as options for marking students' work.

#### Statement of the Problem

In the Self-Esteem Inventories (S.E.I). (1989), it confirmed that the positive feelings that a student has about himself or herself is a major factor in the increase involvement and successful performance of that student. Semke, Newcomb, Wilson and Bosker believe that this can be magnified when using a red ink to mark students' work.

The purpose of this study was to determine that there is not a significant difference in the academic self-esteem in fourth grade students when their in class work, homework, tests and quizzes were graded in red ink versus blue ink or black ink. The study was a quasi-experimental study in a selected fourth grade classroom.

The rationale for this study was to clarify and reinforce that grading student's work in red ink is not an inhibiting factor on a student's academic self-esteem in the general education classroom. Thus in this study it would be determined if the color of the ink can have a negative effect on a student's self-esteem. Additionally, this study was to help evaluate the attitudes towards students' total self-esteem.

#### Statement of Hypothesis

It was hypothesized that there is not a significant difference in the academic selfesteem of fourth grade students whose class work was graded in red ink compared to the self-esteem of the same fourth grade students whose class work was graded in blue or

#### Limitations of Study

The following were limitations identified in the study:

- 1. The selected population was a limitation in this study. The population consists of one fourth-grade class (in a specific elementary school). Therefore, random sampling could not be used.
- 2. This study was restricted to fourth grade students in this particular rural area in southern New Jersey, thus it cannot be assumed that the findings can be generalized to all grade levels, in all regions of the United States.
- 3. The student's academic state of mind is a limitation in this study. If previous to the pretest/posttest being administered a student had received for example a homework or test grade back and had not done as well as they had hoped, this may affect the responses on the S.E.I. test.
- 4. The students were required to take two different standardized tests (Terranova and ESPA) during the period of time that the student's work was graded in red ink. Therefore, the stress placed on performing well on these tests may have an affect on the students' self-esteem
- 5. There were other factors (external) that may have affected a student's self-esteem, for example a distressed home life, in that grading their work in red ink may not have an affect on their academic self-esteem, or it may be one of many factors, as opposed to a single factor. Another example is if a student comes to school hungry or tired, and the pretest/posttest is given then, this outside factor may have affected their responses.
- 6. The duration of grading the student's work in red ink may not be long enough to determine the actual affects of self-esteem.
- 7. Student's preconceived notions of grading in red ink may interfere, for example experiences in previous grades with how their work was marked.
- 8. The students did not easily comprehend some of the vocabulary in the S.E.I. Test; therefore it was necessary to explain these words.
- 9. The time of day that these test is administered. The pretest and the posttest were given at different times of the day.
- 10. One student was absent from the original date of posttest, thus it was given to him individually the following day.

#### **Definitions of Terms**

The following are terms that were used consistently throughout the study. In order to ensure that these important terms were used uniformly, they have been defined.

<u>Red Mark</u>: red pen, red ink, any kind of grader's (teacher's) mark on the paper, homework or test.

<u>Self-Esteem</u>: refers to the evaluation one makes and maintains of oneself. Overall self-esteem is an expression of approval or disapproval, which is an indication of the extent an individual, believes in his or her competent, successful, significant and worthy. This is a personal judgment of worthiness expressed in the attitudes a person holds towards the self.

Self-Confidence: the belief in oneself, one's own abilities, assurance, poise, security.

Student's Work: includes papers, in class work, homework, quizzes and tests.

#### Chapter II

#### Review of Related Literature

#### Introduction

Huey (2000) argued that the classroom dynamics are changing, presuming that the make-up of the education system is being altered. According to the research in the S.E.I. (1989) there is an increase in parent and student complaints due to the lack of motivation and decrease in involvement in student learning and overall satisfaction during school hours. The literature evaluated exposed differing opinions on grading a student's work (including homework, papers, test and quizzes) in red ink. Some researchers, for example Harriet Semke (1984) discussed that the color of the ink (red) reduces the students' self-esteem (as it relates to academic self-confidence). While others, for example, Newcomb (1998) discussed that a student's self-esteem is associated with effective functioning; leading to a significant relationship between a student's school performance and their self-esteem. Finally, there are those researchers who have proposed alternatives to grading in red ink.

This study would determine if there were a significant difference in the academic self-esteem in fourth grade students when their work is graded in red ink versus blue ink or black ink. It was hypothesized that the academic self-esteem of fourth grade students is not affected by grading their work in red ink. The question this study sought to answer was whether students' academic self-esteem is affected as a result of grading their work in red ink.

#### Is the Color of the Markings Important?

Marilyn DeMoranville (1994) contends that what teachers say in response to writing and how they say it are notably more important than the color of the ink they use, thus color is not any less intimidating than other colors. Students need to be made aware that everyone makes mistakes and that making mistakes can be a great tool for learning and growth. Additionally, Kay N. DuVal (1996) discussed that even though red pen marks have negative connotations, they are made for the students' sake so that they can learn from the errors they made. DuVal disputed that the red ink instructors place on a student's work should indicate the strengths as well as the weaknesses. Therefore, positive as well as negative comments can appear in red ink. Hence she explains that red ink is part of the communicative process between teacher and student.

Newcomb (1998) suggested that when a teacher grades in red, their stand is clear. The good teachers are the ones who place strong comments and strong grades on the page. These teachers had a statement that they were entitled to make. The red marks firmly stated the teacher's expectations. The red marks set standards that could teach a student as they strove to meet them. Even though a plethora of red on a student's work was not a good sign, those red marks set standards that have taught students to strive to meet expectations.

DuVal (1996) examined holism, which is looking at the entire paper, and assessing it as a whole, leaving the paper free of markings (with the exception of the grade). She gives an example of grading an essay under this theory of holism, and poses the question of what does the student gain if the paper is returned with only a pass/fail mark, or even a number score of zero to twelve. If there are no markings on the paper

how does the student know how or what they need to improve on. Therefore, holistic grading by itself without comments (constructive criticism) is not necessarily the most effective. It is still believed that the educator needs to make comments (in any color), in order for the essay to be used as a teaching instrument for the student's future writing.

#### Negative Effects of Marking with Red Ink

Robert Wilson (1987) discussed that there are parallels between psychological effect of red ink and a relationship such things as blood, violence and horror. If students make such a connection, it is understandable why the color of red may have negative undertones.

In a study conducted by Semke (1984), she examined students studying the German language. It was found that corrections do not increase writing accuracy, writing fluency, or general language proficiency, and they may have a negative effect on students' attitudes, especially when students must make corrections by them.

Additionally, the return of students' work (homework, papers, tests and quizzes) covered with the inevitable red marks resulted in looks of disappointment and discouragement.

The question is posed then if the students even bother to read the corrections, and it is unknown if they learned from them, because of all the "red". It was discussed by Semke that the likelihood of their work ending up in the trash after receiving only a facile glance was verified by an experiment conducted by Marzano and Arthur, who found that the hours teachers spend correcting students' free writing is an exercise in futility.

Additionally, Semke (1984) discussed that teachers may be frustrated because of the realization that the number of red marks on students' work does not adequately reflect the quality of the work. Many of the mistakes may not actually interfere with the communication, however the red ink causes these errors to appear so immense that the learner is unaware of all the good, which has been created. As a result, students do not feel the affirmation and positive reinforcement that their efforts have deserved.

It was concluded in the study by Semke (1984), that the results supported the theory that these corrections do not improve student's writing skills (in German as a second language), nor does it increase total competency in the language. It was supported that the group that received only comments showed more progress than the group which received only corrections. The results also indicated that writing practice alone-enhanced student progress.

The idea of holism is to examine the entire piece of work as a whole, leaving it intact for its collective value, without making a single mark on the paper was discussed in detail by DuVal (1996). In fact, she stated that some instructors do not like to have English teachers as state essay graders because they believe these teachers make a lot of red marks on the papers. She stated that red marks (red ink/pen) have negative connotations, and believed when grading a student's work red ink should not be a requirement; expressing that there is not a need for the attack of the red pen.

Another concern expressed by Newcomb (1998) discussed the challenges of grading papers in red ink. She discussed the recall most adults have of a demanding teacher who used red ink to grade their work; for example red circles around errors, red letters in the margin and red number grades at the top of the test. She stated that comments from the teachers were expected, and sometimes feared but not hard to find. Newcomb explained that from a student's point of view seeing a sea of red was not a

positive sign. She concluded that this was the point of grading in *red*, thus damaging a student's ego, and identifying a self-esteem issue.

Moreover, DuVal (1996) reiterated that some educators believe that it is for the student's sake that the teacher grades in red. Although she states that there are others who believe a teacher who tears a student's work to shreds over a few errors in such areas as punctuation or capitalization destroys the student's confidence in hers/his abilities in organization or development. The teacher, who treats an inexperienced writer's sentence fragments as a crime by using the infamous red pen, hampers the student's following attempts at a new and unfamiliar topic, and formulating a workable paper. She concluded that while the teacher must not tear down or belittle the student's efforts, neither should s/he neglect to help the student identify the individual parts of their work, including both the positives and the negatives.

Two questions posed by Roel Bosker (2000): should teachers use red pen and should teachers correct every mistake? He argued that assessment should be primarily structured, therefore the student should be provided with information on the difference between actual and preferred achievement. Feedback that focuses on a student's self-concept and self-esteem can have negative effects on their learning (even when a student is commended on their efforts), whereas feedback that focuses on their work has more positive effects. Thus, the focal point of assessment should be useful and helpful in improving a student's learning.

#### What are some of the Alternatives?

An alternative to the typical method of correcting each error of a student's work

was explored by Semke (1984). A system of simply marking places where the errors occur, using a code to indicate the type of error, and requiring students to correct their own work is an example of Semke's suggested alternative. The student instead of being rewarded with the return of an assignment, which has been attacked by the red pen, will receive teacher response of acceptance, encouragement and understanding. It was concluded that it doesn't mean that corrections should never be made, but discretion should be used.

Another alternative Semke (1984) proposed was to make corrections but respond to the content with written comments and questions indicating that the message has been understood. It is defended that it is more helpful to respond and question a student's work, than making red marks. It was concluded that supportive comments have a positive effect on students' motivation when writing, however corrections tend to extinguish the student's drive and motivation.

As discussed in detail by DuVal (1996) there are benefits to holistic grading in order to avoid the red marks on a student's paper. This however is only applicable in (essay) writing when the sums of the parts are assumed to be greater than the parts themselves. Thus the paper is left intact for its overall value. The process is only effective if the teacher marks obvious errors and identifies strengths and weakness carefully, returning it to the student in order to correct and revise, and finally going over the revised version of the paper with the student and discussion with the student. DuVal believe that there needs to be collaboration in methods of grading student's work. She concluded that there are four necessary steps: the student writes an assigned essay, the teacher reads and marks the essay, the student revises the essay, based on the critical

comments of the teachers and then during a conference the student and the evaluator discuss the essay.

Michael Manafo (2000) discussed an alternative in that papers must be corrected, and that teachers in fact may become an expert with a red pen. It was suggested that teachers should take students aside who do not seem to get it and offer creative insight. Like Kay DuVal he explained that the red pen would last much longer after having this interaction.

However, now Newcomb (1998) has found that some teachers are using a softer touch, therefore just pushing them slightly. She found that teachers who used pencil to grade a student's work believed that this was less disturbing when their work is graded in pencil, then the student can make the corrections and the comments could be erased.

Another alternative is establishing Rubrics, which have been discussed by Houghton Mifflin Co. (1997) as a method of grading to shoe whether a student has demonstrated behavior important to each grading area. For examples using positive symbols (+) for consistency and negative symbol (-) for inconsistency on said criteria. Still, ultimately assigning a letter is grade is necessary, but it is based on the totals of the positive and negative symbols.

#### Student Self-Esteem

According to Wells and Marwell (Sewell, 1984), self-esteem and self-concept are usually regarded as multidimensional, but it is not clear what this means. Measures of self-esteem may be confounded by social desirability biases, thereby a tendency to answer questions in terms of social pertinence rather than *true* self-esteem. Thus the

educator's red marks should indicate the strengths as well as weaknesses in the student's work. Gerald Bracey (2000) concluded that grades help determine the promotion, retention and admission of the students to higher institutions; but not acknowledging the problem of the influence of these marks or grades on the moral attitude of the pupil toward the school, education and even life, can be damaging.

As mentioned in the S.E.I. (1989) Stanley Coopersmith is the psychologist who has conducted the largest study of children's self-esteem. Coopersmith suggested that we imagine self-esteem as an interior discussion a person holds. In other words the telling a story about oneself. Self-esteem was identified as the ability to do things, and one's value as a person and the meaning of one's life.

Stanley Coopersmith discussed that positive feelings about the self appears to be one of the feeling states that increase active participation and successful achievement as identified in the S.E.I. (1989). Thus building self-esteem is not a secondary, luxury option in the school's programs, but is more of a basic element of programs equipped to motivate learning. He examines that students are not born with concerns of being good or bad, or smart or challenged. They develop these ideas of themselves and form self-images. These images are pictures of themselves, which are based largely on the way they are treated by significant people in their lives for example, their parents, siblings, teachers, and peers.

Additionally, Coopersmith definition of self-esteem is stated clearly in the S.E.I. (1989), in which he believes self-esteem provides a mental set that prepares the person to respond according to expectations of academic success, social acceptance and individual personal strength. Coopersmith discussed self-esteem as not a separate entity from school

performance, but an important, essential part of performance. He identified studies conducted in the past, which indicated that children with high self-esteem perform better in their schoolwork than children with lower levels of self-esteem. The formation of self-esteem in the home is due to parental involvement. School personnel can help a child gain a sense of confidence in his/her abilities thus aptitudes and cultivating self-esteem within the classroom.

Dr. Terri Apter (1997) discussed self-esteem in that during student's conversations there are references to the shame of being *told off* in front of class, or being made to feel stupid and thus creating feelings of shame, isolation and rejection.

Children's are asked to live with the daily risk of being shamed by their own inadequacy.

Adults quite often forget what a powerful force this fear exerts on the students (144).

The significance of self-esteem was examined by Rogers, Murphy, Honey and Adler (S.E.I., 1989)), who supported the importance of a favorable attitude toward oneself. However this is a widely held belief, suggestive rather than definitive, and usually general in nature. They seldom indicate the explicit behaviors to which self-esteem is related or in what way it is an effective contributing, detriment of personality.

#### What about the Color Red?

Eric Johnson discovered in his research (1999) that color is a powerful tool, which can influence a human's response. The color *red* has been found to stimulate feelings of arousal and increase appetites. It has been explained that when the eye sees red, physiological changes such as the pituitary gland sends out a signal that makes the heart beat faster, the blood pressure increase and the muscles tense occur. On the other hand it

was discussed by Johnson that red is also considered a color, which is warm and inviting.

#### Chapter III

#### Procedure

#### Introduction

This study was conducted to determine the effect of grading students' work in red ink on their academic self-esteem. The hypothesis of this study was that there is not a significant difference in fourth grade students' academic self-esteem when their work is graded in red ink, compared to their work graded in blue or black ink. It was identified in the Coopersmith S.E.I. (1989) that there is an increase in parent and student complaints of the lack of enthusiasm, and a decrease of involvement in student learning and overall satisfaction during school hours. The literature examined the differing opinions on marking a student's work (including homework, papers, test and quizzes) in red ink.

Semke (1984) believed that the color of the pen (red) lowers the students' self-esteem (as it relates to academic self-confidence).

#### Population and Subjects

The county in which the city resides in has over 230,000 residents. Within the county there are over 15,000 residents in this city. There were over 600 students in this school with grades ranging from fourth to sixth. There are twenty-one students in the fourth grade class that was studied, however only nineteen were included in the study. These students were from a rural elementary school in southern New Jersey. It was located approximately 18 miles from a metropolitan city. This was a historical city, for

example its manufacturing of glass dates back to the 1700's. In the selected fourth grade class there were thirteen African American students and eight Caucasian students. Of these twenty-one students, nine of them were male and twelve of them were female. One of the female students was not fluent in the English language therefore she was excluded from the study. Another student, who was male, prior to the study, was removed from the school, receiving instruction at home. Thus, he was also excluded from the study. Six of the remaining nineteen students were labeled as Basic skills. Seven of the nineteen students receive a free breakfast/lunch daily. Also, halfway through the study a new female African American student entered the classroom. This student took the posttest, but did not receive the pretest, thus her results were not included in the final data.

#### **Procedures**

Prior to the experiment (first six months of the school year), the students in the selected classroom had all their class work, homework, tests and quizzes graded in either blue ink or black ink. This was a quasi-experimental research study; in which the fourth grade class were orally read the questions from the Coopersmith Self-Esteem Inventories (see appendix A). The fourth grade students responded to individually on the given answer sheet. After the self-esteem instrument was administered, all of the students' class work, homework, quizzes and tests were graded in red ink for a period of four weeks.

During the four-week period, students had forty-eight homework assignments, twenty morning work assignments, eight tests and twelve quizzes, and twenty in-class work assignments which were all graded with red ink. After the four-week period, the students were orally read the questions from the Coopersmith Self-esteem Inventories again (post-

test), and responded to the questions, completing the answer sheet. When administering both the pretest and the posttest it was discovered that the students were unclear with some of the terminology used in the S.E.I. questions. Therefore, the test administrator defined these words for the students.

Additionally, the students were only identified through numbers in order to protect them. The data was examined to determine any correlation to the color of ink a student received on marked work and their academic and total self-esteem.

#### **Description of Instruments**

The Coopersmith S.E.I. (1984) measures self-esteem of students from age 8-15, and consists of fifty-eight items; fifty of which are self-esteem and eight items that constitute the Lie Scale. The Lie Scale is a measure of a student's defensiveness or test wiseness. This SEI Test yields a total score for all fifty-eight questions and also a separate score for the four subcategories: General Self, Social Self-Peers, Home-Parent and School-Academic. They are among the best known and most widely used of the numerous self-esteem measures. It has been claimed that they are reliable and stable and exists a convincing amount of information bearing on their construct validity.

Additionally, these measures were forthright and based on the general theory of self-esteem and its relationship to academic performance.

The data was collected from the responses given in the two Coopersmith Self-Esteem Inventories. These inventories were compared to determine if there was a significant difference in the fourth grade students' self-esteem when their work was graded using red ink versus blue ink or black ink. The overall data was analyzed through

t-test in order to reject or fail to reject the original hypothesis. The level of confidence was set at 0.05. The data was collected and examined to determine an overall mean score and standard deviation for the class' academic self-esteem and total self-esteem.

#### Chapter IV

#### Analysis of the Findings

#### Introduction

There is an increase in parent and student complaints of the lack of enthusiasm, and a decrease of involvement in student learning and overall satisfaction during school hours according to the S.E.I. (1989). It was hypothesized that there is not a significant difference in the academic self-esteem of fourth grade students whose class work was graded in red ink compared to the self-esteem of the same fourth grade students whose class work was graded in blue or black ink. Data analysis was performed and a t-test was administered to determine significance. Results were reported in the narrative and table form.

#### Results

The scores for the pretest and posttest were tabulated for the quasi-experimental group. There were fifty items on each test. The scores were tabulated through the use of a scorecard, which deciphered between academic self-esteem and total self-esteem. The individual academic self-esteem scores for the quasi-experimental group were recorded in table 1.

table 1

Pretest and Posttest Academic Self-Esteem Scores for the Quasi-experimental Group

Participants	Pretest	Posttest
1	4	3
2	6	6
3	8	8
4	4	3
5	6	3
6	7	7
7	7	8
8	5	6
9	. 4	5
10	3	3
11	2	2
12	8	8
13	3	3
14	2	6
15	7	7
16	1	2
17	3	4
18	5	2
19	4	8

The means for the pretest was 4.68, and the mean for the posttest was 4.95.

A t-test was administered to determine the significance of the mean pretest and posttest scores of students' academic self-esteem. A t-score of -0.37 with 36 degrees of freedom was calculated for this study. The absolute value of this t-value 0.37 falls outside of the critical value of 2.021. This was not significant at the p = 0.05 alpha level (see table 2).

table 2
Summary of the t-Test

Source	Mean Test Scores	Standard Deviation	t-score	Degrees of Freedom
Pretest	4.68	2.1	-0.37	36
Posttest	4.95	2.3		

The individual total self-esteem scores for the quasi-experimental group were recorded in table 3.

table 3

Pretest and Posttest Total Self-Esteem Scores for the Quasi-experimental Group

Participants	Pretest	Posttest
1	80	70
2	84	82
3	90	92
4	72	70
5	84	64
6	84	86
7	92	100
8	82	90
9	76	68
10	30	42
11	56	52
12	98	98
13	60	58
14	58	66
15	80	86
16	34	40
17	54	54
18	38	42
19	80	84

The means for the pretest was 70.11, and the mean for the posttest was 70.74.

A t-test was administered to determine the significance of the mean pretest and posttest scores of students' total self-esteem. A t-score of -0.10 with 36 degrees of freedom was calculated for this study. The absolute value of this t-value 0.10 falls outside of the critical value of 2.021. This was not significant at the p = 0.05 alpha level (see table 4).

table 4
Summary of the t-Test

Source	Mean Test Scores	Standard Deviation	t-score	Degrees of Freedom
Pretest	70.11	20.22	-0.10	36
Posttest	70.74	19.23		

#### Discussion

It was clear in table 2 and table 4 that there was no significant difference in the mean test sores between student, work graded in red ink and the same students' whose work was graded in blue or black ink. The hypothesis of the study was that there was not a significant difference in the academic self-esteem of fourth grade students whose class work was graded in red ink compared to the self-esteem of the same fourth grade students whose class work was graded in blue or black ink. The raw scores and the t-test scores support this hypothesis.

#### Chapter V

#### Summary, Conclusions, and Recommendations

#### Introduction

Academic self-esteem has been investigated, in which several researcher have examined factors that effect student's self-esteem. These factors were documented through the Review of Related Literature. This study was conducted to determine the effect of grading students' work in red ink on their academic self-esteem. The hypothesis of this study was that there is not a significant difference in fourth grade students' academic self-esteem when their work is graded in red ink, compared to their work graded in blue or black ink. It was identified in the Coopersmith S.E.I. (1989) that there is an increase in parent and student complaints of the lack of enthusiasm, and a decrease of involvement in student learning and overall satisfaction during school hours. The literature examined the differing opinions on marking a student's work (including homework, papers, test and quizzes) in red ink. Semke (1984) believed that the color of the pen (red) lowers the students' self-esteem (as it relates to academic self-confidence).

#### Summary of the Problem

During a student's educational career, his/her self-esteem may be tested.

However, it is important to remember that an individual's academic self-esteem can be affected not only by the color of the grading but outside factors, for example a challenged home life. The question this study sought to answer was if the color of the ink could have

a negative effect on academic self-esteem in fourth grade students when their in class work, homework, tests and quizzes were graded in red ink versus blue ink or black ink.

The rationale for this study was to clarify and reinforce that grading student's work in red ink will not be an inhibiting factor on a student's academic self-esteem.

#### Summary of the Hypothesis

It was hypothesized that there is not a significant difference in the academic self-esteem of fourth grade students whose class work was graded in red ink compared to the self-esteem of the same fourth grade students whose class work was graded in blue or black ink.

#### Summary of the Procedure

Prior to the experiment (first six months of the school year), the students in the selected classroom had all their class work, homework, tests and quizzes graded in either blue ink or black ink. Additionally, the students were only identified through numbers, to protect the identity of the students. This was a quasi-experimental study; in that the fourth grade students in a selected class were orally read the statements from the Coopersmith Self-Esteem Inventories (see appendix A). However, these fourth grade students responded individually on the given answer sheet. After the self-esteem instrument was administered, all of the students' class work, homework, quizzes and tests were graded in red ink for a period of four weeks. During the four-week period the students had forty-eight homework assignments, twenty morning work assignments, eight tests and twelve quizzes, and twenty in-class work assignments, which were all graded

with red ink. After the four-week period, the students were orally read the questions from the Coopersmith Self-Esteem Inventories again (posttest). The students responded to the statements by completing the answer sheet. When administering both the pretest and the posttest the students were unclear with some of the terminology used in the S.E.I. questions. Therefore, the test administrator defined these words for the students.

The pretest and posttest scores were examined to determine any correlation to the color of ink a student received on marked work and their academic self-esteem, as well as their total self-esteem.

#### Summary of the Findings

A statistical analysis of the data was performed and a t-test was administered. It was found that there was no significant significance in the mean test scores between the students' scores on the pretest compared to the same students' scores on the posttest. The mean scores from the pretest to posttest for both academic self-esteem and total self-esteem increased. The means for the academic self-esteem pretest section was 4.68, and the mean for the academic self-esteem posttest section was 4.95. The means for the total self-esteem pretest was 70.11, and the mean for the total self-esteem posttest was 70.74. However, the mean pretest and posttest scores for both academic self-esteem and total self-esteem were relatively the same and the difference in scores was not significant.

#### Conclusions

After analysis of the scores it was concluded that the mean academic self-esteem score and total self-esteem score of the group were relatively the same and therefore the

difference between the scores was not significant at the p=0.05 alpha level. The scores for the pretest and posttest were tabulated for the quasi-experimental group. There were fifty items on each test. The scores were tabulated through the use of a scorecard, which deciphered between academic self-esteem and total self-esteem. A t-test was administered to determine the significance of the mean pretest and posttest scores of students' academic and total self-esteem. The t-test score for academic self-esteem of -0.37 fell outside of the positive and negative critical value of 2.021. The t-test score for total self-esteem of -0.10 fell outside of the positive and negative critical value of 2.021. Therefore, it can be concluded that the academic self-esteem of fourth grade students in this study was not significantly affected by the color of ink used to grade their work, thus they hypothesis was accepted.

#### Implications and Recommendations

I would recommend additional research to explore the relationship between academic self-esteem and the color of ink used to grade students' work. If there is a strong positive correlation between the color of ink used to grade student's work and their academic self-esteem educators will want to alleviate the negativism associated with the color used to grade students' work. Researchers have discussed the use of grading students' work in red ink that it is linked to negative feelings of academic performance. However, the results found in this study did not support those claims.

Future research on the effects of grading students' work in red ink and their academic self-esteem should be based on a larger, randomly selected sample. The subjects should also reflect a wide range of ethnic diversity. Additionally, future studies

should be conducted for a longer period of time comparing more than just the pretest and posttest scores of one classroom, at one grade level. The duration of grading the student's work in red ink may not be long enough to determine the actual affects of self-esteem. It is also important that during future studies, avoid conducting research during the time period when standardized tests are being conducted. The stress placed on performing well on these tests may have an affect on the students' self-esteem. Even though the S.E.I claimed to be appropriate for students age 8–15, it is important to pretest students for vocabulary words that are used on this inventory to avoid having the test administrator define these words, and thereby may inadvertently affect students' responses. Finally, cross-age comparisons should be made across grade levels to compare the differences in academic self-esteem of students at different stages of child development.

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APPENDIX

Unlike Me	
] 1. Things usually don't bother me.	🔲 🔲 30. I spend a lot of time daydreaming.
2. I find it very hard to talk in front of the class.	iss.
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	change if I could.
] 4. I can make up my mind without too much trouble.	n trouble.
] 5. I'm a lot of fun to be with.	34. Someone always has to tell me what to do.
] 6. I get upset easily at home.	[] 35. I'm often sorry for the things I do.
ceil 7. It takes me a long time to get used to ar	nything new.
] 8. I'm popular with kids my own age.	[ 37. I'm doing the best work that I can.
] 9. My parents usually consider my feelings	38. I can usually take care of myself.
] 10. I give in very easily.	☐ 39. I'm pretty happy.
11. My parents expect too much of me.	☐ 40. I would rather play with children younger than I am.
12. It's pretty tough to be me.	H1. I like everyone I know.
] 13. Things are all mixed up in my life.	H2. I like to be called on in class.
] 14. Kids usually follow my ideas.	H3. I understand myself.
] 15. I have a low opinion of myself.	H. No one pays much attention to me at home.
ceil 16. There are many times when I'd like to leave home.	sve home.
] 17. I often feel upset in school.	He. I'm not doing as well in school as I'd like to.
18. I'm not as nice looking as most people.	Toan make up my mind and stick to it.
] 19. If I have something to say, I usually say	it.
20. My parents understand me.	
21. Most people are better liked than I am.	
] 22. I usually feel as if my parents are pushin	
23. I often get discouraged at school.	21
] 24. I often wish I were someone else.	
25. I can't be depended on.	
26. I never worry about anything.	
27. I'm pretty sure of myself.	
28. I'm easy to like.	
29. My parents and I have a lot of fun together.	57. 1
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