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**THE EFFECTS OF REPEATED WRITING AND STORY GRAMMAR
INSTRUCTION ON THE WRITING PERFORMANCE OF
THIRD, FOURTH AND FIFTH GRADE STUDENTS**

A THESIS

**SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA**

BY

VALERIE JAYNE RILEY

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY**

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and that any and all revisions required by the final
examining committee have been made.

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June 9, 1997

GRADUATE SCHOOL

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Chapter I

INTRODUCTION

A job applicant is asked to write a short paragraph telling why he is qualified for the job. A child at summer camp is asked to write a post card home to let his mother know he is having a good time. A high school student must write a term paper for class, and a college student is faced with an essay exam for a final. Writing skills are needed in various aspects of daily life and encompass all ages and phases of life.

For a person with a learning disability, writing is an even more difficult task than for the average person. Writing connected discourse (written expression) is a major concern for educators and frequently appears as a goal on Individual Education Plans (IEP) (Ysseldyke & Algozzine, 1990). Many different approaches are used to attempt to remediate this difficulty and increase the length and fluency of written expression.

Because writing is important and pervasive, much time is spent both in research and in the classroom attempting to improve written expression. The purpose of this study was to investigate alternative approaches to writing instruction that might enable

elementary students to be more productive on a first draft. This research study was designed to contrast the effects of a familiar method (story grammar) with both a new method (repeated writing) and a combination of the two methods on productivity.

The first major hurdle to be crossed in writing is generating ideas and getting them on paper. Once the basic idea is there, revising and editing can be used to mold the writing into a more effective piece. A number of techniques, including brainstorming and story mapping, have been used to help the students produce an initial piece of writing. Both techniques have merit in the generation of ideas. However, these ideas must still be put onto paper.

Research has indicated that longer compositions are generally rated more favorably than shorter compositions (Graham, 1990). Thus, students must not only be able to generate more ideas, but they must be able to put them onto paper. They must be able to expand the ideas generated and express them in a coherent fashion. Instruction in story grammar has been proven useful in producing coherent writing (Fitzgerald & Teasley, 1986). The question is whether an approach like repeated writing may also prove useful.

Repeated writing is based on the technique of repeated reading, which has consistently been shown to improve reading fluency for poor readers (Samuels, 1979). Based on this, we are testing to determine if repeated writing will have similar results in the area of written expression.

Description of the Study

In the present study, the effects of three writing interventions -- story grammar, repeated writing, and a combination of these two -- will be compared. The students receiving instruction in story grammar will be taught seven questions that are to be answered in developing a story. These questions, or "elements," will be taught over a period of two weeks. Once instruction will be completed, students will be reminded before beginning a story to use the elements as they write, and a chart containing the seven questions will be prominently displayed in the classroom. The students will be given a different story starter each day for their writing assignment.

The repeated writing students will be given one story starter for the week, and asked to write the same story three times during the week. Students doing repeated writing will be instructed in two

ways to increase the length of their stories -- adding more to the original idea or generating a related idea and developing it. This instruction will last one week. Before beginning each subsequent day of writing, students will be reminded of these two techniques.

Those students in the combined treatment group will receive instruction both in story grammar and in ways to increase the length of their stories. The instruction will last about three weeks. Following completion of instruction, they will be reminded of the techniques before beginning their writing. A chart containing the seven story grammar questions will be displayed in the classroom. These students will be given one story starter for the week and will write the same story three times during the week.

Students in grades three through five will participate in the study based on the assumption that, before grade three, students produce very little writing. Participating students will come from intact classrooms in two suburban public school districts and one parochial school in the same area. The classrooms (including controls) participating in the study will be located in different school buildings and within each grade will be randomly assigned to treatment groups.

Because writing is important to all students at all ability levels, regular classroom groups will be used in the research. It is also true that the best students are not necessarily the best writers and vice versa. Analyses will be done by subgroups including gifted, ESL, and special education students to examine possible differences in response to the various treatments by different groups of students.

Definition of Terms

Certain key terms will be used throughout the study. They are defined as follows:

Repeated writing: a technique in which students are asked to write a story three times using the same story starter for each new writing. After the first writing, the students are allowed to read their previous composition(s) before beginning repeated writing. The stories are then collected and each student begins a new story on a clean sheet of paper.

Story grammar: instruction in the key elements that should be included in a good story. These are stated, for this study, as seven questions that the students should answer while writing their stories.

Story starter: A sentence or part of a sentence used as the beginning of a story and giving an idea to be expanded upon.

Number of words written: a simple count of the number of words, including small words like “a” and “the.” Contractions are counted as two words. Words that the student writes as two words that should actually be one (e.g., dog house) are counted as one word. Similarly, words that the student writes as one word that should actually be two words (e.g., a lot) are counted as two words.

Quality of writing: A value judgment in which a story is given a rating of 1 (low) to 5 (high) based on an holistic evaluation of the essence of the story. No specific criteria are given regarding what to look for in the story.

Research Questions

The study will attempt to answer the following questions:

1. Do the treatments differ with respect to the initial number of words written with each new story starter?
2. Do the treatments differ with respect to the number of words written between pre-test and post-test?
3. Does instruction in story grammar improve writing quality over simple repeated writing?

4. Does combining story grammar and repeated writing improve the writing quality to a greater extent than either alone?
5. Are differential treatment effects obtained for different types of students?

Chapter II

REVIEW OF THE LITERATURE

Writing has been an important subject of research in recent years. In the decade of the 1980's, over 18,000 articles on writing appeared in the ERIC document registry (Farnan, Lapp, & Flood, 1992). However, improvement in student writing continues to be elusive. The National Assessment of Educational Progress (NAEP) studies for the years between 1984 and 1988 report very little improvement in writing. The 1990 report concludes that there were no significant changes in total writing proficiency in grades 4 and 11, but that average performance of eighth grade students dropped significantly (NAEP, 1990). The same NAEP report also compared assessment results between 1974 and 1988 and concluded that "levels of writing performance in 1988 appear to be substantially the same as in 1974. Many students continue to perform at minimal levels on the NAEP writing assessment tasks, and relatively few performed at adequate or better levels" (NAEP, 1990).

The report did document a trend of increased writing in our schools. This article says that it may seem curious that an increase in time allocated to writing has not led to significant improvement, but it appears that the increase time allocation in the curriculum in itself is not enough (Graham, 1982). Graham says that while students certainly cannot become more proficient without writing, the crucial issue may be what type of writing instruction and experience occurs during the time students spend writing. Steps must be taken to remediate the various problems encountered by students with writing difficulties.

Applebee (1981) did a year-long study and found that only about 3% of the writing that occurred either at school or as homework was at least one paragraph length. The writing that did occur tended to be fill-in-the blank, multiple choice, short-answer responses, and essays designed to test previous learning. Ten years later, similar results were reported by the Center for the Study of Writing (Freedman, 1991). Christenson, Thurlow, Ysseldyke, and McVicar (1989) found that some students spent less than one minute per day writing.

Although much remains to be learned about the writing process, it is evident that many meaningful writing experiences are necessary for good writing (Daiute, 1986; Graham & Harris, 1988; Houck, 1988). Whatever the disabilities that may underlie writing problems, the factor common to poor writers is lack of writing experience (Greenberg, 1987). It seems quite likely that the lack of writing experience results in low achieving writers' lack of fluency.

Production

Problem

Productivity has been shown to correlate closely with achievement test scores, teachers' ratings, and grade level in the area of written expression (Deno, Marston, & Mirkin, 1982; Videen, Deno & Marston, 1983). Low achieving writers produce less text per composition (including not only in total words, but also in number of sentences and number of words per sentence) than their normally achieving peers (Barenbaum, Newcomer & Nodine, 1987; Graham & MacArthur, 1987a; Moran, 1981; Myklebust, 1973; Nodine, Barenbaum & Newcomer, 1985; Poteet, 1978; Thomas, Englert, & Gregg, 1987; Wong, Wong & Blenkinsop, 1989). For example, Houck and Billingsley

(1989) found that the normally achieving peers wrote about half again as many words and sentences as low achieving writers.

Productivity is also related to grade level, but growth is not linear. Newcomer, Barenbau and Nodine (1988) found that for average writers the number of words written increased from third grade to fifth grade, but this growth did not continue to seventh grade. However, students with learning disabilities showed minimal growth at any grade level; seventh grade students with learning disabilities were less productive than low achieving regular education third graders.

Remediation

Productivity seems to improve for students who are simply encouraged to "write more" when they appeared to be finished (Graham, 1990). This production signal led to a substantial increase in the amount of text produced under several composing conditions. Not only was the quantity of the text affected by production signals, but there were also small, but significant, improvements in quality. Production signaling did not result in more text for every student, however, and more than one prompt was required before some subjects produced more text. Kraetsch (1981) found that the

instructions "write as many words and ideas as you can about the picture" significantly increased the number of words and sentences written in an ABAB single-case design, nearly triple the baseline rate. When the student was shown how to add adjectives and adverbs to a previous composition and then told to "write as many words and ideas as you can about the picture," about four times as many words and sentences were written as during baseline.

A related method for increasing productivity is to use incentives (Graham & Harris, 1988; Rumsey & Ballard, 1985; Seabaugh & Schumaker, 1981). Brigham, Graubard and Stans (1972) did a study in an "adjustment" classroom which regularly used a token system. During the study, points were given for number of words written, number of different words (those not previously used in the current story), and number of new words (those not used in previous stories). The number of words written and the time spent writing at the end of the study was nearly double that of baseline.

Another possibility for increasing productivity is collaborative peer writing or peer conferencing (Erickson, 1989). MacArthur and Graham (1987) found that productivity was increased

when the child was allowed to dictate the story, but this finding was not substantiated by Newcomer, Barenbau and Nodine (1988).

Using the word processor may also increase productivity (Bobrow, 1985; Cameron & Kress, 1984; Cochran-Smith, 1989; Kleiman & Humphrey, 1982; Larter, 1987; Lindsay & Marini, 1984; Quinsaat, 1983), especially for those who began with the shortest handwritten stories (Outhred, 1989). Yau, Ziegler and Siegal (1990) gave lap-top computers to students with learning disabilities. Computer users showed a steady rate of progress over the year, while the control group did not show any significant improvement. The stories of the two groups were not initially different in length, but they were significantly different at the end.

The addition of a voice synthesizer was especially valuable when used with beginning or poor readers and writers (Rosegrant, 1986). Kurth (1988) studied three mixed-ability groups. One group wrote with a word processor, one with a word processor with voice synthesizer, and one with paper and pencil. There was a significant increase in composition length in both word processing modes. The poor readers in the group with the voice synthesizer continued to

use it extensively throughout the semester, while the others stopped using it once the novelty wore off.

Closely related to productivity for low achievers is the willingness to write. Some authors believe that "willingness" can be increased by using the word processor (Kleiman & Humphrey, 1988; Lindsey & Marini, 1984; Mokros & Russell, 1986; Rubenstein & Rollins, 1978). Other researchers found the communication that takes place through a journal is another motivation to write, and this motivation may in time transfer to other writing tasks (Hayes & Bahruth, 1985).

In summary, researchers have found several methods for increasing productivity. These include production signals, incentives, and use of a word processor. Dictation may also be effective, but researchers have met with mixed results in this area. It is also important to increase the child's motivation to write, as this also appears to be related to productivity.

Free Writing

One activity that frequently occurs in classrooms is free writing. Free writing was defined by Hillocks (1986) as writing in which the topic is not prescribed and which is ordinarily not graded.

Albo (1973) argues that free writing is the most effective way to improve one's writing. He thinks that writers should write without stopping for a 10 to 20 minute period and that the exercise should not be evaluated or commented upon in any way. Free writing may take several forms. Students may engage in journal writing, response to story starters, or response to pictures or another stimulus.

Other researchers change the concept a little to come up "focused free writing" (Olson & DiStefano, 1980) in which students receive an assignment and discuss it with the teacher before writing down ideas. Case study research provides a basis for speculating that free writing enhances creativity, provides practice in writing, and encourages effective and interesting writing (Emig, 1971; Graves, 1981). Experimental studies, however, have produced mixed results (Hillocks, 1986; McCrory, 1976; Knudson, 1991).

Hillocks (1986) reported more positive attitudes toward writing by those doing free writing than by control group students, but there is much disagreement about whether free writing is effective in improving composition (Bereiter & Scardamalia, 1985; Fox & Suhor, 1986; Smagorinsky, 1986). McCrory (1976) thinks that

students should be encouraged to do free writing, but he does not think that these activities of themselves produce good writing. He recommends refinement of ideas through other activities in the writing process.

Knudson (1991) contrasted free writing with three different writing prompts. All groups improved with practice up to a point, but the improvement did not remain after the study stopped. One possibility is that practice is a necessary, but insufficient, condition for improvement in writing competence. Students also may need a variety of instructional methods, activities, and tasks that increase in difficulty to allow learning to occur.

Hillocks (1986) did an analysis of composition research and discovered that while free writing was superior to focus on grammar and mechanics, it was not as effective as using writing models, sentence-combining, and writing criteria. Two extreme characteristics of the free-writing movement are the tendency to reject skills and structure, and the expectation that being able to write many words will somehow allow the student to produce good writing if the student writes frequently.

Free writing might be a useful tactic with certain kinds of students for particular purposes. For example, writers who write slowly and over-plan and over-edit might profit from the unblocking effects of free writing, while students who are already free writers might profit from more instruction in the elements of writing. Composing a first draft might be something of a free writing exercise. There may be times when free writing can be used as a tool for developing students' skills as writers. However, use of free writing alone in a classroom will not automatically produce better writers.

Story Grammar

Background

One method that has been used extensively in writing instruction is the use of story grammars. Story grammars were first used in relation to teaching reading comprehension (Taylor & Samuels, 1983). Initial research efforts developed a systematic way to analyze narratives. Researchers identified an internal structure for simple stories called story grammar. This structure is characterized by a hierarchical list of categories and the logical relations between them. Story grammars delineate what we know

about story structures in a way similar to how traditional grammar is used to describe our knowledge of language structures.

Mandela and Goodman (1982) believed that people's knowledge of story grammar should greatly affect their processing. To test the scientific validity of this concept, they carried out three studies. They tested the sequencing rules of the hypothesized "story grammar" by systematically moving parts of the story (constituents) away from their expected position in the story. At the same time, they included surface markers within the story to show the intended sequence of events. In all cases, reading time was slowed in the place where the expected constituent was missing and in the place where it actually occurred. Movement also resulted in more recall errors. The results of this study supported the position that people have incorporated knowledge about the structure of stories which they use during processing.

Many children appear to learn features of stories through exposure to stories. This exposure comes through reading and possibly through listening. These features can then be used both in reading comprehension and in writing (McKeough, 1984). Applebee (1978) believes that there are developmental trends in the

acquisition of story knowledge. Children's knowledge tends to become more elaborate with age and more able writers appear to have a more generalized knowledge of text structure.

Problems

Some reports suggest that not all learners naturally acquire and use knowledge of story structure to enhance text comprehension and recall or to organize compositions (Fitzgerald & Teasley , 1986). Knowledge of text structure improves with age for average writers. However, less proficient writers improve with age in the area of including subordinate details, but not in the task of relating ideas to make a unified whole. For example, students with learning disabilities seem to be unaware of text structure and story elements (Englert & Thomas, 1987). Englert, Raphael, Fear and Anderson (1988) found that knowledge of strategies correlated with written performance. Students with learning disabilities appeared to be less aware of steps in the writing process, strategies for presenting expository ideas, and procedures for selecting and integrating information than either their high-achieving or low-achieving peers. Student with learning disabilities also appeared less able to control the writing process.

Poor writers have greater difficulty generating compositions that can be classified as stories (Newcomer, Barenbaum & Nodine, 1988). When given an opportunity to write or tell a story, only 20% of the students with learning disabilities and 47% of those with reading difficulties could generate a composition that could be classified as a story, compared to 71% of their normally achieving peers (Nodine, Barenbaum & Newcomer, 1985). These students included many important story elements, but they regularly omitted such things as information related to time, context, goals, endings and characters' internal reactions (Vallecorsa & Garriss, 1990).

Poor writers also have difficulty making their writing fit with the type of structure needed (Englert & Raphael, 1980; Englert & Thomas, 1987). Thomas, Englert and Gregg (1987) had students write paragraphs of description, sequencing, comparison, and enumeration. The topic sentence and initial sentence were designed to illustrate the type of paragraph structure needed. These two sentences were read aloud to prevent reading difficulties from influencing the outcomes. They found that below average writers had significantly more errors involving redundancies and irrelevancies than their average or above average peers.

A related area of difficulty is coherence (Barenbaum, Newcome & Nodine, 1987). Typical writers mature in coherence as they age, but poor writers do not. For example, Cox, Shanahan and Sulzby (1990) had high achievers and low achievers in reading write narrative and expository paragraphs. In the narrative mode, both reading ability and grade level were related to their use of cohesive ties, while in the expository mode, the cohesive harmony increased only with reading ability.

In summary, knowledge of story grammar has been shown to relate to how well students can fit their writing to the type of structure required (e.g., narrative or expository) and to cohesion.

Remediation

Children who are specifically taught story grammar categories have generally shown improvement in reading comprehension (Dimino, Gersten, Cardine & Blake, 1990). The group receiving interactive comprehension strategy instruction based on schema theory and story grammar did significantly better both on basal questions and on written retells than students who received traditional basal instruction.

Because story grammar was found to have empirical validity and to be effective in improving reading comprehension, it was introduced into the field of writing. Research on the utility of story grammar has produced mixed results. Edmondson (1983) found no differences in the number of story grammar elements in stories written by elementary students who received instruction in story grammar when compared to students who received instruction in literature and drama appreciation. Two other studies, however, reported positive results. Gordon and Braun (1983) found an improvement in the number of story grammar elements contained in the written stories, while Fitzgerald and Teasley (1986) also found improvement in organization and quality of written compositions.

In a similar study, Applebee (1978) studied groups of fourth grade children with the lowest scores on knowledge of story structure who received special instruction in narrative structure or dictionary use and word study. Instruction in narrative structure had a strong positive effect on the organization of children's writing and enhanced the general quality of the compositions. While the pretest stories were judged as "barely adequate," after instruction the stories were judged to be "adequate" and "good."

Graham and Harris (1989a) taught students a story-writing strategy that involved asking themselves seven questions. When this strategy was used with 22 low-achieving writers, their writing improved until they were not noticeably different from their peers in story grammar elements included. The quality of the stories also improved, but they were still significantly lower in this area.

Graham and Harris (1986) compared a story grammar awareness group (informed about the value of story structure and taught to recognize how these structures were used in a story) to a teacher modeling and guided practice group. The students who received the more detailed instruction wrote more complex, well-formed stories than students who received story structure awareness instruction. Teacher modeling, according to these authors, illustrated to the student how story structure is used to guide the writing of narratives. The teacher used a think-aloud procedure.

Although the above study found a value for more specific instruction, sometimes this is not that case. Bereiter and Scardamalia (1985) gave two groups of students opportunity to write daily with instruction in pre-writing. One group was simply

told to write a story with at least five sentences, while the other group was given explicit instruction for composing the five sentences -- for example, "What does the main character look like? Describe that person." The first set of instructions resulted in superior student writing. The second set of instructions resulted in mechanical fill-in-the-blank responses. The students wrote to "answer the question" and often did not write in complete sentences and had poor sentence/phrase construction. This seemed to constrain student writers rather than help them write more complete thoughts and encourage them to expand vocabulary and description in the narratives.

The reason for the results in Bereiter and Scardamalia's study discussed above may be found in Knudson's (1988) discussion of two types of facilitation -- procedural and substantive. Procedural refers to the availability of external supports for composition to reduce the executive demands of the writing task. For example, children may list isolated words that they can use in developing a topic before they begin to write. Substantive facilitation refers to the entry by the teacher or researcher as a collaborator in the writing task. An example would be a conference in which the

teacher assists the student in selecting a topic. Bereiter and Scardamalia (1985) point out that substantive facilitation may be helpful in freeing a student to attend to one function by taking over responsibility for others, especially if this facilitation is gradually withdrawn and the student supplies the parts of the task that the teacher had previously supplied. However, substantive facilitation always involves a risk of protecting the student from those parts of the task that are most critical for mastery.

Story grammar is the study of one type of text structure -- that used in a narrative (story). The idea of text structure has been extended beyond story grammar in an attempt to teach students to adjust their writing to fit other categories of writing (e.g., essay, explanation, comparison/contrast). These interventions have met with varying degrees of success. Englert, Raphael, Anderson, Anthony and Stevens (1991) used direct instruction of text analysis and modeling to teach two types of writing: explanation and comparison/contrast. Their results showed that experimental students' compositions were significantly more well organized than the control students'. The experimental students also improved in their ability to generalize this knowledge to less structured

situations where they were asked to write about a topic of their own choosing. The gains made by the students in the learning disabilities group helped to close the gap between them and the low achieving students in the control group.

Others also found instruction in text structure to be beneficial (Hillocks, 1984; Wallace & Bott, 1989). Graham and Harris (1989b) attempted to improve the writing of argumentative essays by using the mnemonic TREE: Topic sentence, Reasons, Examine reasons, Ending. All the students using the mnemonic had considerably more of the essential elements in their post-treatment essays. In addition, the essays were generally longer and received better qualitative ratings. They also received improved scores in the area of coherence. However, other researchers have not found that instruction in narrative structure had any effect on coherence (Fitzgerald & Teasley, 1986). Cooper and Odell (1978) found that having a sense of audience is another method for improving coherence.

Computers have also been used in explicit structure instruction to improve knowledge of text structure (Burns, no date), although other research has not shown this to be successful

(Woodruff, Bereiter and Scardamalia, 1982). Zellermayer, Salomon, Gloverson and Given (1991) studied students in grades 6 and 9 who were given unsolicited guidance (where instruction in text structure was given without choice), solicited guidance (where the students could chose to get help with text structure), and simple word processing (where no instruction in text structure was available). The computer provided various metacognitive guides including pre-writing/planning questions, questions to support writing, and revision guides. Two weeks after the training, students were asked to write an unguided essay. When the quality of the post-test essays was judged, the unsolicited guidance group was significantly better than either of the other two groups, which did not differ significantly from one another.

In summary, instruction in text structure has proven beneficial in improving both narrative and expository writing in students who were lacking in knowledge of text structure. Use of word processors to aid in this instruction was proven beneficial by some researchers but not by others.

Quality

Many researchers have reported improved quality because of the interventions they employed. While the measurement of quality is subjective, it is believed to be important enough to merit evaluation. Techniques that lead to reports of improved quality are "production signaling" (Graham, 1990), collaborative writing and peer conferencing (Erickson, 1989; Gilles & VanDover, 1988; Salend, 1990; Stevens, Madden, Slavin & Farnish, 1987; Zaragoza, 1987), a sense of audience (Berkenkotter, 1981; Flower, 1979), and the use of a word processor (Larter, 1987; Nodine, Barenbaum & Newcomer, 1983; Phenix & Hannen, 1984; Yau, Ziegler, & Siegal, 1990). Direct instruction in revising strategies did not improve quality (Brakel-Olson, 1990) and neither did computer-prompted writing (Woodruff, Bereiter & Scardamalia, 1982).

Attitude

Another subjective result often reported is student attitude. Word processors were reported to increase confidence (Phenix & Hannen, 1984; Tierney, 1989) and to cause students to write more often (Cochran-Smith, 1989; Kleiman & Humphray, 1982; Rubenstein & Rollins, 1978; Russell, 1986).

Repeated Reading

Background

Repeated writing is a new technique developed from the technique of repeated reading. Repeated reading consists of rereading a short, meaningful passage several times until a satisfactory level of fluency is reached. Fluency is defined as both accuracy of word recognition and reading speed, although speed is emphasized (Samuels, 1979). Repeated reading is not a method for teaching all beginning reading skills, but should be used as a supplement, especially for children experiencing problems.

The method of rereading came from the theory of automaticity (LaBerge & Samuels, 1974) that notes that fluent readers decode automatically, leaving their attention free to be used for comprehension, while beginning readers focus on decoding. Conceptually similar is "repeated practice" for achieving automaticity in music and sports, two areas that require high levels of performance.

In a study by Samuels (1974) with mentally retarded students, he found that as reading speed increased, word recognition errors decreased. By continuing to use this technique, the student could

read each new selection with a faster initial speed and reach mastery in fewer rereadings.

Chomsky (1976) developed a similar technique involving rereading while listening. A short book or chapter was read while listening to it on tape until fluency was achieved. She noted a substantial increase in the rate of progress on reading achievement tests when compared to the previous two years of schooling.

While many researchers have found that repeated reading increases reading speed, others disagree. Rashotte and Torgesen (1985) found that reading speed increased with repeated reading only in passages that had large numbers of shared words.

Repeated Writing

Little research has been done on repeated writing. Leary (1990) had one condition in her study in which students rewrote on the same topic if their writing goal from the day before was not met. This rewriting was basically revision, "in many cases, simply recopying the original text with corrections." Repeated writing is defined in this study not as revision, but as a technique by which students produce more text each day. Based on the success students

have experienced with repeated reading, it is believed that similar successes may be seen with repeated writing.

Chapter III

METHOD

The purpose of this study was to compare the effects of three writing interventions -- story grammar, repeated writing, and a combination of these two -- on the writing proficiency of third through fifth grade students.

Participants and Setting

The participants were students in grades 3, 4, and 5 from 12 classrooms in 2 suburban Minneapolis/St. Paul school districts and 1 parochial school in the same area.

The teachers within the districts were asked to volunteer to do a 6-week writing project in their classrooms. They were told only that the students would be writing for 20-30 minutes 3 times a week. Based on that limited information, 12 teachers, from 11 different school buildings, were recruited. Four classes participated at each grade level.

Once the teachers were recruited, they were randomly assigned within each grade level to one of three treatment groups or

to a control group. The names of the teachers at each grade level were placed in a hat. The first one chosen was assigned to repeated writing, the second to story grammar, the third to the combination of methods, and the fourth to control. Thus, each treatment was presented to students at all three grade levels.

The number of students within the classes varied from 22 to 28. Table 1 shows the numbers by grade and treatment condition and percentage that completed the pre-test and post-test.

Procedure

Approximately 1 week before beginning the study, the researcher met individually with each of the 12 teachers. The teachers were given detailed instructions for teaching each day for the 6-week period (see Appendix A). The researcher and the teachers went through the instructions thoroughly and the researcher answered questions.

Once the study was begun, the stories were collected at the end of each week by the researcher. This gave the researcher contact with each teacher each week, providing opportunity for answering questions and for checking on whether procedures were being followed properly.

Table 1

Numbers and Percentages of Students by Grade and by Treatment**Completing Pre-Test and Post-Test**

Grade	Treatment	Number	Percentage
3	Repeated Writing	22	92
	Story Grammar	22	85
	Combination	20	91
	Control	18	90
4	Repeated Writing	19	68
	Story Grammar	23	92
	Combination	27	100
	Control	21	88
5	Repeated Writing	19	76
	Story Grammar	23	88
	Combination	21	88
	Control	15	65

Each teacher was provided with a story starter for each story. These were chosen to be of high interest to upper elementary students. The researcher prepared a list of 37 story starters. These were then rated by 25 elementary school teachers working on their master's degree at the University of Minnesota. They were asked to choose 20 from the list that they thought would be most interesting to students in grades 3-5. These selections were then compiled into a master list (see Appendix B). The top 7 were chosen for the first story of each week and the post-test. The next 12 were assigned to the remaining days of the study.

Under the repeated writing and combination conditions, 7 story starters were provided by the researcher to the teacher (see Appendix C). One story starter was used each week for six weeks and the seventh was used for the post-test. The story grammar condition received 19 story starters (see Appendix D). They began each week with the same story starter used in the other two conditions, but they had additional story starters for the other two days in each week. The control group was provided with a story starter for the pre-test and one for the post-test identical to those

used by the other conditions. The teacher was also given a list of other story starters to use if she desired (see Appendix E).

Each student in each class was to write a story from the appropriate story starter three times a week. Students were given 5 minutes to plan and 25 minutes to write each time. The teachers had the flexibility to choose the days of the week on which they would have the students write. Instruction time during the beginning days of the study lasted about 15 minutes per day.

Story Grammar Condition

Under the story grammar condition, the students were taught seven elements that should be contained in a story. These elements were adapted from Graham and Harris (1989a). The seven elements were:

WHO is the main character?
WHO else is in the story?
WHEN did the story happen?
WHERE did the story happen?
WHAT did the main character try to do?
WHAT happened then?
HOW did the story end?

These elements were presented to the students in the following manner. On the first day, the teacher posted the chart and read each element to the class. She then read a story and, as she read, she

pointed out each element. The teachers were given freedom to choose a story to use for this task. On the second day, a different story was read. This time the students were asked to find the various elements. The third and fourth days were used to brainstorm words and phrases that could be used to show WHEN and WHERE respectively. These two elements were singled out because they presented difficulty to students in a pilot study conducted by the researcher. Following these four days of instruction, the students were cued each day to “remember the elements that should be included in your story.” They were encouraged to refer to the posted chart while writing.

The students in the story grammar condition were given a different story starter each day and wrote a totally new story each day. On the first day of each week and on the post-test, they had the same story starter as the students in the other two conditions. Their story starters were unique to them for the other two days of the week.

Repeated Writing Condition

Under the repeated writing condition, the students were taught two different methods for expanding a story: by adding more details

to the existing paragraph or by generating a new paragraph on a related idea. Each teacher was provided with a sample one-paragraph story. After this story was read to the class, the children were guided to think about other things they could talk about in this same paragraph. The next day, the same story was read again and the children were guided to think of related ideas about which they could write to make a new paragraph. Following this teaching, the children were cued, "Remember the two ways you can write more in a story. You can add more to what you are writing about, or you can think of a related idea."

Combination Condition

Under the combination condition, the students were instructed both in how to expand a story and in the seven elements to be contained in a story. These students had the poster with the story grammar elements in their classrooms as well. They were cued with both the expansion cues and the story grammar cues as mentioned above.

In both the repeated writing and combination conditions, students were given one story starter for the week. On the first day, they were writing a new story on a new topic just as the story

grammar group was. However, on the second day, the students were given their story from the previous day to read. Following this, the stories were collected and the students were given a blank sheet of paper. They were given the same story starter as on the previous day and cued as mentioned above. On the third day, they reread their stories from the second day. The stories were again collected and the students given a blank sheet, the same story starter, and the same cues. Thus, three stories were written by these students using the same story starter in one week.

Control Condition

In the control condition, the students were given story starters identical to those used by the other three groups for the pre-test and post-test. During the six weeks between the two tests, the teachers taught writing using a process approach, with much emphasis on rewriting. Only two to three stories were generated during that period, with one class working on one story for the entire time. The teachers were asked to spend approximately the same amount of time on writing during the 6-week period, although it did not necessarily occur in 30 minute blocks 3 times a week. The

Table 2

Procedures for Teachers Under Each Condition

Week/Day	Story Grammar	Repeated Writing	Combination
1 / 1	Pre-test	Pre-test	Pre-test
1 / 2	TEACH: First 4 story grammar elements. Write story.	TEACH: Add more to original idea. Reread story and rewrite story.	TEACH: First four story grammar elements. Reread story and rewrite.
1 / 3	TEACH: Last three story grammar elements. Write story.	TEACH: Introduce a new idea. Reread story and rewrite story.	TEACH: Add more to original idea. Reread story and rewrite story.
2 / 1	PRACTICE: Finding story grammar elements. Write story.	Write story.	TEACH: Last three story grammar elements. Write story.
2 / 2	BRAINSTORM: Words or phrases for WHEN question. Write story.	Reread story and rewrite story.	TEACH: Introduce a new idea. Reread story and rewrite story.
2 / 3	BRAINSTORM: Words or phrases for WHERE question. Write story.	Reread story and rewrite story.	PRACTICE: Finding story grammar parts. Reread story and rewrite story.
3 / 1	PRACTICE: Finding story grammar element. Write story.	Write story.	BRAINSTORM: Words or phrases for WHEN question. Write story.
3 / 2	Write story.	Reread story and rewrite story.	BRAINSTORM: Words or phrases for WHERE question. Reread story and rewrite.
3 / 3	Write story.	Reread story and rewrite story.	REVIEW: Introduce a new idea. Reread and rewrite.
4 / 1	Write story.	Write story.	REVIEW: Finding story grammar parts. Write.
4 / 2-3	Write story.	Reread story and rewrite.	Reread story and rewrite.
5 / 1	Write story.	Write story.	Write story.
5 / 2-3	Write story.	Reread story and rewrite.	Reread story and rewrite.
6 / 1	Write story.	Write story.	Write story.
6 / 2-3	Write story.	Reread story and rewrite.	Reread story and rewrite.
7 / 1	Post-test	Post-test	Post-test

three teachers in the control classrooms reported spending from 8 1/2 to 10 hours on writing, as compared to 9 hours for the three treatments groups.

Dependent Measures

Two different measures of writing were obtained for analysis:

1. The number of words written on the first day and third day of each week was counted. Using these numbers, difference scores were calculated for each week by subtracting day 3 from day 1. The number of words were also counted on the pre-test and post-test. The pre-test was subtracted from the post-test to obtain a difference score. This measure included data from every student participating in the study.

At the University of Minnesota Institute for Research on Learning Disabilities, research was done to correlate number of words written with scores on achievement tests. Criterion validity coefficients comparing this writing performance indicator with performance on standardized tests were .70 (Deno, Mirkin, Lowry, & Kuehnle, 1980). This writing performance indicator was chosen because of its sensitivity of growth. Achievement tests are not appropriate to determine growth over a six-week period. However,

number of words written enables the researcher to evaluate the effectiveness of the treatment (Deno, 1985). In addition, normative and descriptive research has shown that the production of text consistently increases as grade level increases (Deno, Marston & Mirkin, 1982).

About 25 people were employed in counting words. Before beginning, each person was given a sample story to count. The count on these stories was compared to the experimenter's count. The average inter-observer agreement coefficient was .97.

2. Holistic ratings were obtained for every student completing both a pre-test and a post-test. Holistic scoring is thought to measure the qualitative aspects of writing more than the quantitative (Cooper, 1977). Four raters -- three elementary education teachers and a freelance writer -- were each assigned the stories written by students from three classrooms. The classrooms were randomly selected as to grade level and treatment. The raters were given instructions (see Appendix F) and asked to assign each story a score from 1 (low) to 5 (high). The sets of stories were stapled together with the order of pre-test and post-test varied.

Inter-rater reliability was collected by having each rater assign a score to a sample pre-test/post-test set. Actual pre-test/post-test combinations from student writing were photocopied and given to each examiner. Practice was continued until scores were similar. Then a "test" set was scored and reliability calculated from that set. Reliability was found to be .88, and was computed as follows:

$$\frac{\text{Agreements}}{\text{Agreements} + \text{Non-Agreements}}$$

Analyses

Pre-tests were analyzed using a 2x2 ANOVA. Because of difference in pre-tests between groups, post-test scores were analyzed using an ANCOVA with pre-tests as the covariate. A Chi square was used to evaluate the holistic ratings.

Repeated measures (the stories repeated for three days) were analyzed for changes in starting point (the number of words written at the beginning of each week) and mean level. These analyses were conducted on the number of words written.

Chapter IV

Results

The purpose of this study was to investigate which type of writing instruction would enable elementary students to write more words on a first draft. Descriptive and comparative analyses were conducted to examine the effects of the three types of writing instruction.

Normative Perspective

To provide a general normative perspective on the students included in the study, the first writing sample (pre-test) of all 281 third, fourth and fifth graders was quantified in terms of the number of words written and given a holistic rating. The analyses were done separately for each method of writing instruction in each grade. Table 3 contains the means and standard deviations for all students. Within each grade, the means and standard deviations are reported in four groups: Repeated Writing (RW), Story Grammar (SG), Repeated Writing and Story Grammar (RW/SG), and Control (CON). An ANOVA was run on these writing samples for the four experimental

Table 3

Pre-test Means and Standard Deviations for All Students for Total Words Written (TW) and Holistic Rating (HR)

			RW	SG	RW/SG	CON
Grade 3	N		24	26	22	18
	TW	X s	82.38 31.04	132.08 72.08	73.04 38.07	102.17 45.70
	HR	X s	2.41 0.80	3.18 1.05	1.98 0.95	4.11 0.90
Grade 4	N		19	23	27	21
	TW	X s	94.26 72.08	148.87 47.42	80.96 40.82	151.64 98.22
	HR	X s	2.53 0.96	3.26 1.05	2.85 0.86	1.98 1.01
Grade 5	N		21	24	21	15
	TW	X s	138.62 52.83	92.17 39.80	223.14 90.16	106.20 30.84
	HR	X s	2.84 0.77	2.74 0.96	3.62 0.87	3.33 0.72
Overall	N		64	73	70	54
	TW	X s	100.59 52.02	144.28 68.78	106.61 72.43	121.22 71.58
	HR	X s	2.56 .82	3.30 .89	2.74 1.12	3.06 1.28

groups to determine if their starting points were significantly different from one another. Table 4 contains the ANOVA comparing the four groups. The ANOVA revealed significant differences between grades, but no differences between treatments on the pre-test. Because of the large differences between grades on the pre-test, an analysis of covariance was conducted using the pre-test as the covariate, and the post-test as the dependent measure. The ANOVA also revealed significant interaction between grade and treatment. To deal with this factor, follow-up tests (Tukey's HSD) were conducted.

Research Questions

Quantitative Measures

Question 1. Do the treatments differ with respect to the initial number of words written with each new story starter?

The first research question addressed the quantitative differences between treatment groups during the course of the study. The control group was not included in this analysis, as they did not begin with a new story starter each week.

This difference scores related to this question have been graphed and are presented in Figures 1, 2, 3, and 4. It is apparent

Table 4

ANOVA on Total Words Written on Pre-tests

Source	df	MS	F
G (Grade)	2	44660.81	13.47*
T (Treatment)	3	3820.37	1.15
GT	6	55404.97	16.71*
Error	254	3316.27	
Total	260		

* $p < .01$

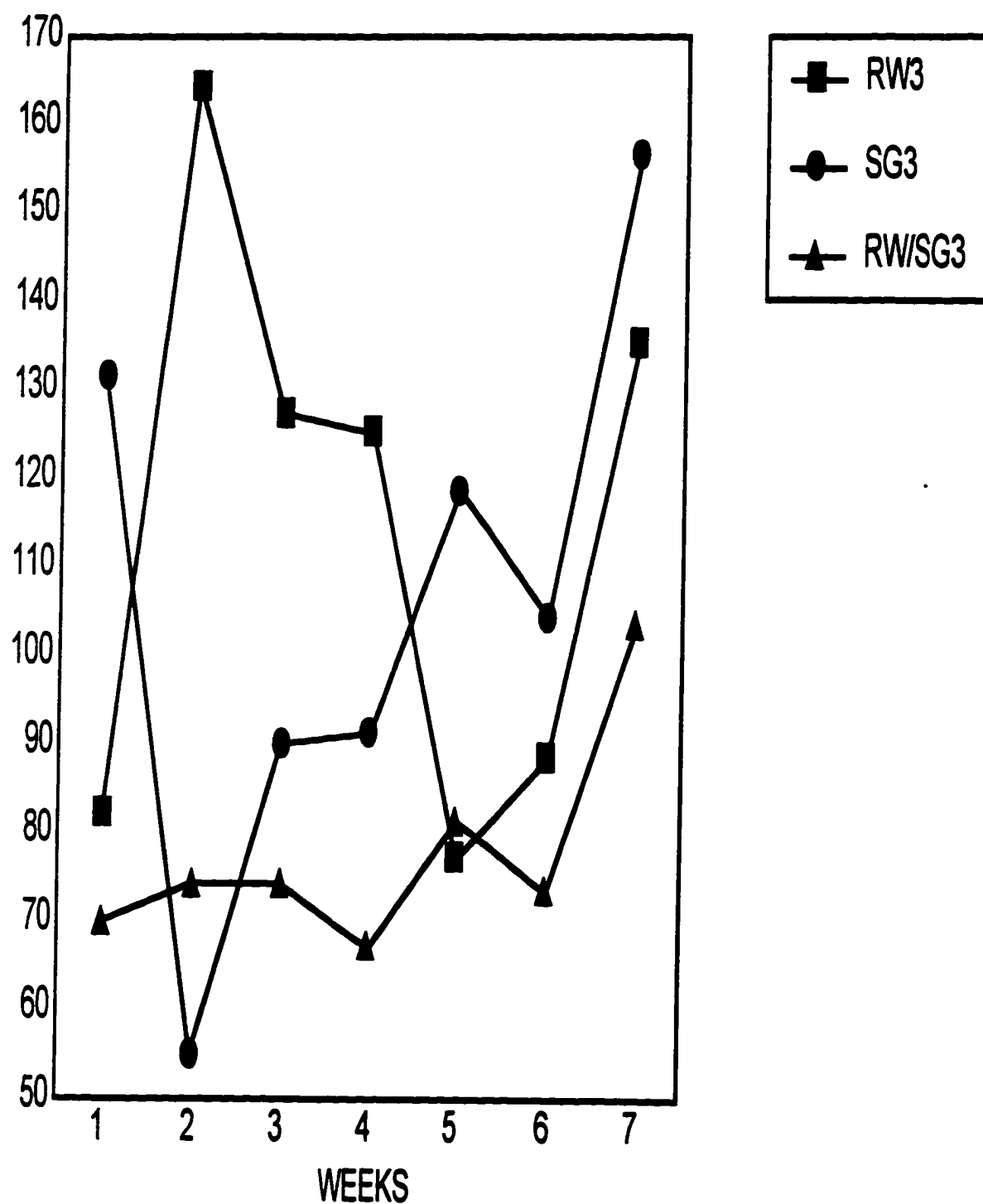


Figure 1. Number of Words Written by Third Graders at the Beginning of Each Week in the Repeated Writing, Story Grammar and Combination Conditions.

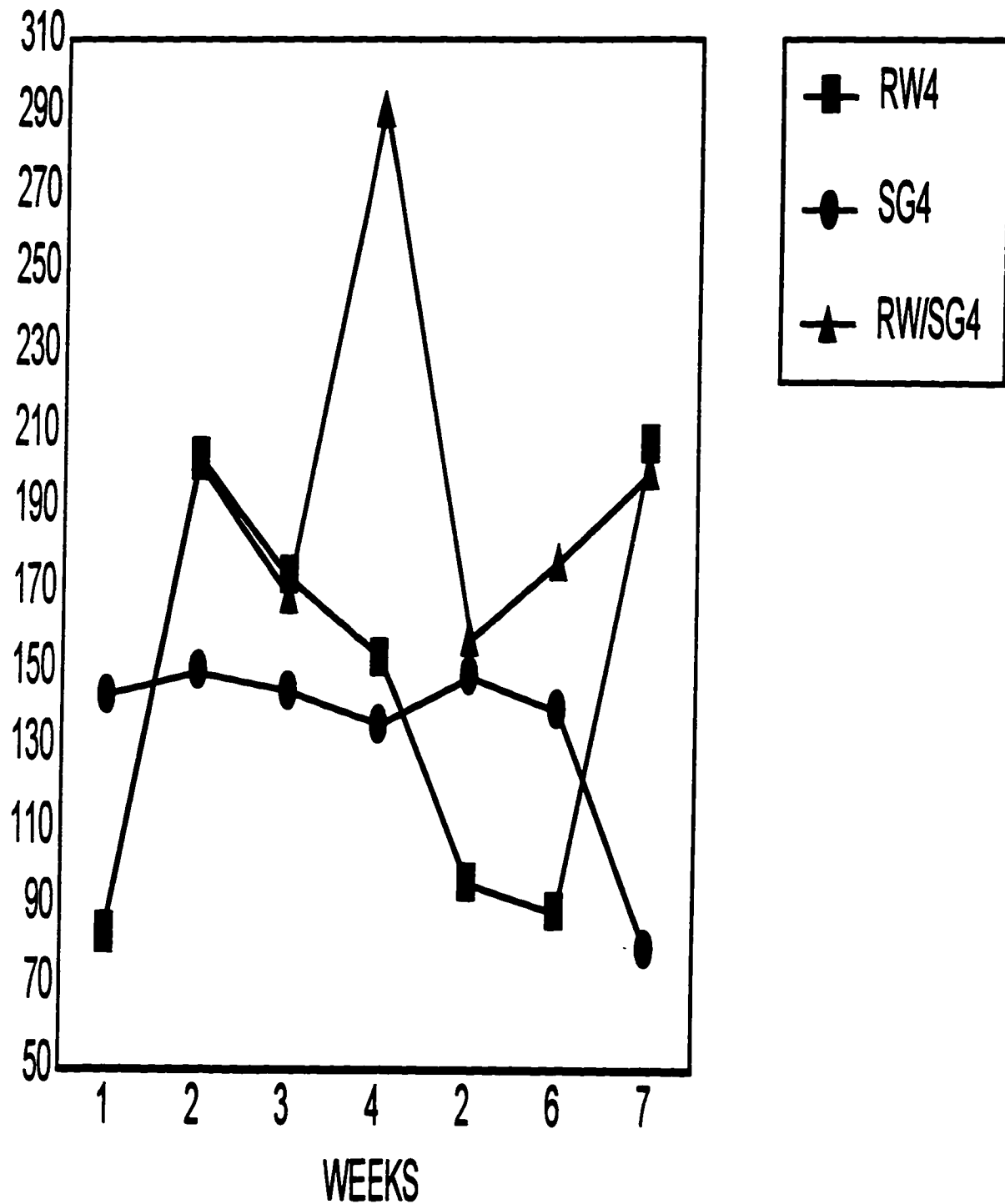


Figure 2. Number of Words Written by Fourth Graders at the Beginning of Each Week in the Repeated Writing, Story Grammar and Combination Conditions.

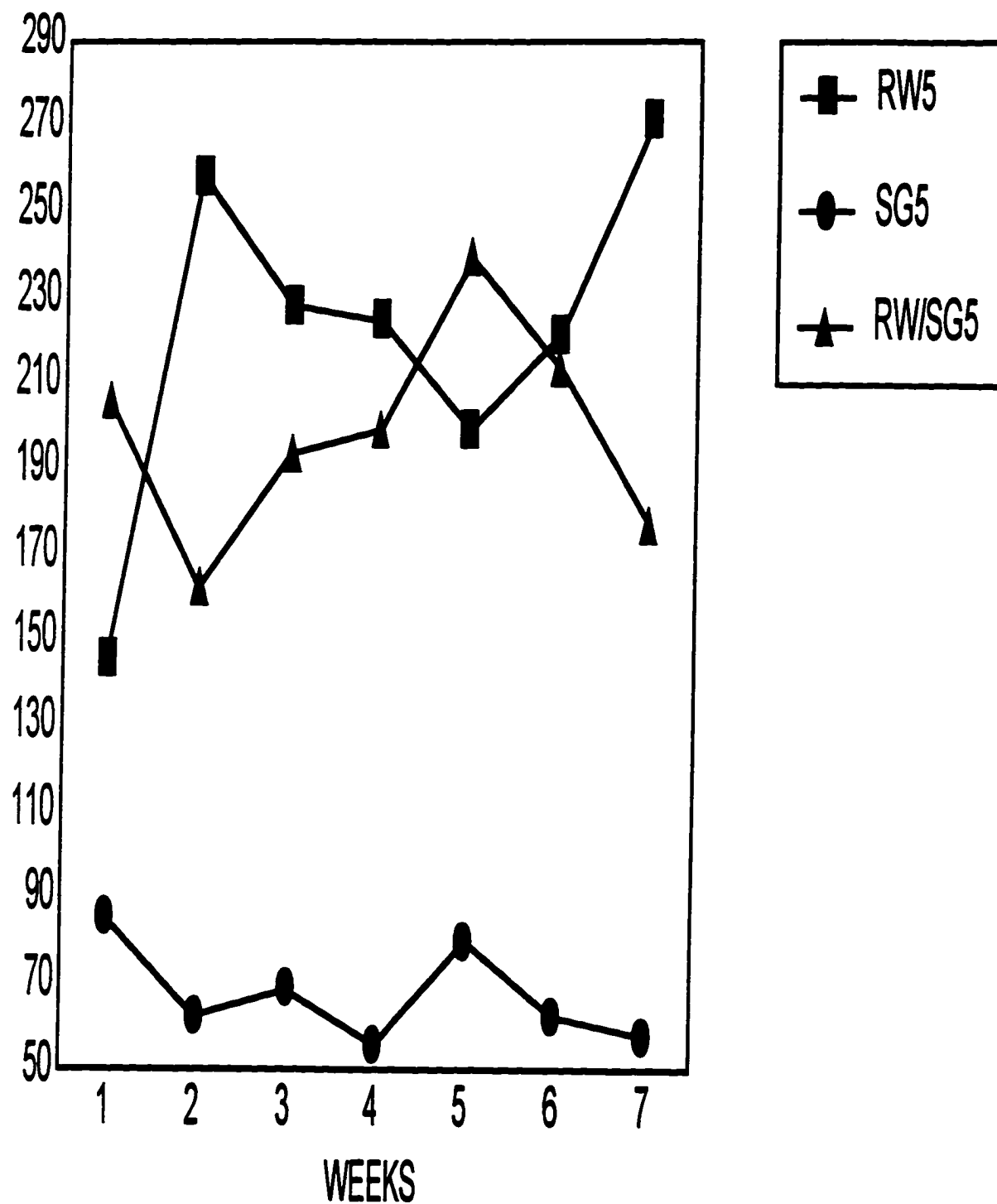


Figure 3. Number of Words Written by Fifth Graders at the Beginning of Each Week in the Repeated Writing, Story Grammar and Combination Conditions.

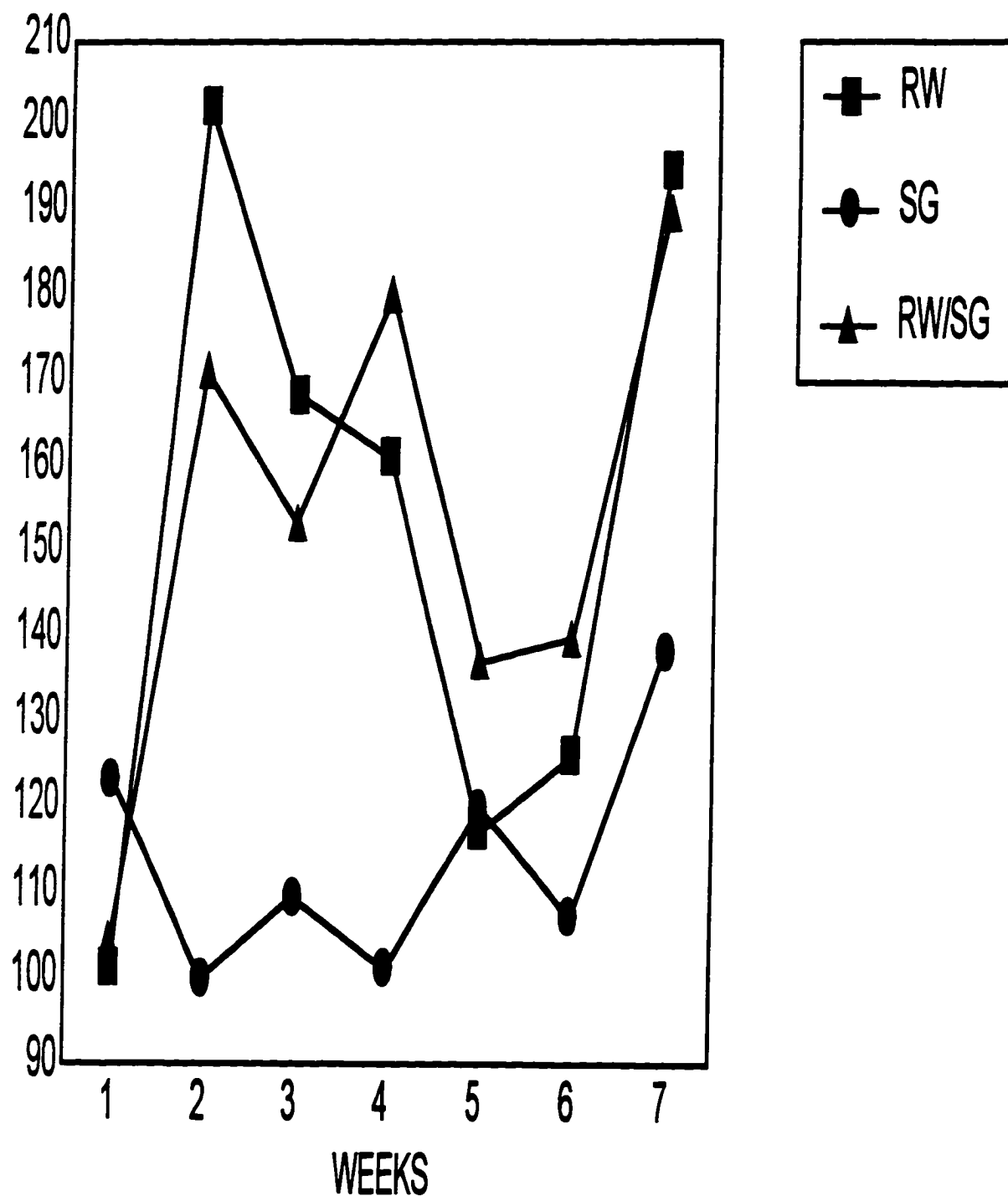


Figure 4. Number of Words Written by All Students at the Beginning of Each Week in the Repeated Writing, Story Grammar and Combination Conditions.

that no consistent trends in performance were obtained either within or between treatments. With so few data points, the reliability of the slopes is uncertain. There are trends in some grades and in some treatments. Further study over a longer period of time with more data points would be necessary to adequately answer this question.

Question 2. Do the treatments differ with respect to the number of words written between pre-test and post-test?

The second research question addressed the quantitative gains made by treatment groups from the beginning to the end of the study. Because of the significant differences between pre-test means, an analysis of covariance (ANCOVA) was calculated. Table 5 contains the pre-test and post-test means for each treatment, and Table 6 contains the ANCOVA. There was a significant group difference in post-test scores after removing the group differences in the pre-test. Table 7 shows the means by grade for pre-test, post-test, and difference scores, and Figure 5 shows the interaction indicated by these means as seen on the ANOVAs for pre-test and difference scores.

Table 5

Means and Standard Deviations for Students on the Pre-Test and Post-Test Writing Sample for Total Words Written

		Pre-Test	Post-Test	Difference
Repeated Writing	X sd N	100.40 58.70 60	189.53 85.62 60	89.13 78.83 60
Story Grammar	X sd N	124.85 53.68	132.07 79.71 68	7.22 56.12 68
Combination	X sd N	123.06 89.67 68	196.81 117.03 68	73.75 80.71 68
Control	X sd N	120.67 72.33 54	125.31 77.23 54	4.64 62.79 54

Table 6

**Analysis of Variance with Covariate -- Independent Variable: Group;
Dependent Variable: Post-test Score; Covariate: Pre-test Score**

Source	DF	MS	F	P
Covariate (Pre-test)	1	8932672.26	182.56	.000
Main Effects (Group)	3	106371.96	21.74	.00
Residual	245	4892.79		
Total	249	9451.61		

Table 7

Means and Standard Deviations (by Grade and Condition) for Students
on the Pre-Test and Post-Test Writing Sample for Total Words
Written

Grade	Condition	N	Mean (Pre)	SD (Pre)	Mean (Post)	SD (Post)
3	RW	22	82.37	31.04	129.95	50.52
	SG	22	132.08	56.75	152.59	89.71
	RW/SG	20	73.05	38.07	108.85	53.45
	CON	18	102.17	45.70	89.56	37.14
4	RW	19	94.26	72.08	190.35	81.02
	SG	23	148.87	47.42	182.26	53.72
	RW/SG	27	80.96	40.82	198.48	97.30
	CON	21	148.29	99.35	179.33	93.96
5	RW	19	138.62	52.83	251.37	70.58
	SG	23	92.17	39.80	61.39	20.16
	RW/SG	21	223.14	90.16	278.43	126.98
	CON	15	106.20	30.84	92.60	33.54

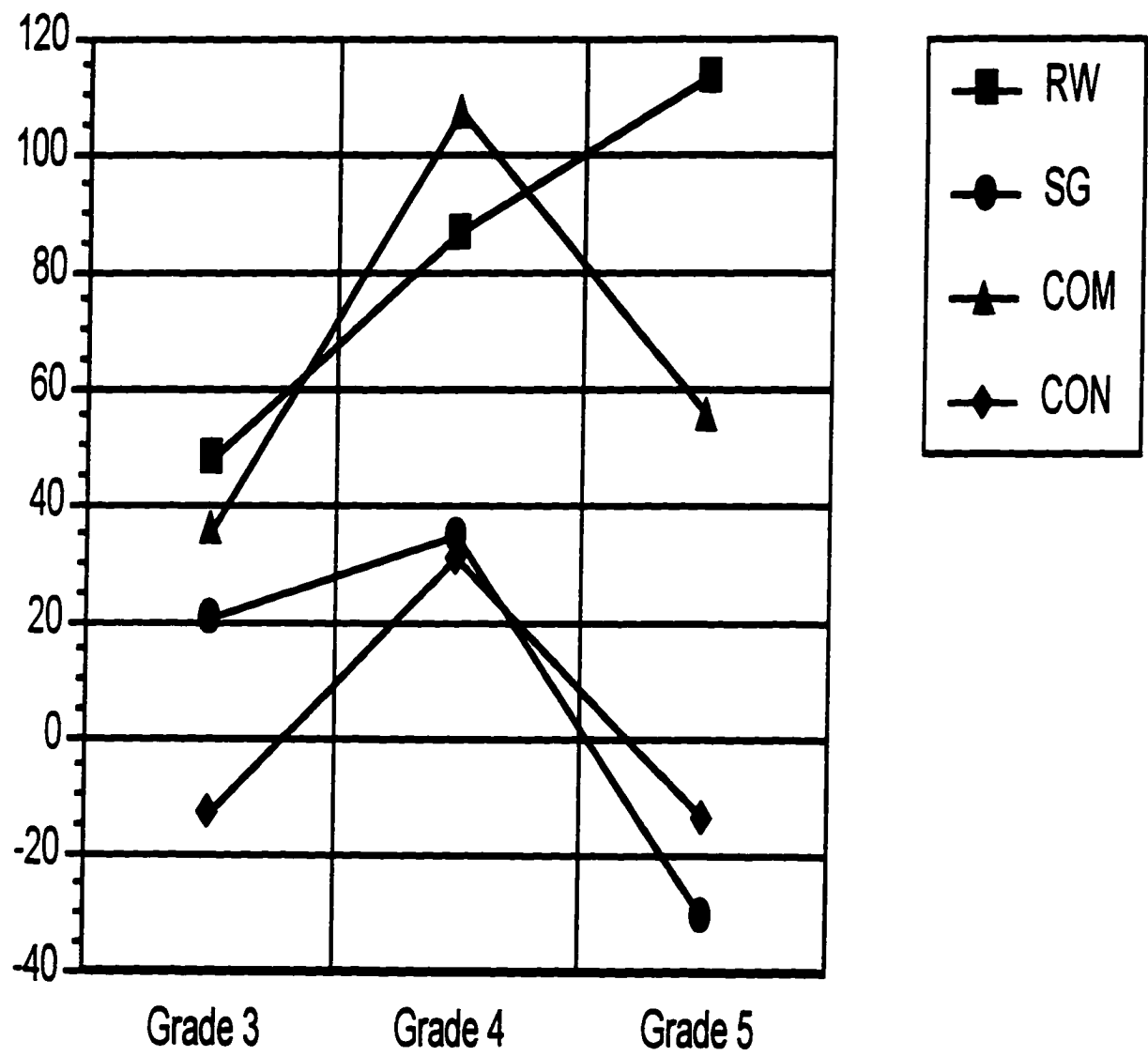


Figure 5. Mean Difference Scores for Groups at Each Grade Level

Tukey's HSD (Honestly Significant Difference) Test was run as a follow-up test to determine where treatment groups differed. The results of this test are shown in Table 8. Inspection of the table reveals that the Repeated Writing and Combination groups scored significantly higher than the Story Grammar or Control groups. The repeated writing group increased the number of words written by 93% and the combination condition (RW/SG) increased by 78%, while story grammar increased only 12% and the control group increased only 3%.

Qualitative Measures

Question 3. Does instruction in story grammar improve writing quality over simple repeated writing?

Besides the quantitative analyses, a holistic writing analysis of the four treatment groups was also performed on the writing samples. Two regular elementary education teachers, one freelance author, and one elementary learning disabilities teacher holistically judged the pre-test and post-test writing samples of the four treatment groups. Readers were given two writing samples in a stapled set and were not told which of the samples was pre or post.

Table 8

Tukey's HSD (Honestly Significant Difference) A Posteriori Test on Differences Between Groups.

Mean		RW	SG	RW/SG	CON
84.13	RW		*		*
7.22	SG				
73.75	RW/SG		*		*
4.65	CON				

95% Confidence Interval for Mean = 33.38 to 53.06

* Denotes pairs of group significantly different at the 0.05 level.

Readers scored the set by giving each sample a score from 1 (low) to 5 (high). The difference between the ratings was assigned to categories as follows:

Much Better - Positive change of 2 or more

Better - Positive change of less than 2

Same - No change

Worse - Negative change of less than 2

Much Worse - Negative change of 2 or more

The inter-rater agreement coefficient (.88) was computed as follows:

$$\frac{\text{Agreements}}{\text{Agreements} + \text{Non-Agreements}}$$

For example, suppose the four raters assigned scores as follows:

	Pre-test	Post-test
Rater 1	3	5
Rater 2	3	5
Rater 3	3	4
Rater 4	3	5

In this case, agreements would be 7, and agreements + non-agreements would be 8. This would give a .88 agreement coefficient.

A Chi square was performed to determine if a categorical distinction could be made as to a qualitative change in the student's writing and the student's treatment group. Table 9 displays the holistic scoring results. The Chi square was statistically significant. However, examination of the results shows that the results were the opposite of those anticipated. Instruction in story grammar did not improve the quality ratings over the use of repeated writing alone. By comparing the number of students in each treatment whose post-test rating were better than the pre-test rating, we see that this number was lower than expected in the story grammar condition and higher than expected in the repeated writing condition.

Question 4. Does combining story grammar and repeated writing improve the writing quality to a greater extent than either alone?

The holistic scores were obtained and classified as specified above. The Chi square was used to determine if a categorical distinction could be made as to a qualitative change in the student's writing based on the student's treatment group. Table 9 displays the holistic scoring results. Again the Chi square was significant. The

results from the combination group (RW/SG) were very close to the expected values calculated for the chi square, while the repeated writing (RW) group performed better than expected and the story grammar group (SG) performed worse than expected.

Generalizability Measures

Question 5. Are differential treatment effects obtained for different types of students?

Teachers were requested to supply information as to the special education status of pupils in their class. The categories represented by the students in these twelve classrooms were: gifted (5), learning disabilities (21), EMH (1), and Chapter 1 (6). The EMH student was present for only six of the 13 scored stories, and although she was present the day of the pre-test, she did not take the post-test. Therefore, no information is available for this category.

Gifted students were identified only in the classroom using the combination (RW/SG) treatment, so it is impossible to determine if one method was better for these students.

Table 9

5 x 3 Contingency Table for the Holistic Rating of Repeated Writing.
Story Grammar and the Combination Conditions on Differences
Between Rating for Pre-test and Post-test Samples.

	RW	SG	RW/SG	Total
Much Better	14.0 (8.9)	6.0 (10.1)	9.0 (10.1)	29
Better	24.0 (17.8)	11.0 (20.1)	23.0 (20.1)	58
Same	12.0 (13.8)	17.0 (15.6)	16.0 (15.6)	45
Worse	9.0 (15.0)	26.0 (17.0)	14.0 (17.0)	49
Much Worse	1.0 (4.6)	8.0 (5.2)	6.0 (5.2)	15
Total	60	68	68	196

Chi Square: 23.91 with 8 df
P < .005

Students receiving Chapter 1 help were found in two treatments (story grammar and combination). It would be difficult to determine if one method was better for these students, as story grammar was included in both treatments.

Students receiving assistance for learning disabilities fell into all four treatment groups in approximately equal numbers. However, the number of students was too low for statistical comparison. Table 11 shows means and standard deviations for pre-tests and post-tests for both students classified learning disabled and regular education students.

The pattern for students classified as learning disabled is very similar to that observed in the entire group. Significant increases were obtained in the Repeated Writing (85%) and Combination (30%) conditions. Students in the control group improved slightly (13%), and those in the story grammar (SG) group actually wrote fewer words (-15%) at the post-test. It would appear that the treatment(s) that worked best for the entire group, also worked best for those with learning disabilities.

As can be seen in Table 10, the students classified as learning disabled began significantly below their peers, and even in those

treatments where improvement was similar to that of their peers, they remained significantly behind. It is important to note, however, that, while they did not noticeably narrow the gap between themselves and their peers, neither did they fall further behind under the repeated writing condition.

They also compared favorably with their regular education peers in terms of holistic ratings. The greatest improvement for the students with learning disabilities was in the story grammar group, although those in the repeated writing group also improved. These students appeared to write less well in the combination and control conditions, based on the holistic ratings.

Table 10

**Comparison of Means and Standard Deviations for Total Words
Written on Pre-Test and Post-Test for Students with Learning
Disabilities and Students in Regular Education**

		N	Mean (Pre)	SD (Pre)	Mean (Post)	SD (Post)
Repeated Writing	Regular LD	74 3	100.6 64.0	52.02 37.85	193.7 118.5	89.47 28.64
Story Grammar	Regular LD	68 5	123.3 62.3	68.78 21.01	137.9 53.0	111.3 6 11.05
Combination (RW/SG)	Regular LD	69 3	88.1 142.0	72.43 53.33	157.2 184.0	115.5 9 27.62
Control	Regular LD	50 4	121.2 76.0	71.58 23.49	125.3 85.5	77.23 20.34

Table 11

Comparison of Holistic Means on Pre-test and Post-test for Students with Learning Disabilities and Students in Regular Education

		N	Mean (Pre)	Mean (Post)
Repeated Writing	Regular	74	2.56	3.44
		3	2.33	2.66
Story Grammar	Regular	68	3.30	2.91
		5	1.60	2.50
Combination (RW/SG)	Regular	69	2.74	3.02
		3	3.33	3.00
Control	Regular	50	3.06	3.10
		4	2.75	2.00

Chapter V

DISCUSSION

This discussion will be organized around the research findings as they relate to the five research questions, the limitations of the study, and recommendations for future research.

Research Questions

The results in Chapter 4 reveal reliable differences for the quantitative measures. The differences between the number of words written on the pre-test and the post-test provide a basis for concluding that the two treatments that involved repeated writing produce a significant increase while the other two do not. This was demonstrated in spite of differences on the pre-test between groups.

Studies involving repeated reading show significant increases in the number of words read across weeks. Since repeated writing was patterned after repeated reading, it was hypothesized that the same results would accrue from the use of repeated writing. In this study, the results have borne this out. While it is difficult to

discern a weekly trend in regards to the number of words written, over the period of the study, the repeated writing and combination approaches do significantly increase the number of words written over the story grammar and the control conditions.

The degree of difference between the groups can be better seen in the differences between initial and final writing samples.

Statistically significant differences were found for treatment groups. In examining the pre-test and post-test means for the four groups, we see clearly that those involving repeated writing make greater gains than either story grammar or ordinary instruction.

A possible explanation for this is that writing the same story on three different days increases the students' confidence in their ability to write. Just as repeated reading allows the student to read more words each time because the beginning part of the reading is becoming more familiar, so repeated writing allows the student to write more words each day because the ideas used in the beginning part have already been generated and are familiar. To write more, the student can build on these familiar ideas. By writing the same story three times, the student learns to generate new ideas and build on old ones. Then when he is given a new story starter, he is

able to use the methods he learned in the rewriting process to generate more ideas initially. He then builds on these ideas for three days, and the process repeats itself.

The holistic rating evaluation of the various treatment groups provides information regarding the qualitative differences in the writing. It was hypothesized that instruction in story grammar would improve writing quality; however, this did not prove to be the case. In fact, students receiving story grammar instruction actually do worse than expected and students doing repeated writing do better than expected. The combined approach apparently results in greater improvement than story grammar alone, but not as much as repeated writing alone.

While the results were other than those expected, they are not totally surprising. Productivity in writing, measured by words written, has been shown to correlate closely with achievement test scores (Deno, Marston, & Mirkin, 1982). Albo (1973) found that quality ratings improved if students wrote without stopping for a 10 to 20 minute period (the current study used 25 minutes) and if the exercises were not evaluated or commented upon in any way.

Graham (1990) also found that writing more improved quality ratings.

The final research question dealt with differential effects for different types of students. No special effort was made to find classrooms containing certain types or quantities of special education students, nor were these students singled out or dealt with differently. The only category of special education student found across all four treatment groups was students with learning disabilities.

Although the number of students classified as learning disabled was small, it appears that the pattern for improvement in these students was very similar to the pattern for the entire group of students. It would appear the method that worked best for the entire class also worked best for the students with learning disabilities.

Limitations

Several aspects of this study are presented as limitations. While the students in this study came from 10 different schools, all of the schools were within the same school district serving a suburban area. Although students represented a wide spectrum of

the population in terms of socio-economics, race, sex, and aptitudes, repeating the same study in a variety of city and rural school settings would provide further evidence to validate the instructional methods. Also the small number of students classified as learning disabled found in the classrooms participating in this study made it difficult to generalize to this population.

A second variable that might be changed to increase the generalizability of the study would be to increase the number of weeks involved from six weeks to a semester or a school year. It would be expected that repeated writing would continue to demonstrate increases in fluency for the students, but it is possible that the novelty would wear off and that the technique would only be viable for a limited time, after which other methods would need to be used.

Because the study was conducted with twelve intact classrooms, it is possible that there were teacher/treatment interactions not revealed in the analyses. An attempt was made to decrease this possibility by having three teachers in each treatment; however, another study employing different teachers might yield different results.

Recommendations

The investigator concludes that repeated writing greatly increases the number of words written by students and also improves the holistic ratings of stories written by these students. It is recommended that this technique be utilized, especially with students with limited production. It is understood that simply writing a lot of words is not the final end of writing instruction. However, it is impossible to edit until a significant amount has been written. This technique, coupled with instruction in editing, could improve the creative writing of elementary students.

It is important, also, that more time be spent on writing in elementary classrooms. It has been demonstrated that increased time spent on writing does improve writing skills. If this commitment is not made, the next National Assessment of Educational Progress Writing Report Card will probably follow the trends of the past.

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APPENDIX A

INSTRUCTIONS TO TEACHERS

APPENDIX A**INSTRUCTIONS TO TEACHERS****Repeated Writing Condition**

Begin a new story each week. Use the same story starter for all three days of writing in each week.

WEEK 1:**DAY 1:**

This will serve as a pre-test. Therefore, no instruction will be given. Put the story starter on the board, give the children 5 minutes to plan their stories, and then have them write for the remaining 25 minutes.

DAY 2:

Demonstrate how to add to a story by **adding more to the original idea**. For example, the student writes:

Marie swung the bat. It flew out of her hands. She stood there staring as it flew out toward the pitcher. "Duck," someone yelled. The pitcher was so scared that she couldn't move. The bat hit her in the stomach and she fell down.

To add more to this, continue telling about what happened next. The student could tell how all of her teammates rushed over to help her. The student could tell that the pitcher had to go to the hospital, or that in a few minutes she was all right again.

After demonstrating this concept, return the story from the previous day and allow the student to read his/her story. Collect the papers, and give the students 25 minutes to rewrite yesterday's story and add more details to the original ideas.

DAY 3:

Demonstrate how to add to the story by introducing a new idea, generating a second paragraph. For example, the student who wrote the story above might add another paragraph about what happened the next time Marie was at bat or might tell what happened when the next batter on Marie's team came up. Maybe the next time Marie would get a hit or strike out.

After demonstrating this concept, return the story from the previous day and allow the student to again read his/her story. Collect the papers, and give the students 25 minutes to rewrite the previous two days' stories and add to the story by generating a second paragraph.

WEEKS 2-6

DAY 1 OF EACH WEEK:

On the first day of each week, simply have the children plan their story for 5 minutes and then write for 25 minutes.

DAYS 2 AND 3 OF EACH WEEK:

On the second and third day of each week, remind the students of the two techniques for adding to a story. Let them reread the story from the previous day, collect the stories, and let them write for 25 minutes.

WEEK 7:

On the first day of the seventh week, have the students write a story from the post-test story starter. Give them 5 minutes to plan and 25 minutes to write.

Charting progress (OPTIONAL):

Have a graph for each student. Each day, chart the number of words written that day. The students can count their own words. Ideally, they should write more words each succeeding day of the week, and each week's new story should begin with more words than the previous week's story. Draw a line between each week, and only connect the dots within each week.

Story Grammar Condition

Use a new story starter every day and have the children write a new story.

WEEK 1:**DAY 1:**

This will serve as a pre-test. Therefore, no instruction will be given. Put the story starter on the board, give the children 5 minutes to plan their story, and then have them write for the remaining 25 minutes.

DAY 2:

Explain to the class what should be included in a story:

WHO is the main character?

WHO else is in the story?

WHEN does the story happen?

WHERE does the story happen?

WHAT does the main character try to do?

WHAT happens when he or she tries to do it?

HOW does the story end?

Tell (or read) a story illustrating how the **first four** are included in the story. Post the list of questions where everyone can refer to it as they write. Put the story starter on the board, give the children 5 minutes to plan, and then allow them 25 minutes to write.

DAY 3:

Review the elements that should be included in a story (see above). Tell (or read) a story illustrating how the **last three** are included in the story. Put the story starter on the board, give the children 5 minutes to plan, and then allow them 25 minutes to write.

WEEK 2:

DAY 4:

Read a short story and have the students find each of the **seven** elements listed above. Then have the children write, following the directions for day 2.

DAY 5:

Have the students brainstorm words and phrases to be used in the **WHEN** question. Illustrate how these words could be used in a story. Remind the children of the elements to be included in a story. Then have the children write, following the directions for day 2.

DAY 6:

Have the students brainstorm words and phrases for the **WHERE** question. Illustrate how these words could be used in a story. Remind the children of the elements to be included in a story. Then have the children write.

WEEKS 3-6:**DAY 7:**

Read a story and have the students find each element as you did on day 4. Then have the children write.

DAYS 8-18:

On each successive day, simply remind the class of the elements to be included in a story without further teaching. Give the children 5 minutes to plan and 25 minutes to write. Continue this procedure for the remainder of the 6 weeks.

WEEK 7:

On the first day of the seventh week, have the students write a story from the post-test story starter. Give them 5 minutes to plan and 25 minutes to write.

Combination Condition

Begin a new story each week. Use the same story starter for all three days of writing in each week.

WEEK 1:

DAY 1:

This will serve as a pre-test. Therefore, no instruction will be given. Put the story starter on the board, give the children 5 minutes to plan their story, and then have them write for the remaining 25 minutes.

DAY 2:

Explain to the class what should be included in a story:

WHO is the main character?

WHO else is in the story?

WHEN does the story happen?

WHERE does the story happen?

WHAT does the main character try to do?

WHAT happens when he or she tries to do it?

HOW does the story end?

Tell (or read) a story illustrating how the first four are included in the story. Post the list of questions where everyone can refer to it as they write.

DAY 3:

Demonstrate how to add to a story by adding more to the original idea. For example, the student writes:

Marie swung the bat. It flew out of her hands. She stood there staring as it flew out toward the pitcher. "Duck," someone yelled. The pitcher was so scared that she

couldn't move. The bat hit her in the stomach and she fell down.

To add more to this, continue telling about what happened next. The student could tell how all of her teammates rushed over to help her. The student could tell that the pitcher had to go to the hospital, or that in a few minutes she was all right again.

After demonstrating this concept, return the story from the previous day and allow the student to read his/her story. Collect the papers, and give the students 25 minutes to rewrite yesterday's story and add more details to the original ideas. Remind them to include the necessary story elements as well.

WEEK 2:**DAY 4:**

Review the elements that should be included in a story (see above). Tell (or read) a story illustrating how the **last three** are included in the story. Put the story starter on the board, give the children 5 minutes to plan, and then allow them 25 minutes to write.

DAY 5:

Demonstrate how to add to the story by introducing a new idea, generating a second paragraph. For example the student who wrote the story above might add another paragraph about what happened the next time Marie was at bat, or (s)he might tell what happened when the next batter on Marie's team came up. Maybe the next time Marie would get a hit or strike out.

After demonstrating this concept, return the story from the previous day and allow the student to again read his/her story. Collect the papers, and give the students 25 minutes to rewrite the previous two days' stories and add to the story by generating a second paragraph. Remind them to include the necessary story elements as well.

DAY 6:

Read a short story and have the students find each of the **seven** elements listed above. Return the story from the previous day and allow the students to again read hi/her story. Collect the papers, and give the students 25 minutes to rewrite the previous day's story and add to it. Remind them to include the necessary story elements.

WEEK 3:**DAY 7:**

Have the students brainstorm words and phrases to be used in the **WHEN** question. Illustrate how these words could be used in a story. Remind the children of the elements to be included in a story. Put the new story starter on the board, give the children 5 minutes to plan and allow them to write for 25 minutes.

DAY 8:

Have the students brainstorm words and phrases for the **WHERE** question. Illustrate how these words could be used in a story. Remind the children of the elements to be included in a story. Return the story from the previous day and allow the student to again read his/her story. Collect the papers and give the students 25 minutes to rewrite the previous day's story and add to it. Remind them to add to their story by telling more about the same topic.

DAY 9:

Review with the children how to add to their story by writing a new paragraph (see day 5). Return the story from the previous day and allow the student to again read his/her story. Collect the papers and give the students 25 minutes to rewrite the previous day's story and add to it. Remind them to refer to the list of necessary story elements.

WEEK 4:**DAY 10:**

Read a story and have the students find each of the seven story elements as you did on day 6. Put the new story starter on the board, give the children 5 minutes to plan and allow them to write for 25 minutes.

DAYS 11-12:

On the second and third day of this week, remind the students of the two techniques for adding to a story and the story elements. Have them add to their story as outlined above.

WEEKS 5-6:**DAY 1 OF EACH WEEK:**

On the first day of each week, put the new story starter on the board. Remind the children to include the seven story parts from the chart. Give them 5 minutes to plan and 25 minutes to write.

DAY 2 AND 3 OF EACH WEEK:

On the second and third day of each week, remind them of ways to add to a story and the seven story parts. Follow the procedure above for rewriting.

WEEK 7:

Have the students write a story from the post-test story starter. Give them 5 minutes to plan and 25 minutes to write.

APPENDIX B

TEST STORY STARTERS

APPENDIX B

TEST STORY STARTERS

Choose the **twenty** story starters which you think would be best for children in grades 3 through 5.

If I had another week of summer vacation, I would ...
Linda could hardly wait to tell them she had won.
Krista woke up to find a flashlight shining in her window.
The gate blew open. There stood ...
While exploring a cave, our light went out. We ...
When Lonnie got to school, he looked in his desk and found ...
Going to her grandfather's, she got on the wrong plane.
Suddenly the lights went out in the room and ...
Elaine tore open the package. In it was ...
As the huge wave came closer to Adam, he ...
"Quick? Give me the ball ..."
"You have to get up early tomorrow," said Dad. "We're ..."
Suddenly the car stopped and ...
Marie swung the bat. It ...
"Yippee!" Dan shouted as he ...
The scratching sound was coming from under the door.
"Quick! Pack your suitcase," said Grandfather. "You're ..."
I couldn't believe it when my best friend told me ...
I don't believe in magic pencils, but ...
A ghost walked here last night ...
Right in my own back yard, I saw ...
I became more frightened with every step.
The day the teacher overslept, we ...
We played this crazy game in which you had to ...
All the kinds on the black waited anxiously ...
The strangest looking dog I've ever seen ...
More than anything else in the world, she wanted to ...
Under the pillow was a note saying ...
Gigantic footprints led right up to the ...
The birthday party was a big success until ...
I found a secret birthday message saying ...

Waking up on St. Patrick's Day, everything turned green.
I walked to the basement door, opened it, and slowly went down
On the day of football tryouts ...
I set the pizza box on the table and opened the box.
As Maggie picked up the shell, she heard a voice inside saying, ...
"You just won a million dollars," said the announcer.

APPENDIX C

STORY STARTERS FOR REPEATED WRITING

AND COMBINATION CONDITIONS

APPENDIX C**STORY STARTERS FOR REPEATED WRITING****AND COMBINATION CONDITIONS**

WEEK 1: Krista woke up to find a flashlight shining in her window.

WEEK 2: While exploring a cave, our light went out. We ...

WEEK 3: The scratching sound was coming from under the door.

WEEK 4: The day the teacher overslept, we ...

WEEK 5: I walked to the basement door, opened it, and slowly went
down.

WEEK 6: "You just won a million dollars," said the announcer.

POST-TEST: Suddenly the lights went out in the room and ...

APPENDIX D

STORY STARTERS FOR STORY GRAMMAR CONDITON

APPENDIX D

STORY STARTERS FOR STORY GRAMMAR CONDITION

WEEK 1:

DAY 1: Krista woke up to find a flashlight shining in her window.

DAY 2: The gate blew open. There stood ...

DAY 3: When Lonnie got to school, he looked in his desk and found ...

WEEK 2:

DAY 1: While exploring a cave, our light went out. We ...

DAY 2: Elaine tore open the package. In it was ...

DAY 3: "You have to get up early tomorrow," said Dad.
"We're ..."

WEEK 3:

DAY 1: The scratching sound was coming from under the door.

DAY 2: Suddenly the car stopped and ...

DAY 3: I couldn't believe it when my best friend told me ...

WEEK 4:

DAY 1: The day the teacher overslept, we ...

DAY 2: I don't believe in magic pencils, but ...

DAY 3: Right in my own back yard, I saw ...

WEEK 5:

DAY 1: I walked to the basement door, opened it, and slowly went down.

DAY 2: Under the pillow was a note saying ...

DAY 3: Gigantic footprints led right up to the ...

WEEK 6:

DAY 1: "You just won a million dollars," said the announcer.

DAY 2: I found a secret birthday message saying ...

DAY 3: As Maggie picked up the shell, she heard a voice inside saying ...

POST-TEST:

Suddenly, the lights went out in the room and ...

APPENDIX E

STORY STARTERS FOR CONTROL CONDITION

APPENDIX E

STORY STARTERS FOR CONTROL CONDITION

INSTRUCTIONS: Put the story starter on the board. Give the children 5 minutes to plan their stories independently. Then give them 25 minutes to write the story.

PRE-TEST (October 26):

Krista woke up to find a flashlight shining in her window.

POST-TEST (December 7):

Suddenly the lights went out in the room and ...

OTHER STORY STARTERS:

If I had another week of summer vacation, I would ...

Linda could hardly wait to tell them she had won.

The gate blew open. There stood ...

While exploring a cave, our light went out. We ...

When Lonnie got to school, he looked in his desk and found ...

Going to her grandfather's, she got on the wrong plane.

Elaine tore open the package. In it was ...

As the huge wave came closer to Adam, he ...

"Quick? Give me the ball ..."

"You have to get up early tomorrow," said Dad. "We're ..."

Suddenly the car stopped and ...

Marie swung the bat. It ...

"Yippee!" Dan shouted as he ...

The scratching sound was coming from under the door.

"Quick! Pack your suitcase," said Grandfather. "You're ..."

I couldn't believe it when my best friend told me ...

I don't believe in magic pencils, but ...

A ghost walked here last night ...

Right in my own back yard, I saw ...

I became more frightened with every step.

The day the teacher overslept, we ...

We played this crazy game in which you had to ...

All the kinds on the black waited anxiously ...

The strangest looking dog I've ever seen ...
More than anything else in the world, she wanted to ...
Under the pillow was a note saying ...
Gigantic footprints led right up to the ...
The birthday party was a big success until ...
I found a secret birthday message saying ...
Waking up on St. Patrick's Day, everything turned green.
I walked to the basement door, opened it, and slowly
 went down
On the day of football tryouts ...
I set the pizza box on the table and opened the box.
As Maggie picked up the shell, she heard a voice inside
 saying, ...
"You just won a million dollars," said the announcer.

APPENDIX F

INSTRUCTIONS TO RATERS

APPENDIX F**INSTRUCTIONS TO RATERS**

Dear Teacher,

Thank you so much for agreeing to evaluate the stories for me. It is a big help, and will save me a lot of time.

You will receive the stories stapled together in sets of two. These stories were both written by the same child -- one at the beginning of the six week writing period and one at the end. They are in random order, so you will not know which one was written first.

Do one set of stories at a time. You are only comparing these two stories with one another, not one set with another set. Read both stories through, and then assign a rating of 1 (low) to 5 (high) to each. Reread if necessary. Remember that these are first drafts, so try to ignore spelling and grammar mistakes and concentrate on the essence of the story.

When you have finished, please return the stories to me in the folder or envelope in which you received them. Thanks again for your help.

Sincerely,

APPENDIX G
PILOT STUDY

APPENDIX G

PILOT STUDY

In order to determine whether repeated writing was a viable method of producing more text, a one-week pilot study was conducted by the researcher with three third-grade students. The students were chosen by their teacher as students having difficulty with creative writing. They were randomly assigned to one of the three conditions to be used in the study.

On the pre-test, their scores were very similar to one another, and the number of story grammar elements included were also similar. The pre-test was given on Friday, and the study began the following Monday.

The student given instruction only in story grammar did not progress in the number of words written. Her production fluctuated from day to day, perhaps in response to her interest in the story starter which she had been given for the day. The number of story grammar elements included in her story declined as the week progressed.

The student given instruction in both repeated writing and story grammar made significant progress in number of words

written through the week. She began at a point comparable to her pre-test score, and increased the number of words written by about 50%. The number of story grammar elements remained constant throughout the week.

The student given instruction only in repeated writing made the most dramatic increase in number of words written in the week. She began the week slightly below the number of words written for the pre-test and increased the number of words written almost 300%. The number of story grammar elements decreased throughout the week, however.

No holistic rating was done on these stories, as the researcher was only interested in determining if repeated writing was a viable method for increasing the number of words written. From the pilot study, it appeared that it was viable.

Table 12

Number of Words Written by Third Grade Students in Repeated Writing, Story Grammar, and Combination (RW/SG) During the One Week Pilot Study

	N	Pre-Test	Day 1	Day 2	Day 3
Repeated Writing	1	67	59	112	174
Story Grammar	1	65	36	69	43
Combination	1	87	85	135	127