UNIVERSITY OF THE VIRGIN ISLANDS GRADUATE PROGRAM

THE EFFECTS OF COOPERATIVE LEARNING STRATEGIES ON THE WRITING ACHIEVEMENT OF THIRD GRADE STUDENTS AT THE EVELYN M. WILLIAMS ELEMENTARY SCHOOL ON ST. CROIX

A THESIS SUBMITTED TO

THE GRADUATE COUNCIL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF

MASTER OF ARTS IN EDUCATION

BY

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ST. CROIX, VIRGIN ISLANDS
MAY, 1993

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Abstract

The purpose of this study was to investigate the effect of cooperative learning strategies on the writing achievement of two groups of third grade students at the Evelyn M. Williams School. One experimental group and one control group were conveniently chosen. Both groups responded in writing to literature for about ninety minutes, daily, over a period of six weeks. The subjects retold stories, analyzed characters, wrote letters to characters, sequenced stories, and did story mapping. The students of the experimental group worked cooperatively, while those in the control group responded in writing, individually. A pretest and post-test were given to both groups. Both tests were evaluated using the Write to Read criteria. A statistical analysis was done to determine the results. There was a significant difference which resulted in the rejection of the null hypothesis. The significance of difference between group means was determined by analysis of Covariance (ANCOVA). The level of significance was set at .05. The independent variable was the writing program and the dependent variable was the writing achievement. The results of this study revealed that the students in the experimental group scored higher in writing achievement than the control group. It was concluded that cooperative learning strategies were effective in enhancing students writing achievement.

ACKNOWLEDGEMENT

To the One without whom I could do nothing-My Heavenly Father, I thank You for Your sustenance and guidance through it all.

A heartfelt Thank You goes to you Dr. Anita Gordon-Plaskett for your untiring guidance, patience, understanding, and resources throughout this whole ordeal.

Dr. Combie, I thank you for your support and patience you contributed by reading and correcting my errors.

Mr. Dindial Barbahadur, my sincere gratitude goes to you for your statistical assistance. Without you this study would be incomplete.

My sincere thanks to my Principal, Mr. Antonio Steele, and your assistants Mrs. Janette Bass and Mrs. Estrina Hyliger for your patience and understanding.

Special thanks goes to you Mrs. Doward for your consent, to Mrs. Lystra James for your support, and to all you students of the Evelyn M. Williams School who participated in this study.

To my faithful friend, Christophine Athill, who was always there whenever I needed you. I am sincerely grateful for your help. Thanks for introducing me to the computer.

My gratitude goes out to all you monitors of the computer lab who were so patient with my constant harassment.

To Valerie, Sharon, and all the rest of my peers who were so

helpful through out this ordeal, I thank you for your wonderful support.

My sincere gratitude for your words of encouragement, Mr. Charley Mack.

To my dear children Helene and Heidi and my special friend Leroy, my heartfelt gratitude for your understanding of my constant neglection throughout this ordeal.

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CHAPTER ONE

INTRODUCTION

Hampton (1989) stated that learning to write and writing to learn are essential parts of a student's total education. He feels that because writing effectively is cumulatively attained, students benefit most from a consistent and comprehensive writing program. Students, therefore, must be provided the opportunity to write on a routine basis in a risk-free environment.

The belief, however, was not always at the fore-front of educators' thoughts. For decades, writing in the classroom was left for Friday afternoon, when and if the other work for the rest of the week was completed. According to Donato (1990), many students and teachers did not realize that writing facilitates the exploration of inner thoughts and feelings, organizing of experiences, and the construction of meaning. Thus, effective writing has been considerably neglected.

Though there have been changes towards writing in recent decades, learning to write continues to be a major problem in the United States. Lipa (1989) states that in spite of individual States' and schools' programs in which the teaching of writing is addressed, some twenty-three million American adults are functionally illiterate. The author purports that daily writing is the primary solution for eradicating this problem.

Other authors present similar views. Guenderson et al

(1988) report a study which investigated students writing development due to teaching style. The results revealed that students who were engaged in daily writing became competent writers. Dawlin (1988) concluded from her study that writing instruction should center on the writing instruction process and that students should be provided with the opportunity to write everyday. Her findings suggested that writing instruction does increase students' writing skills.

Elks (1986) argues that writing has been shown to yield a higher retention rate and a higher recall rate. It is her belief that writing opportunities present a method of response that requires thinking, thus surpassing other response modes. She is convinced that students learn to write by writing. She argues that too often students are taught separate skills but are unable to use them because they lack practice in actual writing situations.

Donato (1990) cites Smith who stated that when students view writing as something that was natural as well as purposeful they would write more effectively. Donato (1990) also mentions Butler and Turbill, who believe that when students write on a wide range of topics of their own choosing, for a variety of audiences, along with conferring with the teacher, while working at their own pace, they develop better writing skills.

According to Slavin (1981), there is a variety of writing approaches through which students can achieve this needed writing practice. Donato (1990) feels cooperative learning experiences

are among the most effective methods.

Cooperative learning describes a program in which teachers and mainly students may benefit from the privileges of learning in group situations. This program is structured in such a way as to afford students four major learning experiences among others. They are positive independence, individual accountability, group evaluation, and the teaching of cognitive and social skills (Johnson & Johnson, 1991).

The literature is replete with many positive effects of cooperative learning. Hasley (1989) cites Dunn who states that group work encourages cooperation rather than competition. Kelly also cited by Hasley (1989) reconstructed her writing class to combat students' apathy. Through involvement in collaborative groups, the students developed a more positive attitude toward writing, less competitiveness, less teacher dependence and more cooperation.

Although there is an abundance of information on this topic in the literature, research has not yet been conducted on the Virgin Islands on the effects of cooperative learning on writing achievement. Thus this issue warrants closer investigation.

Statement of the Problem:

In presenting a summary of NAEP's findings over 20 years,
Mullis (1990) quoted the assessors stating that the goal in
particular is targeted toward increasing student's achievement
levels, ensuring that they learn to use their minds well, and

preparing them for responsible citizenship.

In expressing the daunting challenge to reach the national goal set for twenty-first century, Mullis (1990) stated that small proportions of students write well enough to accomplish the purposes of different writing tasks and most do not communicate effectively.

Mullis (1990) summarized the NAEP writing assessment report for grades 4,8 and 12. The report stated that many students have difficulty communicating effectively in writing. According to the report, no more than 47% of the students at any grade level wrote adequate or better responses to informative tasks, and no more than 36% of the students wrote adequate or better responses to the persuasive tasks. Although performance was somewhat better in the narrative writing tasks, no more that 56% of the students wrote adequate or better responses.

According to Cathcart (1990), the problem involves the inadequacy of the present writing program to stimulate the imagination. Many children are not presented with opportunities for self-expression in writing. Preoccupation with handwriting methods along with insufficient information about the developmental capabilities and needs of children prevents meaningful writing experiences.

Butler and Bentley (1988) feel that another part of the problem is that writing is too often perceived as a test, whether as a means to demonstrate what a student has learned about a content field or simply to show that the student has mastered the

conventions of writing.

Donato (1990) concluded from her study that limited student interaction while writing may very well be the root of the problem which causes students to have been unable to develop their writing abilities and, therefore, demonstrate poor quality, quantity, and variety when writing.

Cathcart (1990) states in brief, that the problem is that traditional methods of writing instruction are not effective in meeting the developmental needs of children. Additionally, schools in the Virgin Islands have adopted several programs in an attempt to improve writing. Programs such as IBM-Writing to Read, The World of Reading, and Whole Language, are used on a regular basis. At the Evelyn M. Williams School the Writing to Read program which is geared toward kindergarten and first grade students is one avenue used to enhance writing. Seven different stages are used to teach students skills necessary for writing. The computer, manipulatives, and charts are used in this program. Another avenue used to enhance writing is the Learning Network Group sponsored by A T & T. A Special Education class and an Acceletated class are involved in a telecommunication program. The students at Evenlyn M. Williams School communicate to the students in other parts of the United States such as Hawaii, Wisconsin, Ohio, Massachusetts, New Jersey, North Carolina, Cincinatti and Louisiana. Many of the programs mentioned cooperative learning methods, but there has been no investigation on the effects of such on students writing achievement.

Therefore, the question is, "Would cooperative learning improve students' writing proficiency in third grade at Evelyn Williams Elementary School?"

Purpose of the Study

It was the purpose of this study to investigate the effects of cooperative learning strategies on the writing achievement of third grade students at the Evelyn M. Williams School.

Null Hypothesis

There is no significant difference between the writing achievement of third grade students at Evelyn Williams

Elementary School who engage in cooperative learning strategies and those who did not.

Definition of Terms:

- Control Group third graders who were not exposed to
 the six weeks of instruction in
 cooperative writing
- Cooperative Groups the three groups in which the
 experimental group were divided with
 whom cooperative learning was discussed
 by conferring with members of their
 groups, writing, revising, editing and
 publishing their work (Johnson &
 Johnson, 1991)

- Cooperative Learning basic instructional strategy in which students work collaboratively in small groups, to master the assigned task.
- Cooperative Writing basic instructional writing in which
 students work collaboratively in small
 groups, to master the assigned task
- Experimental Group third graders who were exposed to six

 weeks of instruction in cooperative

 writing and who wrote, revised, edited,

 and published on a weekly basis
- Writing Achievement measured by the written retelling
 of children stories. The retelling was
 evaluated using the Write to Read
 criteria for scoring writing samples by
 two or three raters

Theoretical Rationale:

Writing is an important aspect of natural literacy program and children should be provided with many opportunities to write (Franklin, 1992). Elks (1988) cites Clay who says writing is creating for academic purposes. Clay believes that in order for a student to develop constructive purpose, he/she must be given opportunities to construct his/her own responses and organize them into a meaningful whole as much as 50% of the time.Elk (1988) further purports that students learn to write by writing.

when writing may very well be the key to help students develop the quality, quantity, and variety of their writing. Foyle et al (1990) support this premise. They state that a student's motivation to function at school depends upon the extent to which that student's basic psychological needs are met. The authors believe that cooperative learning increases a child's motivation when provided by help from other children. It helps students at every academic level to feel successful and productive in the classroom.

Slavin (1981) states that when students work in a cooperative setting they are able to relate subjects being taught, to their own lives, better internalize concepts being provided, and learn the joy of working in a shared setting.

Erickson (1989) found that collaboration had a positive effect on the quality of students' work produced.

Pierce and Van Houten (1984) suggest that when students work in partnership within the classroom, they tend to learn faster and seem to take on more responsibility for their own learning. Teale (1982) says that when students interact with their peers while writing and the teacher took on the role of a facilitator students learn to write more effectively. Brandt (1988) concurs with Teale in stating that when the teacher takes on the role of facilitator, when students work in a cooperative setting, students learn more effectively and exhibited fewer discipline problems.

Donato (1990) concluded from her study that limited student

interaction while writing may very well be the root of the problem which causes students to have been unable to develop their writing abilities and, therefore, demonstrate poor quality, quantity and variety when writing.

Slavin (1987) found that when the students worked in isolation from one another, they may have felt frustrated and developed a feeling of isolation and therefore not work up to their potential. Doanto (1991) cites Vygotsky who stated that when students work in isolation from others they are less likely to expand their thoughts and ideas and learn effectively.

Finally, Donato (1990) cites Brady and Jacobs who found that fourth and fifth grade students learned to write more effectively through the give and take of cooperative learning experiences after they were taught how to look for good responses. The lively and friendly interaction of ideas and assistance helped all express their ideas more fully and effectively.

The research strongly supports the view that collaborative techniques have a great positive effect on writing. To date there is no evidence that a study of this kind has been conducted to investigate the effects of cooperative writing strategies on the writing achievement of third graders. It is hoped that the results of this study will stimulate interest in this topic and will bring about changes in children's instructional programs in regards to writing.

CHAPTER TWO

REVIEW OF THE LITERATURE

The review of the literature will address the following:

- 1. The description of cooperative writing
- The advantages and disadvantages of the use of cooperative writing.

According to Johnson and Johnson (1991) cooperative learning describes a program in which teachers and mainly students may benefit from the privileges of learning in group situations. This type of learning is an old idea. The capacity to work cooperatively has been viewed as a major contributor to the survival of man. The greatest book of all times, the Bible approves of cooperative learning (Eclesiastics 4:9-12).

This program is structured in such a way as to afford students four major learning experiences among others. One of them is positive independence, which would require students to discuss and solve problems and complete tasks. In such groups students are responsible for what they know, as well as what their group members know (Johnson and Johnson, 1991). Another experience is individual accountability. Inspite of the emphasis on positive interdependence, students must still be accountable for their individual work. A third aspect is group evaluation, where students have the opportunity of evaluating their work with their peers. Furthermore, cooperative learning also allows for the teaching of cognitive and social skills. Students in cooperative groups may learn how to associate and work with

peers, while progressing academically. In addition, students may learn the necessary social and cognitive skills to be successful in career and work situations Cohan(1986).

According to Bruffee (1984) peer collaboration for students is an opportunity to experience academic discourse in a social atmosphere. He later stated that students should be prepared to interact in a society that is becoming more and more collaborative and that they should learn methods of discovery through interaction with their peers. This, Bruffee argues will undoubtedly help students discover attributes they are not aware they have.

Hasley (1989) cited the following authors who strongly recommend cooperative learning. Hansen claims that grouping peers during the writing process helps students to make connections between reading and writing. Stay(1985) argues that peer collaboration integrates speech and writing which instills confidence in beginning writers, and encourages revision. Wesson (1986) supports peer collaborative learning as a way to avoid autonomy in the classroom.

Dale (1992) reports that the ultimate goal of using groups in writing classes is to allow students to see how writing can evolve from sketchy ideas to an edited product. Collaborative writing has the potential to do just that as students start out with one or more vague ideas and determine what should appear in a final text.

Bruffe (1984) cited by Dale (1992) also believes that

students should be involved in conversation at as many points as possible in the writing process and that the aim of writing instruction is to engage students more deeply with what they write. However, students will not have the motivation to talk through others' writing at each stage of the process and at a fully engaged level unless they too, have a stake in the outcome. Only with a collaborative product is the level of engagement possible.

Another strength, reports Dale (1992), is that collaborative writing focuses on higher order thinking, something that schools do not emphasize enough. Our students are adept at lower order skills but are not accomplished at any task that ask them to defend their opinions. Coauthoring by its very nature, demands that students defend their choices to their peers. They must explain reasoning and word choice in light of the demands of clarity, purpose, and audience. They must analyze and synthesize in the process of debating text-in-process.

Dale (1992) continued to argue that what students will remember from coauthoring might be a real sense of audience or new ways to plan. They might take away from writing together the belief that despite differences of opinion, we can learn from each other or that there are various ways to approach writing, all useful lessons about writing in or out of school. In addition, coauthoring brings alive the voices of our minds by externalizing them. We must capitalize on those externalized voices to help students better understand the writing process and their own

strategies. Students need not write in a vacuum. Collaborative writing engages students in a process of knowing - the talk itself, an enactment of that process of engagement.

Despite all the claims about the naturalness and educational validity of collaborative learning, without solid planning and request follow-up on the process, groups can fall apart and learning can fail to take place (Hasley, 1989). Hasley (1989) cites another set of researchers who are strongly against peer collaboration learning. Meyers (1979) objects to teachers relinquishing their authority to peer groups as they critique each other's writing. Meyers (1979) fears conformity. Wiener (1986) poses an important question. "How do you evaluate the effectiveness of teachers in the atmosphere created by peer collaboration? As formal assessment of an instructor's teaching skills is a part of the system, Wiener (1986) feels that teachers using peer collaboration must derive a method for evaluating themselves. Until they do, Wiener (1986) feels teachers should not rely too heavily on peer collaboration.

Another author cited by Hasley (1989) found no difference in the writing skills of students who engaged in collaborative writing. Meeks (1985) used observation to investigate how third graders revised in peer groups. She found that question asking by peer editors was necessary to helpful revision. Garner, also cited by Hasley (1989) studied two groups including one which used peer editing and could find no significant difference between the two.

As Glassman (1989) states since the 1970's there has been a plethora of research, field studies and laboratory studies focusing upon cooperative learning. However, limited data exist which focus upon cooperative learning as implemented in individual disciplines. Therefore, this study provides a prospective not thoroughly explored. It is hoped that the results of this study would embody the existing research with regards to cooperative learning and writing achievement.

CHAPTER THREE

PROCEDURES

Sampling

The population sample consisted of thirty five third grade students at the Evelyn Williams Elementary School. The control group contained nine girls and eight boys. The mean age was 8.2 and the mean reading level was 7.9. For the experimental group which consisted of eleven girls and seven boys, the mean age was 8.6 and the mean reading level was 7.9. Both groups are presently using Silver Burdett Ginn World of Reading. Convenient sampling was used in selecting samples for this study.

Methodology

As a pretest, a story, "Hill of Fire" by Thomas P. Lewis was read to each group in one sitting. Each group was asked to retell the story in writing in their own words. The writing samples were graded using the <u>Write to Read</u> criteria for scoring writing samples. Each sample was read by two readers. In case of a scoring dispute, a third reader rated the writing sample.

The researcher discussed cooperative learning with the students in the experimental group. Students were encouraged to be more positively independent, individually accountable, able to evaluate peers in their groups, and exhibit social and cognitive skills. They were divided into four groups of four children and one group of five. Each week, the experimental group responded to literature in writing in a variety of ways. Some of

the ways in which they responded are as follows:

- --retell story
- story mapping
- character analysis
- letter writing
- sequencing using story chain

Various stories and poems were read to the subjects of both the control and experimental groups. Subjects from the experimental group discussed the assigned activity in cooperative groups before attempting to complete the task. After discussion, each student wrote his or her response to the story. On the completion of this task, students critiqued their responses in cooperative groups. For example, they marked what they liked with a star and put a question mark where there was something they didn't understand or they thought was weak. They marked problems with grammar, usage, punctuation, spelling, or format, and discussed it with the author. Before the final draft, subjects pointed out any errors for the author to correct. Finally, students wrote their edited draft.

In the control group, the students also responded in writing to literature weekly. However, there was no discussion in collabrotive groups prior to their completion of assignments. Each person responded to the literature, individually.

After the six week period a post-test was administered to both the control and the experimental groups. Another story, "Monkey's Tail" by Lois M. Turner, was read to both groups and

then students responded to the story in writing, individually.

The Write to Read criteria for scoring writing samples was used to evaluate the unedited results.

Statistical Procedure

The significance of difference between group means was determined by one way Analysis of Covariance (ANCOVA). The level of significance was set at .05. The independent variable was the writing program and the dependent variable was the writing achievement. The covariate was the pretest writing score.

Control of Extraneous Variables

To avoid the effect of differential selection of subjects, a pretest was administered to adjust for initial differences. The use of grade level also provided control for the study.

Limitation

One of the limitations of this study is the sampling process. The subjects were conveniently selected. As a result, the effectiveness that randomization has in controlling extraneous variables were absent. In addition, all the subjects of the study were associated with the third grade at one school. Thus, the results may not be generalizable to other grades and schools.

Significance of the Study

It was the purpose of this study to investigate the effects of cooperative learning on the writing achievement of third graders at the Evelyn Williams Elementary School. It is hoped that the findings of this investigation will help to promote the collaboration process and that misconceptions associated with this characteristic of teaching will be corrected. It is also hoped that this study would be used by other researchers to further investigate the topic, since it is so vital to the enhancement of literacy in the youths of this territory.

CHAPTER FOUR

ANALYSIS OF DATA

It was the purpose of this study to investigate the effect of cooperative learning strategies on the writing achievement of third grade students at the Evelyn M. Williams School. Two groups of students were conveniently selected. The experimental group which consisted of ten girls and eight boys was treated. The control group which consisted of nine girls and eight boys did not receive any collaborative treatment.

Both groups responded in writing to literature, daily, for about ninety minutes, over a period of six weeks. Some of the various ways in which they responded are retelling story, story mapping, character analysis, letter writing and sequencing story chain. The students in the experimental group, however, were placed in cooperative groups and were taught cooperative strategies.

At the beginning of the experiment, a pretest through the reading of a story, was given to both groups. It revealed that the mean for the experimental group was 2.78 but 1.82 for the control group.

Table I

Pretest For Writing Achievement Scores

Edd of the second		
Groups	Mean	Standard Deviation
Experimental	2.78	1.003
Control	1.82	1.015

After six weeks a post-test was administered through the reading of another story to both groups. It is apparent from the results shown in Table 2, that the mean score of the experimental group (4.78) was higher than that of the control group (2.65).

Table 2

Post-test for Writing Achievement Scores

Mean	Standard Deviation
4.78	1.06
2.65	.862

As observed in Table 2, the mean score of the post-test for the experimental group showed an increase of two from the pretest. On the other hand, the control group gained only 0.83 points.

Differences of the analysis of the standard deviation was

observed in both groups. For the experimental group the standard deviation from pre and the post-test increased by 0.057 (1.06-1.6) while the comparitive group decreased by -0.153 (1.015-.862)

The significance of the difference between groups means was determined by applying ANCOVA (Analysis of Covariance). The level of significance was set at .05. (See Table 3)

Table 3

Analysis of Covariance

Lips.				
Source	SS	DF	MS	F
Total	49.268	33		
Error	30.097	32	.941	
Treatment	19.171	1	19.171	20.373

In this case the critical value for P=.05 at 1,32 degrees of freedom is 4.15. As can be observed the F statistic of 20.373 is greater than the critical value. Additionally, the F statistic exceeds the critical value at the .01(7.56) and the .001 (13.39) levels. Therefore, it is reasonable for the researcher to conclude that there is a significant difference between the writing achievement of third grade students at the Evelyn M. Williams Elementary school who engaged in cooperative learning strategies those who did not. As a result, the null hypothesis of this study was rejected.

CHAPTER FIVE

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS Conclusion

The purpose of the study was to investigate the effect of cooperative learning strategies on the writing achievement of third grade students at the Evelyn M. Williams School. groups of students, one experimental and the other the control, were conveniently chosen. Both groups responded in writing to literature for about ninety minutes daily over a period of six weeks. The subjects retold stories, analyzed characters, wrote letters to characters, sequenced stories and did story mapping. The students of the experimental group, however, worked cooperatively, while those in the control group responded in writing, individually. A pretest and post-test were given to both groups participating in this study. Both tests were evaluated using the Write to Read Criteria For Scoring Writing Samples. A statistical analysis was done to determine the results. There was a significant difference in the group means which resulted in the rejection of the null hypothesis.

These results correspond with the opinion of researchers

Johnson and Johnson (1991) who view cooperative learning as a

tool which teachers, and mainly students, may use to benefit from
the privileges of learning in group situations. This program,
continued Johnson and Johnson(1991), is structured in such a way
as to afford students four major learning experiences among

others. They are positive independence, individual accountability, group evaluation, and the teaching of cognitive social skills. The researcher recalls before the study how students reacted when they were instructed to write in their journals. From listening to their verbal responses such as "I don't know what to write" or "not again", the researcher observed that writing seemed to be a difficult task for them. Johnson and Johnson (1991) explained that if students were allowed positive independence which would require students to discuss and solve problems and complete tasks, they would become responsible for what they know, as well as what their group knows. In addition, Wesson (1986) supports peer collaborative learning as a way to avoid autonomy in the classroom.

Individual accountability is another aspect warranted by cooperative learning. The third grade students, as observed by the researcher during this study, did better work when they understood that they were responsible for their own work, despite their association with the group. The third aspect, which is group evaluation, along with the fourth, which is the teaching of cognitive and social skills are strongly recommended by Johnson and Johnson (1991) to support cooperative learning. The subjects in the experimental group had the opportunity of evaluating their work with their peers. The researcher observed that, during this interaction, students responded satisfactorily to peer support and positive peer pressure. Those students also learned how to associate and work with their peers while they were progressing

academically.

Cohan (1986) agrees that students learn the necessary social and cognitive skills to be successful in career and work situations. According to Buffee (1981) peer collaboration is an opportunity to experience academic discourse in a social atmosphere. He later stated that students should be prepared to interact in a society that is becoming more and more collaborative, and that they should learn methods of discovery, through interaction with their peers. This, Bruffee (1981) argues, will undoubtedly help students discover attributes they are not aware they have.

This study contradicts the reports of Meyer (1979) who fears conformity because he believes teachers may relinquish their authority to peer groups, as they critique each other's writing. But Dale (1992) found that collaborative writing focuses on higher order thinking, something that schools do not emphasize enough. Our students are adept at lower order skills but are not accomplished at any task that asks them to defend their opinions. Coauthoring by its very nature, demands that students defend their choices to their peers. The researcher observed during this study how subjects in the experimental group explained reasoning and word choice, in light of clarity, purpose and audience. This ties in with Dale's report (1992) that says collaborative writing allows students to see how writing can evolve from sketchy ideas to an edited product.

Students from the control group did not write as much as

those from the experimental group. Cathart (1990) explains this difference when he states that many children are not presented with opportunities for self-expression in writing. Pre-occupation with hand writing methods, he argues, along with insufficient information about the developmental capabilities and needs of children, prevent meaningful writing experiences. To combat these problems, however, Hasley (1989) cites Hansen who claims that grouping peers during the writing process helps students to make connections between reading and writing. Stay (1985) purports that peer collaboration integrates speech and writing which instills confidence in beginning writers and encourages revision.

This study strongly supports that cooperative learning strategies have a definite positive effect on writing, therefore, the researcher concludes that proper implementation of this strategy in the classroom should bring about changes in students writing achievement.

Implications

The statistical differences obtained in this study proved that the cooperative strategies applied enhanced writing achievement among third graders. Educators, such as administrators, counselors and teachers, should find cooperative writing strategies a helpful tool in areas such as decision making and the promotion of literacy. One researcher, Teale (1982), agrees that when the teacher takes on the role of the

facilitator and when students work in a cooperative setting, students learn more effectively.

Furthermore, since cooperative learning strategies enhance writing, teachers should be aware of this and should implement them in the classroom. Donato (1990) voiced her opinion on this issue in her reports. She states that limited student interaction while writing, may very well be the root of the problem, which causes students to be unable to develop their writing abilities, and therefore demonstrate poor quality, quantity, and variety when writing. In addition, cooperative writing strategies, if introduced early to students, should provide long lasting effects that will develop excellent writing skills.

Cooperative learning inspires students to work together and help each other. This practice instills in growing children a sense of success and productivity in the classroom. These attributes extend to the home and community. In addition, these attributes help students to understand each other better and encourage peer cooperation, meanwhile decreasing negative peer pressure and competitiveness. According to Johnson and Johnson (1991), working together is a major contributor to the survival of man. This togetherness provides the strength and initiative for generating problem solving skills. It can be deduced that children schooled in such rudiments will produce a future generation of more competent problem solvers.

Cooperative learning provides an opportunity for students to

interact in a more relaxed and stimulated environment. Students develop more positive attributes to writing and working as a whole, and less teacher dependence. When these types of attributes are nurtured at an early age, children grow into adults who exhibit healthy self esteem and self confidence. If this cooperative learning environment is encouraged throughout the Virgin Islands and the United States, we may look forward to a generation of better writers and communities of more literate individuals who will work together toward a better society for America.

Finally, it is hoped that this study would be used by other researchers to further investigate the topic, since it is so vital to the enhancement of literacy in the youth of our nation.

Recommendations

Based on the results of this study, the researcher recommends that:

- further longitudinal studies be conducted to determine whether these gains are long-lasting or if they are a temporary response to the increased writing experiences and peer involvement.
- students at all grade levels be exposed to collaborative strategies to enhance literacy.
- 3. cooperative learning strategies and response to literature be implemented in the language arts so as to improve students writing achievement.

- 4. parents become aware of the benefits of cooperative strategies in writing through the use of workshops given periodically. If parents are acquainted with peer evaluation and group interaction among students, they will see the need to support their children in cooperative settings in the classrooms.
- 5 classroom teachers spend more time in promoting cooperative strategies and writing and allow students to write every day since students learn to write by writing (Elks, 1988).

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APPENDIX A TABLE 1 Experimental Group

Writing Achievement Test Scores

Cubi cata	Durchood	Doot Mont
Subjects	Pretest	Post Test
A	4	6
В	3	5
С	3	5
D	4	5
E	4	6
F	4	6
G	2	4
Н	3	5
I	2	3
J	2	4
K	2	3
L	2	6
M	3	5
N	1	3
0	4	6
P	3	5
Q R	1	5
R	3	4

APPENDIX B TABLE 2 CONTROL GROUP

Writing Achievement Test Scores

Subjects	Pretest	Post Test
A	2	2
В	2	3
С	1	3
D	2	2
E	1	4
F	1	4
G	2	4
Н	3	2
I	3	2
J	1	2
K	3	2
L	4	4
M	1	3
N	2	2
0	2	2
P	0	2
Q	1	2

APPENDIX C Story Read For Pretest Hill of Fire

Once there was a farmer who lived in Mexico.

He lived in a little village, in a house which had only one room.

The farmer was not happy. "Nothing ever happens." he said.

The people in the village thought the farmer was foolish. "We have everything we need," they said.

"We have a school, and a market,

and a church with an old bell that rings on Sundays.

Our village is the best there is."

"But nothing ever happens,"
said the farmer.

Every morning, when the farmer woke up, the first thing he saw was the roof of his little house. Every morning for breakfast he ate two flat cakes of ground corn. His wife had made them the night before. He put honey over the cakes, and drank cinnamon tea from a clay mug.

"Nothing ever happens," he said.

It was still dark and

the farmer got ready

to leave for the field.

His son Pablo was still asleep.

"Perhaps today," said his wife,

"something will happen."

"No," said the farmer.

"Nothing will."

The farmer led his ox away

and did not look back.

At night the farmer returned.

He fed his ox.

Then he sat down by the fire.

Pablo played with five smooth stones.

He threw the stones at a hole

he had dug in the earth.

"See, Papa!" said Pablo.

"I got one in!"

But the farmer was tired.

He did not answer.

Every day was the same.

One morning

the farmer woke up very early.

He pulled on his woolen shirt.

He took his big hat

from a peg on the wall.

"I must go to the field early,"

he said.

"The plowing is not done.

Soon it will be time

to plant the corn."

All morning the farmer

worked in his field.

The ox helped him.

When there was a big rock in the way, the ox stopped and lay down.

The farmer pushed the rock away.

"Tst-tst!" said the farmer.

The ox looked at the farmer.

Then the ox got up and pulled again.

Late in the morning,
when the sun was high,
Pablo came to the field.

"Pablo!" said the farmer.

"Why are you not in school?"

"There is no school today, Papa," said Pablo.

"I have come to help you plow."

The farmer smiled.

He reached into his pocket,

and gave the boy

a small wooden toy.

"A bull!" cried Pablo.

The farmer had made it for his son during the hot time of the day when he rested from his work.

Pablo helped the farmer plow the field.

The ox pulled,
and the plow turned up the soil.
Suddenly the plow stopped.
The farmer and his son pushed,
and the ox pulled,
but the plow did not move.
It sank into the earth.
It went down,
down,
into a little hole.

The little hole became a bigger hole.

There was a noise
deep under the ground,
as if something big had growled.

The farmer looked.

Pablo looked.

The ox turned its head.

White smoke

came from the hole in the ground.

"Run!" said the farmer.

"Run!"

There was a loud CRACK,

and the earth opened wide.

The farmer ran,

Pablo ran,

and the ox ran too.

Fire and smoke came from the ground.

The farmer ran all the way to the village.

He ran inside the church and rang the old bell.

The other farmers came

from their fields.

People came out of their houses.

"Look!" said the farmer.

"Look there!"

That night no one slept.

Everyone watched the fire in the sky.

It came from where the farmer's field had been.

There was a loud BOOM, and another, and another.

Hot lava came out of the earth.

Steaming lava spread

over the ground, through the trees.

It came toward the farmer's house.

It came toward the village.

Pieces of burning stone

flew in the air.

The earth was coughing.

Every time it coughed,

the hill of fire grew bigger.

In a few days

the hill was as big as a mountain.

And every few minutes

there was a loud BOOM.

Squirrels and rabbits ran,

and birds flew away from the fire.

People led their burros

and their oxen to safety

Pieces of burning ash flew everywhere.

The farmer and his neighbors

put wet cloths over their noses

to keep out the smoke.

Some of the people

went close to the steaming lava.

They carried big crosses.

They prayed for the fire to stop.

The farmer and Pablo watched from the side of a hill.

When the booming stopped and the fires grew smaller, the farmer's house was gone.

The school was gone.

The market was gone.

Half the village was gone.

One day some men in uniform came in cars and trucks.

"So you are the one with the plow that opened up the earth," they said to the farmer. They laughed.

"You are lucky to be alive, amigo."

The soldiers looked at the village. "Everyone must go!" the captain said.

"It is not safe to live here any longer. The farmer and his wife and Pablo and all the people of the village went with the soldiers. They rode away in the trucks.

The farmer found a new house.

It was bigger than
the one they lived in before.

It was not far from the old one.

But it was far enough away
to be safe from El Monstruo.

which means "The Monster."

That is the name the people gave to the great volcano.

The people made a new village.

They made a new school

and a new market.

They had a great fiesta

because now they were safe.

At the fiesta the band played,

and the people danced

and clapped their hands.

People from the city came in a bus

to see El Monstruo.

The people of the village

sold them oranges and melons

and hot dogs and corn cakes to eat.

Now the farmer had a new field.

Every morning he woke up early.

It was still dark,

and El Monstruo glowed in the sky.

Every morning for breakfast

he ate two flat cakes

of ground corn.

His wife had made them

the night before.

The farmer went

to his new field.

His ox went with him,

just as before.

Sometimes Pablo brought

the children of the village

to see the farmer.

From the field they could see

the volcano smoking,

like an old man smoking his pipe.

"Can you make another

hill of fire?"

the children said.

"No, my friends, no, no,"

said the farmer. He laughed.

"One hill of fire

is enough for me."

APPENDIX D Story Read for Posttest Monkey's Tail

One day while Wolf was walking through the woods and thinking of food, he stepped into a deep hole. He tried to jump out many times, but he only fell down deeper. Wolf stayed in the hole for three days without food or water. At last he thought that if he howled as loudly as he could, help would come. He howled and he howled.

Sometime later when Monkey came by, he heard Wolf's howl and walked over to the hole. "Who's making all that noise?" Monkey asked.

"It's your friend Wolf. I fell in this hole and I can't get out. You must help me."

Monkey looked down at Wolf. Wolf looked back at Monkey with his big, unhappy eyes.

"But how can I help you?" asked Monkey. "I'm so small and you're so big. Why don't you jump out?"

"I can't," said Wolf. "I just fall down deeper and deeper."

"Well, what do you want me to do?" asked Monkey.

Wolf could see that there was a tree right beside the hole. "Catch on to that tree," he said to Monkey, "and let your tail fall into the hole so I can hold on and get out."

Monkey did as Wolf asked and soon Wolf was out of the hole. But Wolf still held Monkey's tail.

"I have had no food for days," Wolf said. "I don't like to do this, but I must eat you."

Monkey begged Wolf not to eat him. "Please, Wolf. I helped you. You can't eat me. I'm your friend."

But Monkey soon saw that all his talking would not make Wolf let him go. At last Monkey said, "If you want to be fair, you will let me go and then try to catch me. Then if you catch me, you will have the right to eat me." Still Wolf would not let go.

As they talked, Tortoise came by. "What's all the talk about?" he asked.

Monkey said, "Wolf was down in that hole, and as I came by I heard him calling for help. I helped him and now he wants to eat me!"

"Is this so?" asked Tortoise.

Wolf would not look Tortoise in the
eye. Still holding Monkey's tail he said,
"Yes, it is so."

Now, all the animals thought Tortoise was wise. So Monkey asked Tortoise, "What do you say Wolf must do?"

Tortoise wanted to keep Wolf for a friend, but even more he wanted to help Monkey. Tortoise thought fast and said, "Before I can tell you what to do, the two of you must clap your hands three times."

He told Monkey to clap first. Then it was Wolf's turn. When Wolf let go of Monkey's tail to clap his hands, Tortoise called, "Run, Monkey! Run for your life!"

Monkey ran to the top of a tall tree. Tortoise went into some tall grass to hide, and Wolf was left alone.

APPENDIX E Criteria for Scoring Writing Samples

LE YE L 6	EXPLANATION Ideas are well developed and expressed fluently. The narrative is well organized and the ideas flow logically from the story starter. The sentences vary in structure and phrasing. The papers are distinguished by either an interesting plot or exceptional control of language.
5	Ideas are developed and expressed clearly. The narrative is fairly well organized and generally the ideas are logically connected. The sentences vary in structure but are not expressed as well as those in a 6 paper.
4	A narrative emerges, though the story is not usually well developed. Papers will often show fluency but have problems in control of the language or ideas. The sentences probably lack variety.
3	The ideas are apparent, but their connection to each other is lose. There is some sense of narrative or focus, but the development is very meager. The sentences probably lack variety.
2	There is some connection between ideas even though what is written is essentially a list. The use of somewhat more complex sentences may be the one feature that distinguishes a 2 from a 1 paper.

States only one idea or wish without development or gives a list of disjointed ideas or wishes. If a list the sentences are short, simple, and repetitive.

UN	Undecipherable
BL	Blank or completely nonverbal response (pictures or scribbles).
OT	Off topic.

APPENDIX F Pretest and Posttest Samples of Experimental Group

. Nellister Bannis . Grade Era

Evelyn, M. Williams

Evelyn, M. Williams
218192
Hill of Fire by Thomas PLevis

Once alund time there was a farmer who lived in a small house and it only one bedroom. Ever morning the farmer would wake up and plow the field. The famer always wished that something would happen. Then one day Pablo come into the field. The farmer said to Pablo why arn't you in school so day There is no school today So I came to help you plow the field. Then the farmer gave Pablo a bull. Then Pablo and th farmer plowed the field. Then the plow fel into a hole the hole became biggier, the farmet told Pablo to run. The farmer rang the bell. The people in the tillage were scared they watched their rocks with fire. Then the volcano burned half Village. Then one day Soldiers can to the people of the village. The captoin said here is not safe so the people of the village went withthe Goldier to a Safe place. They . called the volcano the Mointen. They had a festo their new village. When Paplo friends came over they asked the farmer if they could make a hext Flitt of Fire. The turme said one Hill of Fir

Halenedary

H A abs

Neillister Bannis	Evelyn, M. Williams
Gradezra	- \\\\
	Tail by Lois Turner
Ohe day wolf was I	ocking for some food and
· ·	le. He tried to jump out but
he just fell in the hole des	per. Then wolf thought it he
howied loudly some one you	d come and help him. so he
howled and he howled.	
Then mon Key hear	d his howling. He asked wolf
	that it was his friend wolf.
	that thee and put your tail
	did what the wolf said. When
	he holes he said I have not
eaten in three days so.	I am going to eat you and he
did not let go of the mo	nkeys tail.
Then the turtle came	. The monkey, "I saved the
wolf from a deep hale and h	e wants to eat me. ('Is that
true "soid the tuntle " Y	es, said the wolf. And then
the turtle said clap you	r hands three time. The monke
did it first then the wolf	When the wolf clapped his
hands the turtle Gold, Ru	n, monkey. The turtle hid in
Some high grass and the mor	Key man up a tall tree and walt
was by himself.	
/	

Omarie -s. E.N.W SM

2/9/92

Reading Hill Of fire

ONCE UPON a time there were a former who live in a VIllage he allways said nothing hapens. and he had a son numed Pablow. One day they went to plant seeds. And The note mas going bus wodded brok. I'm sagasb sin co HE takes went Coming even the ax ran to. And then they saw a fire IN the EXA. NO post slept that high hobody went to sleep every body stayed 49 that night exy on was scared. The farmers house got burned down. The market got beind down. The note village got bouned bown and then the solders come to give them back everything box. The house they lived in were more safer than the other other house that they lived in. The next god the farmers mike made cake Atim book baril sat amograms Atim buppear and the ax and their lived pubblish ever after windhere family.

Sta Omarie .S. Monkeys Toul . E.M.W. Reading by Lois M. turner Once upon a time a wolf was walking by and he fell in a seep hole. He gobs on Timbind pry NE cobs going deepen and deep 50 he howled longer and longer uptil amonkey -came the wolf told the monkey to hong on the tree and put his fail in the holefor he could hold on to it. The monkey was not smart. The wolf did not want to let go of his tail when he got on of the hole. Topice come nathing by and herd the mankey begging for his life so he decided to help the mankey every think the toctise is cleved He tolled the monk to claphis hands and the he told the wolf to clop his honds and then told the monkey to run the for tise had Imped in the monkey climbed up in the big three and the wolf did not notice that the tortise was betind of him So he was left alone.

APPENDIX G Pretest and Posttest Samples of Control Group

roya Romain

_2/8/9.

Writing
Hill of Fire
By

Tomas. P. Lewis

Pleblo Father was a farmer when the volce came up, pece of the farmer house brown The volcano came bigger and bigger the store broke down the school broke down Pleblo father had to move ou becouse the church broke down too. The farmer had to move becouse the solja told them to move becouse the volcano where dingorace to live there so there had to move away.

3-24-93.

Monkey tail

by Lios M. Turner

1. There were a wolf walking though the wood when he was walking he fell in a deep hole. 1. he went deeper and deeper. Then a tortois came by and said, who is makeing all Those nouse. The wolf said help me, get me out. 3. Then a monkey came by a look in the hole and saw a wolf. The wolf said get me out of this hole, he said the mankey said themp cap and get out the wolf said if I trump up i'll go deepen the wolf saw a tree was whole on to the tree and pull me up the did do it then when wolf came up the wolf wolf whole on monkey tail and don't let 90.

ulie Delice February 8, 1993

Hle: H'll of fire

uthor: Tomas R. Lois.

egina: One day at a village in lexico. There was a farmer, his son, and his wife he farmer took the virlage people nothing ver happens.

hiddle: 50 the next morning the farmer voke up early to plow the field. Then his ion toplo wen't and meet him and the for. said Poblo why are you not at school. bho said there in no school today so I con and meet you. The farmer started plowing agian. Sudently, the ax started to go down in i hole then it stopped white smoke came o the hole. Then the farme and his son hear a boom and lava started to flow out of the hole and hot rocks: fly into the ai tarmers house apt burned. indisome soilders told the people they had to leave. The farme and house. Some children ask the farmer

he could make a falcand in re village. The farmer laughted and No I can't.

Irilie Belice Ms. Domoira E143 Monkey toil by Lois M. Turner -Wolf was walking thinking of food then he fall into a hole the more he tried to jump out the deeper he went in he staied in the hole for three days. the next day wolf cried who is that mankey said. It is walf your freindheip me out. How can I help you I'm so small, hold on to the tree and give me your tail wof said so monley did that. And monice & get wolf out of the hole wolf was rungy so he want to eat monkey, so he grab monicey tail. Monkey was beging the wolf not to eat him, so tortaise came sand said what is going on Walt want to eat me, Is that true wolf, Yes It is true. I'm going to tell you what to do. But firs clap your hands When It was wolf turn, When wolf clapped monkey went in a tall tre and tontoise ran into a tall tree.

3 C.A.

APPENDIX H

Teacher-Made Instrument for Pretest and Posttest

I am going to read you a story. Please follow the directions listed below, carefully.

- 1. Note carefully, the title and author of the story.
- Pay careful attention to the setting, plot, and characters of the story.
- 3. Retell the story in your own words in writing.

