

THE EFFECT OF STRUCTURED WRITING EXPERIENCES
AND ORIGINAL WRITING ON THE DEVELOPMENT
OF VOCABULARY AND COMPREHENSION
FOR SIXTH-GRADE STUDENTS

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CHAPTER I

PRESENTATION OF THE PROBLEM

Introduction

Those who inquire into the findings of research see that something must be done to help students, regardless of their grade level, who cannot read. A student must develop some ability in reading by the time he leaves elementary school or else pressures become too great. These pressures involve the coercing of students, by parents and teachers, into accomplishing more and into approaching a more satisfactory level of achievement in their schoolwork. When these pressures become too great, then it is difficult to keep students in school. Fleming (1966), however, says that sensitive teaching is one way of working with pressures upon children and youth. Sensitive teaching is therefore needed during the elementary years because of the tremendous importance of the instruction of reading. Although authorities do not agree as to which reading method is best or how a child's best reading method should be ascertained, most of them do agree that children learn to read by the method best suited to them individually. The sensitive teacher will discover which method to use with each student.

By the time the student reaches sixth grade, he usually receives little or no individual help toward improving his reading skills. Therefore, a method must be utilized which will benefit the individuals

as they are taught reading skills in a large group. The researcher has developed some experiences which provide structure for the teaching of writing and for allowing students the freedom of engaging in original writing, and at the same time, which may aid in the development of vocabulary and comprehension skills.

Background of the Study

The purpose of this study was to observe whether a method of conducting experiences in writing, developed by the researcher, which would utilize both structured and original writings, could generate an increase in the size of a student's vocabulary and also in his ability to comprehend meaning in either the books which he reads or in the original writings which he shares. There has been a tremendous emphasis by industry and business on the ability to write and speak with understanding and to think with some originality (Caplan, 1956). It will be of increased value to see whether structured writing experiences can be a vehicle for influencing and stimulating the growth of vocabulary and comprehension as developed through the outlet of original writing.

Since students usually have only a brief introduction to the materials they have to learn, it is necessary that they develop an understanding of the basic structure of the subject taught (Bruner, 1960). Providing Structured Writing Experiences as the primary basis for this study was derived from the idea that learning is a way of understanding the structure of a subject matter and how things are related to that subject matter (Bruner, 1960; Parker, 1963). Good teaching which emphasizes the structure of a subject is beneficial to

all students regardless of mental ability or sex (Callahan, 1959). Teaching with structure is especially helpful to poor students who would be distracted by poor teaching (Bruner, 1960); it is advantageous to the language development of boys and of the culturally disadvantaged (Baele, 1968; Eastland, 1966).

Several facets of the structure of writing which have been discussed by authorities include the following: the development of well-structured paragraphs containing definite key sentences usually as the first and the last sentence and developed by giving reasons, by comparing, by contrasting, by giving details and by using examples (Robinson, 1961; Meade, Haugh, and Sonke, 1961; Barnes, 1956; Ellis, 1967; Thorndike, 1917); and the study of outlining clusters (Robinson, 1941). The mechanics of writing such as sentence structure, correct usage, spelling, handwriting, capitalization, punctuation, and conversational writing were problems which were met and solved as the student found that his contribution was valued by teacher and peers (Williams, 1955; Judy, 1970; Pinkham, 1968; Mattera, 1956; and Mersand, 1961).

Using Original Writing of Language Experience as a secondary portion of this study was reflective of the emphasis which has been placed on language experience writing for the past few years as a means of improving the vocabulary and comprehension of students (Wirthlin, 1966; Jordanm 1963; Ferry, 1968). Learning composition writing was accomplished through experience rather than through direct instruction (Holt, 1964; Kohl, 1967; Hockett and Jacobson, 1938; Judy, 1970). Thus the externalization of reading, what could be seen, felt, and done would be pertinent to the culturally different student (Conant, 1961; Passow, 1963; Riessman, 1962). In the early primary years the child

dictated his experience to his teacher. Seeing his story in writing caused the child to want to learn to write for himself (Dawson, 1951; Allen and Lee, 1963; Burrows, et al., 1964). As he increased in these skills, his writing became his own creation--his own ideas written in his own words.

The development of vocabulary and comprehension are part of the complex process of reading (Johnson, 1964). Vocabulary growth so important in learning to read, is stimulated by oral language development, by the use of figurative language and picturesque phrases, and by sensory appeal (McLean, 1964; Groesbeck, 1961; Pinkham, 1968). Comprehension, which is referred to as understanding the meaning of words, is concerned with the development of several skills including the following: (1) distinguishing main idea and detail, (2) relating cause and effect, (3) seeing likenesses and differences, (4) seeing organization and sequence, and (5) drawing inferences and conclusions (Parker, 1963; Pinkham, 1968; Haines, 1963; Blaney, 1962; Larom, 1950; Louthan, 1965).

Statement of the Problem

What effects would structured writing experiences plus frequent opportunities for original writing have on the vocabulary development of students in the sixth grade? Would the structured writing experiences tend to increase students' comprehension skills? Would the intelligence quotient level have any influence on the growth in vocabulary and comprehension? Relatively little research has been completed to show the effect of structured writing experiences followed by opportunities for original writing on the development of vocabulary and comprehension skills. The studies which have been made concerning the

structure of subject matter have primarily centered on sentence structure or grammar (Moss, 1967; Reed, 1966; Halvorsen, 1961).

The purpose of this study was to investigate the effect of structured writing experiences followed by opportunities for original writing on the development of vocabulary and comprehension in the reading of sixth-grade students. In other words, will there be any appreciable increase in reading vocabulary and reading comprehension skills after these structured and original writing experiences? Will the students' level of intelligence affect this growth?

Hypotheses

This study proposes to test the following null hypotheses to show that there is no significant difference:

1. Vocabulary growth is not increased as a result of Structured Writing Experiences when considering the total sample.
2. Comprehension growth is not increased as a result of Structured Writing Experiences when considering the total sample.
3. Vocabulary growth is not increased as a result of Structured Writing Experiences when considering those students whose intelligence quotient is above the median for the total sample.
4. Comprehension growth is not increased as a result of Structured Writing Experiences when considering those students whose intelligence quotient is above the median for the total sample.
5. Vocabulary growth is not increased as a result of Structured Writing Experiences when considering those students whose intelligence quotient is below the median for the total sample.

6. Comprehension growth is not increased as a result of Structured Writing Experiences when considering those students whose intelligence quotient is below the median for the total sample.

Definition of Terms

The following are definitions of terms as they are used throughout this study:

Comprehension, as defined by the Gates-MacGinitie Reading Test Teacher's Manual, refers specifically to the student's ability to read complete prose passages with understanding. Reading with understanding involves the use of the following skills: the ability to select and understand main ideas; to find answers to specific questions; to note and recall details; to grasp the author's purpose; to understand sequence of events; to evaluate critically what has been read; to read creatively and infer meaning; to follow directions accurately; and to relate what has been read to one's own experiences.

Vocabulary, as defined by the Gates-MacGinitie Reading Test Teacher's Manual, refers to the student's reading vocabulary. The acquisition of these words may occur through experiences, varied reading, discussions, using words in writing, or a systematic study of words.

Structured Writing Experiences develop the following: outlining procedures, transitional expressions, topic sentences, "clincher" sentences, sentences which build up the main idea, introductory paragraphs, summary paragraphs, descriptive paragraphs, paragraphs of contrasts, paragraphs of comparisons, paragraphs using examples, paragraphs giving reasons, figures of speech, the writing of verse, and short story writing.

Original Writing, creative writing, or language experience are, in essence, the same idea. It is the writing about a student's experiences: what has been seen, felt, heard, or imagined. It is the rewriting in a student's own way of something which has already been written. It is the written expression of some of a student's own ideas.

Delimitations

Scope of the Study

This study is an analysis of the performances of sixth-grade students on different forms of the same test after a specified period of time has elapsed to find what effect there is of the method of teaching on the improvement made in vocabulary and comprehension. These performances were examined to answer the questions raised in the Statement of the Problem, and to test the hypotheses of the study. The students in this study were from intact sixth-grade classes in Longfellow and Goetz Elementary Schools in Muskogee, Oklahoma, during the 1969-1970 school year. Of the five classes, only four were used directly in the study. The four classes were randomly assigned to the method of teaching which they would have presented to them first. They received the alternate one after the first one was completed.

This study includes a repeated measures analysis of variance. The independent variable is the intelligence quotient, obtained from the Kuhlmann-Anderson Intelligence Test Seventh Edition, Form EF. The experimental variables are the structured writing experiences and the traditional classwork. The mid-test and post-test, which are alternate forms of the Gates-MacGinitie Reading Test, Survey D, are the dependent variables. One-half of the students were given Form 2M and one-half

were given Form 3M at the mid-test. The opposite form was given to each student for the post-test. It was necessary to run the analysis twice, once using vocabulary scores from the mid-test and the post-test as the dependent variable, and once using comprehension scores from the mid-test and the post-test as the dependent variable.

Limitations of the Study

Since the population of students from which the sample was selected was limited to intact classes of sixth graders in Longfellow and Goetz Elementary Schools in Muskogee, Oklahoma, generalizing from this study to other populations would not be advisable. Originally, there were 135 students in the four classes; however, not all of them had the required number of tests and some had moved so these students could not be included in the sample. The sample size of eighty-eight, twenty-two from each group, is small.

Because the students were in a departmentalized school structure, they were taught reading and language arts by different teachers. Therefore, it was not possible to control instruction beyond the criterion of minimum teacher education, each teacher was certified by the state department of education; and that the same instructions about structured writing experiences were to be used since they were recorded on tapes by the researcher.

The health of the student, the environmental conditions, and the testing circumstances on the days he was tested may have influenced the results of his test, also.

The eight-week period allowed for each session of the study may not have been adequate enough to reveal the effect of structured

writing experiences on the development of vocabulary and of comprehension.

Assumptions of the Study

1. That a reasonably uniform quality of instruction was received by the subjects in this study since tape recordings, overhead transparencies, charts, dittoed hand-out sheets, and scripts were written and recorded by the researcher, and that all teachers of the experimental groups followed the script suggestions as written by the researcher concerning structured writing experiences and did not enlarge upon the topics themselves.

2. That a reasonably uniform quantity of school-furnished reading and language arts materials were available for all subjects in this study.

3. That individual vocabulary development and individual comprehension development can be determined by the results of the tests used in the study.

4. That the influence of history, what occurred during the time of the study, could be eliminated as a factor since experimental and control groups were taught concurrently during both sessions.

Significance of the Study

This study reports an experiment to determine the potential to be found in combining structured writing experiences with original writings and their effect on the development of vocabulary and comprehension among sixth-grade students. Since the usual classroom has a wide variety of abilities as well as problems found among its students, the

materials used in this study could possibly be a source of help to the teacher in the classroom.

It will not be possible to show the causes for the improvement or lack of improvement in vocabulary and comprehension. Although the groups were assigned to the method of instruction randomly, the individual students in the study were not assigned randomly to the method of instruction. It may, however, be of interest to researchers who are trying to predict various ways to improve the teaching of reading.

Organization of the Study

Chapter I has introduced the background of this study, a statement of the problem, the hypotheses to be tested, the definition of terms, the delimitations of the study, and the significance of this study to teachers, clinicians, and researchers.

Chapter II will review the literature concerning structured writing, original writing, reading and writing skills, and how they relate to other research.

Chapter III will describe the selection of the sample, the test instruments involved and the procedures for using them, and the statistical methods used to analyze the findings.

Chapter IV will contain a statistical analysis of the test data and will indicate the degree to which the hypotheses are found to be significant or not to be significant within recognized limitations.

Chapter V includes a summary of the study, the conclusions drawn as a result, and some recommendations regarding future studies in this area.

Summary

This chapter has presented the background for this study stating that research was needed to help students to learn to read. The stated problem to be investigated in this study was the effect of structured writing experiences followed by original writings on the development of vocabulary and comprehension. To be determined was the effect of vocabulary and comprehension growth for the entire sample, and for those with high and low intelligence quotients.

Six hypotheses were stated for use in answering the questions found in the statement of the problem; the terms used in the study were defined; the delimitations of the experiment were listed; and the significance of the study was explained.

Chapter II will review the literature relative to this study and will show its importance to the rest of the study.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The literature of this chapter is presented under the headings of Structured Writing, Original Writing, and Reading and Writing Skills. It was impossible to find studies which were exact replicas of the present study because Structured Writing Experiences were used to see if they would increase the development of vocabulary and comprehension. The researcher did find studies which could support the methods of instruction used, the materials covered, and the skills learned.

Structure is the key to language whether it be reading, writing, or speaking (Warfel and Lloyd, 1957). Students should understand the basic structure of the subject so there could be a transfer of principles and attitudes (Bruner, 1960). When Barnes' (1956) students concentrated on learning to write paragraphs, they improved in arranging ideas logically, they became aware of the importance of good supporting details, of casting aside generalities, and of dealing with concrete images. In the review of the literature Mills (1967), Pinkham (1968), Westendorf (1967), Reed (1966), Ferry (1968), and Kitzhaber (1963) focus on some points about structured methods. Ferry's and Reed's studies approximate the present study more closely than any others did.

Other authorities believe that Original Writing which reflects a student's personal growth instead of rhetorical or linguistic

instruction is the best way to learn how to write (Judy, 1970; Holt, 1964; Kohl, 1967). It is especially pertinent to the culturally different student (Conant, 1961; Passow, 1963; Riessman, 1962). From the literature, some form of original writing was emphasized by Mills (1967), Ferry (1968), and Pinkham (1968).

Without adequate skills, it is difficult to progress rapidly in school. Robinson (1961) stated that skills should be taught in clusters of small units, such as the "outlining clusters," and that paragraphs should be well-structured with key sentences usually at the beginning or ending of the paragraph. Four methods of developing paragraphs including giving reasons, giving details, giving examples, and comparing and contrasting were suggested as valuable, not only for paragraphs, but also for longer compositions (Meade, Haugh, and Sonke, 1961). One of the main champions of the principle that reading is thinking, Betts (1960), suggested that comprehension is improved by understanding the structure and organization of language. According to a teacher survey, comprehension was the most important reading skill (Braum and Roehm, 1964). However, Hayakawa (1949), Burrows (1952), and Wolfe (1961) agreed that the selection and arrangement of words powerfully, clearly, and correctly used tremendously influences a reader. The ability to make use of picturesque phrases, figures of speech, and sensory appeal was a specific objective mentioned (Alberta Teachers Association, 1959; Smith, Paxton, and Manserve, 1963; Dawson and others, 1963). In the literature Groesbeck (1961), Ellis (1967), Mills (1967), Pinkham (1968), Reed (1966), Westendorf (1967), and Ferry (1968) accentuate skills which can be learned.

Structured Writing

Researchers vary in their opinions as to the best method for teaching good composition writing. Literary models were used in teaching written composition to students in a study by Mills (1967). She also studied the relationship between written composition and age, sex, socio-economic status, years in present school, intelligence, reading, arithmetic, language, and the amount of free reading and writing with written composition by high, middle, and low socio-economic levels. There were forty-five students in the experimental group and seventy-seven in the control group from four fifth-grade classrooms in Athens, Georgia. Twice a week for twenty-four weeks the experimental group, during one-hour periods, was taught written composition. Models in specifically selected children's literature were used as a basis for the lessons. Weekly records were kept by all of the children of the amount of their voluntary reading and writing. Besides the standardized tests which were used, both experimental and control groups had pre-test and post-test Sequential Tests of Educational Progress (STEP) Writing Tests, Forms 4A and 4B, as well as pre-test and post-test Writing Samples. Based on STEP Writing Test as the measure of written composition, no significant difference was found after the treatment; but based on Writing Sample as the measure of written composition, a difference at the .001 level of significance was found. However, these results were not conclusive so more research is needed. Significant relationships with written composition were found in all of the above stated variables except sex, age, and years in present school. The small numbers of the low socio-economic status made the study of such groups worthless. In free reading with written composition,

significant differences were found with the STEP Writing Test and the Writing Sample in the high socio-economic group. A significant relationship was shown with the free writing of stories, poems, and total writing with the Writing Sample for the middle socio-economic group.

To determine the effect on the written expression of fifth-grade students of a series of lessons which emphasized the characteristics of good writing as they were seen in selected works from the area of children's literature, Pinkham (1968) surveyed the approaches to the teaching of written expression in four schools. Aims had to be determined, literature selections were obtained to illustrate these aims, a lesson pattern was developed, and a series of lessons was made to carry out the aims. There were 180 subjects who were divided among four schools with one experimental and one control class in each school. Two of the schools were in urban districts; two of them were in suburban districts.

In Pinkham's study the experimental group was administered the series of lessons and the control group had the same amount of time for hearing literature and for writing under less structured circumstances. When the fourteen weekly lessons were completed, alternate forms of the Sequential Tests of Education Progress (STEP) Writing Test and the STEP Essay Test were given in order to measure the gains made. In the areas measured by the STEP Writing Test, significant differences were found in favor of all experimental groups. The STEP Essay Test showed a significant difference in favor of the experimental groups of the urban subgroup.

Rather than using literary models as guides, Westendorf (1967) used a seven-point rating scale and evaluated the students' writing.

She conducted her study in twelve fourth grades of a middle-class suburban community. This study was developed around an in-service program for teachers, concerning information writing. The in-service program continued through an entire school year. Reports, written in September and May by fifty-seven randomly selected students, were examined by three judges who used a seven-point rating scale. The judges were in agreement in their evaluation on 70-75 per cent of the reports.

In the opinion of Westendorf and the teachers engaged in the study, the greatest effect of the in-service program on students' writing was in organization. Most of the September reports gave evidence of the students' lack of structure in the flow of their ideas about their topics. May reports were different, however. Many reports showed the use of a single sub-topic for each paragraph. Although the students were good at developing individual paragraphs, they were not good about using transitional expressions between paragraphs. The students' opening sentences introduced the report themes, but the concluding sentences were poor. There seemed to be a corollary to vocabulary growth and the need for communicating more complex ideas through increased maturity in composition.

The following year a planned program of personal writing for seeing the difference this treatment would make upon word meaning, paragraph meaning, spelling, language, writing, and attitudes toward reading was the basis for Ferry's (1968) study. He used fourth- and fifth-grade students from one school in Decatur, Illinois. The groups were assigned randomly as control or experimental with one experimental and one control group being composed of fourth-grade students and one

experimental and one control group made up of fifth-grade students. The experimenter taught all four classes using his own planned program of personal writing with the experimental groups and the plans in the language textbooks for the control groups.

The language arts subtests of the Stanford Achievement Test, Forms Y and X and W and Y, were pre- and post-test measures in Ferry's study. Also used were the Sequential Tests of Educational Progress (STEP) Essay Test, Forms 4A and 4B, and a reading aptitude test which was adapted so it could be used with intermediate grade students. When considering the data from the Stanford Achievement Test Subtests, both grade levels showed a significant difference in the language skills of usage, punctuation, capitalization, and dictionary use. Significant differences were also found in understanding word meaning for the fifth-grade students and in spelling for the fourth-grade students. Both fourth- and fifth-grade students had a significant difference in writing essay type compositions as judged by the STEP Essay Test. There was no significant difference on either grade level as far as the adapted version of the Attitude Toward Reading Test was concerned.

If there was no significant difference in the attitude of students toward reading using personal writing, had there been any change in attitude toward reading when a more structured program for writing was followed? Reed (1966) undertook an investigation to determine the relative effect of the study of syntax and paragraph structure on the reading comprehension of monolingual and bilingual students in the seventh grade. The subjects were 167 students in eight intact classes in Track II English curriculum in West Chicago, Indiana. Four teachers had two classes each which were assigned randomly to the classification

of experimental or control. There were eighty-four students in the experimental group and eighty-three students in the control group. Thirty reading lessons, which were prorated in regular English classes for fifteen weeks, were given to the experimental group. No definite program of reading instruction was given to the control group. The researcher devised study sheets which emphasized syntactical units in sentences and/or paragraph structure as an aid to literal comprehension. Topics of interest in the Indiana locality as well as textbook material were used in the lesson content. The Gates Peardon Practice Exercises in Reading and library guidance were used to provide extended practice in reading.

The achievement of the subjects in Reed's study was measured by the "Paragraph Comprehension" subtest of the Nelson Reading Test, Grades 3-9. Form A was given in February; Form B was administered in May. After analyzing the data from these tests, it was learned that the experimental group was superior to the control group in gain score on the Paragraph Comprehension Test at the .01 level. This same finding was discovered between the boys of the two groups at the .05 level, between the girls of the two groups at the .01 level, and between the bilingual students in both groups at the .01 level. No significant difference was found between monolingual students in the experimental group and monolingual students in the control group. When considering the experimental group only, the bilingual students were superior to the monolingual students at the .01 level in gain score in reading comprehension, and there was no difference between boys and girls. This study's greatest contribution appears to be in the methodology for teaching bilingual students in junior high school.

Kitzhaber (1963) used college students in his study concerning composition writing; however, the findings are applicable at other levels. This study is better known as the Dartmouth Study. A random sample of 110 students in English 1 and 55 students from English 2 was taken. These students were equally proportioned among the teachers of these two courses. Three papers from each student were selected after they had been marked, graded, and revised. The second, fourth, and seventh papers were used from English 1. In English 2 where fewer papers were written the second and the last papers were selected and one from near the middle of the course. These 495 papers contained about 380,000 words. These papers were analyzed and teacher-marked errors listed under eight headings. These types of errors were given code numbers so they could be recorded by an IBM machine.

A questionnaire went to all teachers of undergraduate courses at Dartmouth to see what their attitudes were toward written work in their courses. Between 20-25 per cent of the teachers did not require written papers in their courses; about 50 per cent required from one to three papers. An analysis of the writing of the students suggested that when standards were relaxed or when students felt they did not need to put forth the effort to write well, they indeed did not write well. A writing clinic which was available for self-referrals and teacher-referrals was found to be unnecessary. Supervised practice in regular courses proved to be more important than any other factor in keeping standards high.

Original Writing

Original Writing was given a place of secondary importance in two

of the studies. Pinkham (1968) allowed his control group of fifth-grade students who heard selected portions of children's literature some time to do original writing. All of Mills' (1967) subjects had time for free writing and kept records on the amount of their voluntary writing. Mills' middle socio-economic group had a significant relationship shown with the free writing of stories, poems, and total writing with the Writing Sample.

Reading and Writing Skills

Various reading and writing skills were developed during the course of the studies reviewed in this chapter. Pinkham (1968) cited such skills as organization, conventions, critical thinking, effectiveness, and appropriateness as measured by the STEP Writing Test, and quality of thought and style as measured by the STEP Essay Test. The first group skills displayed significant differences in favor of all experimental groups who had been taught the characteristics of good writing through the use of literary models. The second pair of skills showed a significant difference among the experimental groups of the urban subgroup.

Westendorf (1967) had judges evaluate the student reports from his study in four categories: quality of ideas, organization and development of ideas, maturity of language, and mechanics. Organization in writing was affected the most as a result of her in-service program for teachers. The students' ideas did not flow smoothly, students were not good about using transitional expressions between sentences, and their "clincher" sentences were not good; but the students did stay with one topic per paragraph, they developed the

individual paragraphs well, and they had good introductory sentences. As the students became more mature in their writing, they did a better job and showed some increase in vocabulary.

Both fourth- and fifth-grade students showed in Ferry's (1968) study a significant difference in capitalization, dictionary use, language skills of usage, punctuation, and in writing essay type compositions. Fifth-grade students displayed significant differences in understanding word meaning as did the fourth-grade students in spelling. Neither group developed any significant difference in their attitude toward reading.

Teacher-marked errors from Kitzhaber's (1963) study were listed under the following eight types: focus and structure, material, paragraphs, sentences, words, grammar, punctuation and mechanics, and misspelling. An analysis of the students' writing gave evidence that supervised practice in the regular class was more important to keeping writing standards high than any other factor.

Reed (1966) learned that reading comprehension showed significant gains in favor of the experimental group on the "Paragraph Comprehension Test." Reading comprehension gains were also seen in favor of the experimental groups between the boys of the two groups at the .05 level, between the girls of the two groups at the .01 level, and between the bilingual students in both groups at the .01 level. The bilingual students were superior to the monolingual students at the .01 level in gain score in reading comprehension when only the experimental group was considered.

A study in the transfer of the comprehension of figurative language by elementary students was made by Groesbeck (1961). She used a

third-, fourth-, and fifth-grade class from each of two public schools. After ten twenty-minute lessons where the students learned to interpret figurative language, the experimental group scored significantly higher on the post-test than the control group. No significant differences in scores were found between the sexes. A correlation from .61 to .65 ranged between knowledge of figurative language and other variables. The control groups were more consistent on correlations between pre-experimental tests and figurative language than the experimental groups. Boys scored higher than girls in inter-correlations among pre-experimental variables.

Concerning the textbook analysis of Groesbeck's study, metaphors, similes, onomatopoeia, personification, expletives, and antithesis were found most frequently. Colloquialism, slang, and jargon were the forms of many figurative terms. It was recommended that children in the upper elementary grades should have definite training in interpreting figures of speech and that teachers should be sure students understand all figures of speech which they encounter. The understanding was acquired through the listening and reading processes.

Ellis (1967) conducted a study to determine to what extent the currently taught methods of paragraph development were used in contemporary expository writing. First, composition textbooks which had been published since 1960 were checked to determine which methods of paragraph development were to be sought. Then one hundred paragraph samples were taken from each of these three sources: letters to the editor of the Richmond Times-Dispatch, a morning newspaper; articles from the Saturday Review which was a quality magazine read by the general public; and articles from the professional journal, the English

Journal. Next, each of the three hundred paragraphs was analyzed to determine its dominant method of development. The analysis of all three hundred paragraphs produced these findings: (1) Eight of the textbook methods of paragraph development were used--twenty-four per cent were examples, twenty-two per cent were details, eight per cent were reasons, six per cent were chronology, one per cent each were contrast, definition, repetition, and cause-effect; (2) Comparison, one of the textbook methods of paragraph development, was not used; (3) Thirty-five per cent of the paragraphs were not developed by textbook methods. Thus it was decided that two paragraph development methods cited in composition textbooks, details and examples, were used frequently in modern expository writing, while two other textbook methods, reason and chronology, were used occasionally. Rarely were other methods of development given in these textbooks used. Many paragraphs which were not developed by any of these methods did use the new additional comment method.

Summary

The studies which were reviewed in this chapter provided encouragement for the present study even though they were not related closely enough to support the study completely. Appendix D provides an outline of the materials contained in the Structured Writing Experiences. After scanning Appendix D, the reader will see more clearly the importance of the work done by Westendorf (1967), Groesbeck (1961), Ellis (1967), and Mills (1967) concerning the materials used in the study. The organization of the method of instruction using Structured Writing Experiences with opportunities for Original Writing was supported by

Pinkham (1968), Mills (1967), Ferry (1968), Kitzhaber (1963), Westendorf (1967), Ferry (1968), Kitzhaber (1963), Reed (1966), Groesbeck (1961), and Ellis (1967).

Chapter III will describe the selection of the sample, the test instruments involved and the procedures for using them, and the statistical methods used to analyze the findings.

CHAPTER III

DESIGN OF THE STUDY

This study compared the reading achievement in vocabulary and comprehension at the sixth-grade level in language arts classes where the method of instruction was changed mid-way through the study. In one method structured writing experiences developed by the researcher were given to one-half of the students. These experiences were composed of taped lessons by the researcher, overhead transparencies, dittoed handouts, and charts, followed by opportunities to do original writing. The second method was the traditional classroom work based upon regular language textbooks, which was given to the other half of the students. Eight weeks were spent during the first session after which the methods were reversed with the groups, and another eight weeks were spent during the second session. This reversal was made to help eliminate the effect of historical factors. Intelligence as related to the achievement of the students was of concern.

Description of the Population

The four classes of students which participated in the study consisted of all but one class of sixth graders from Longfellow and Goetz schools in Muskogee, Oklahoma. Intact groups were used. The Assistant Superintendent and the Language Arts Supervisor made the selection of the schools. This selection was based on their being

representative of the school population. The four classes were randomly assigned to the method of instruction which they would receive first. Table I indicates this assignment.

TABLE I
RANDOM DISTRIBUTION OF GROUPS TO
METHOD OF INSTRUCTION

Teacher	Experimental First	Control First
I	A	C
II	B	
III		D

Teacher I had two classes (A and C) participating in the study; one was experimental first, and the other was control first. At the second school there were two teachers involved since they each taught language arts to a section of sixth graders. Teacher II taught class B which was experimental first, and Teacher III taught class D which was control first. The classes were randomly assigned as experimental or control by the researcher. This was done to help account for any differences in the order of the presentation or any differences between the experimental and the control groups. Both schools were departmentalized; thus a teacher might teach on more than one grade level as well as in more than one subject area.

Table II indicates the manner in which students were distributed. A total of 135 students were in the four classes, which varied from 26 to 36 in size. At the end of the study, 20 students had either moved or had missed one or more of the tests. This left a total of 115. However, since one of the classes was down to 22 students, it was necessary to randomly eliminate students from the other three groups to make them of equal size and to facilitate the analysis of the data. This random elimination was done by using Popham's (1967) Table of Random Numbers.

TABLE II
NUMBER OF STUDENTS INVOLVED IN
TESTING AND/OR STUDY

Group	Number of Students		
	At Pre-Test	At Post-Test	Used in Study
A	26	27	22
B	36	36	22
C	28	28	22
D	35	38	22

When the total study sample is considered, the intelligence quotients are needed. Although the original total sample data are not needed in this analysis, they are included in order to make a

comparison at a later time. Table III shows the breakdown for the original sample: 9.6 per cent were in the superior and very superior range; 16.8 per cent were in the bright range; 49.6 per cent were in the average range; 16.8 per cent were in the dull range; and 7.2 per cent were in the mentally retarded range.

The distribution of the intelligence quotients for the study sample of 88 is seen in Table IV: 7.2 per cent were in the superior and very superior range; 17 per cent were in the bright range; 51.1 per cent were in the average range; 13.6 per cent were in the dull range; and 7.9 per cent were in the mentally retarded range.

Table V shows the approximate per cent in each Intelligence Quotient Range for the norm group, the total sample, and the study sample. When considering intelligence quotients of 109 and under, there is greater agreement as to the percentage registered in this range: the norm has 73.5 per cent; the total sample has 73.9 per cent; and the study sample has 72.6 per cent. There is less agreement when considering intelligence quotients of 90 and above: the norm has 73.5 per cent; the total sample has 76.8 per cent; and the study sample has 78.3 per cent.

By overlaying the three groups of percentages a better comparison of the three groups may be made. It, of course, must be remembered that the norm is based upon 9,309 cases; the original sample is based upon 125 cases; and the final sample is based upon 88 cases. The study sample deviates in the average and high ranges. It can be seen, however, that the original sample more closely follows the norm curve (see Figure 1). How this would have appeared and compared if the original

TABLE III
TOTAL GROUPING OF INTELLIGENCE
QUOTIENTS INTO RANGES

Classes	Number of Cases	Intelligence Quotient Ranges							
		140 +	130- 139	120- 129	110- 119	90- 109	80- 89	70- 79	60- 69
A	26			1	4	15	5	1	
C	28		1	2	5	18	1	1	
B	36		1	2	5	17	10		1
D	35	1	2	2	7	12	5	4	2

TABLE IV
SAMPLE GROUPING OF INTELLIGENCE
QUOTIENTS INTO RANGES

Classes	Number of Cases	Intelligence Quotient Ranges							
		140 +	130- 139	120- 129	110- 119	90- 109	80- 89	70- 79	60- 69
A	22				4	14	3	1	
C	22			1	5	15		1	
B	22		1	2	4	9	6		
D	22	1	2	2	2	7	3	4	1

TABLE V.

APPROXIMATE PER CENT IN EACH
INTELLIGENCE QUOTIENT RANGE

I.Q. Range	Norm Group	Total Sample				Total Average	Final Sample				Total Average	
		A	C	B	D		A	C	B	D		
140-+	0.6				2.9	.7					4.5	1.1
130-139	2.4		3.6	2.8	5.7	3.0			4.5	9.1	3.4	
120-129	7.5	3.8	7.1	5.5	5.7	5.5		4.5	9.1	9.1	5.7	
110-119	16.0	15.3	17.8	13.9	20.0	16.7	18.2	22.7	18.2	9.1	17.0	
90-109	47.0	57.7	64.3	47.2	34.2	50.9	63.6	68.2	40.9	31.8	51.1	
80-89	16.0	19.2	3.6	27.8	14.3	16.2	13.6		27.3	13.6	13.6	
70-79	7.5	3.8	3.6		11.4	4.7	4.5	4.5		18.2	6.8	
60-69	2.4			2.8	5.7	2.1				4.5	1.1	
Below 60	0.6					0.0					0.0	

sample had been randomly selected thus eliminating the need for the final sample, is not known.

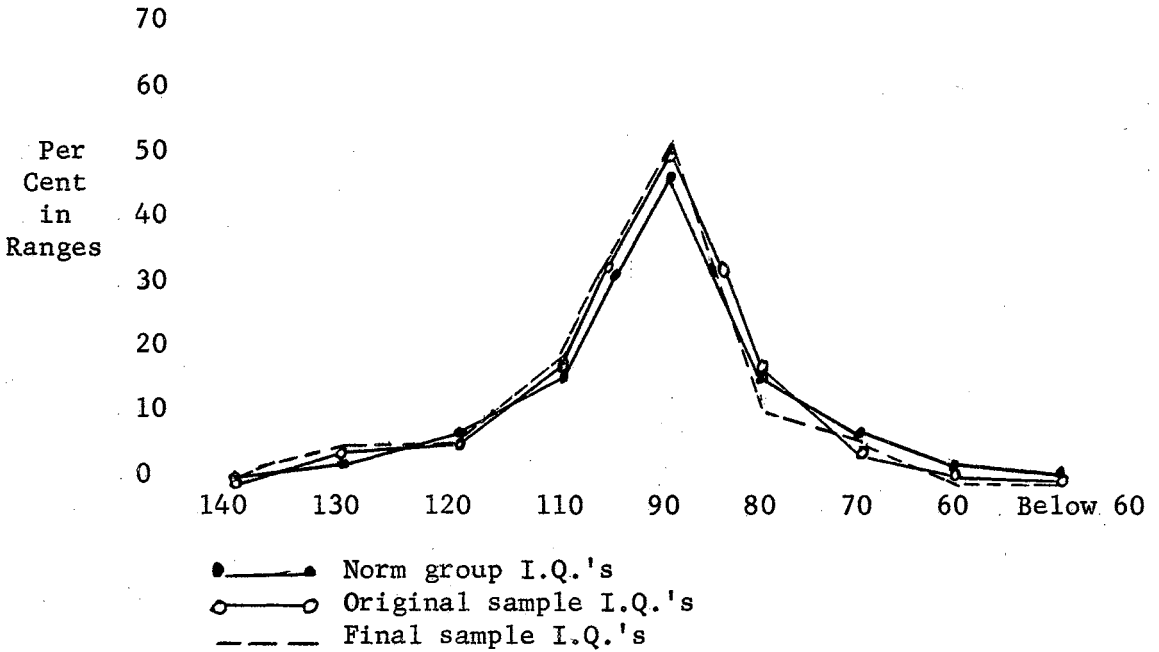


Figure 1. Overlay of the I.Q.'s of the Three Groups

Structured Writing Experiences

Structured Writing Experiences consisted of lessons prepared by the researcher. These lessons were formulated to cover the following skills: (1) outlining procedures; (2) paragraph writing, transitional expressions, topic sentences, "clincher sentences," introductory paragraphs, and summary paragraphs; (3) paragraphs of description; (4) paragraphs using comparisons, contrasts, or both; (5) paragraphs using examples and paragraphs giving reasons; (6) figures of speech;

(7) forms of verse; and (8) short story writing. Five twenty-minute periods were spent teaching each of the eight categories. This was a cumulative situation since previously learned mechanics were reviewed as they were seen in later work. The models used were written about topics of interest to these sixth graders and included some of their own writings.

With each phase, time was given for original writing to be done which would put to use some of the points learned, and which would give expression to some of the feelings experienced by these students. As could be expected, most students did not have time to "polish" their efforts, but the percentage who tried to do some writing was most encouraging. Examples which will be given of the work done in the classes will not necessarily be the best ones since representatives from each phase of the work will be selected at random.

The Traditional Program

The traditional program consisted of using the language textbook which was provided by the school system. The students read the material either silently or orally and did the exercises assigned. They wrote a composition when it was requested. The amount of discussion on a topic was controlled by each teacher. Supplementary language textbooks were available in order to provide a wider variety of material.

Measuring Instruments

The Kuhlmann-Anderson (1964) Intelligence Test, Seventh Edition, Form EF, was given to all students in the study by the researcher in one of their classrooms. Because these students were involved in

departmentalized teaching, they were accustomed to working with different teachers and in different rooms. Each class was tested apart from any other class. All were tested within a twenty-four hour period, even those who were absent on the test day. The tests were machine-scored to insure accuracy of grading, and then were spot-checked by the researcher. This test requires the student taking it to select the correct answer from a group of multiple choice answers on many of its eight subtests. It yields a verbal score, a quantitative score, and a total score.

Anderson (1964) states that the validity of the Sixth Edition tests was built into the Seventh Edition tests. It is explained that the contents of the trial form of the Seventh Edition D and EF booklets were subjected to item analyses, using the pupils' MA's on the Sixth Edition test as the criterion. Each item was rejected or retained on the basis of the extent to which it discriminated between the top and bottom 27 per cents of the item-analysis group. The median correlations between the items and the criterion ranged from .33 to .57 for the final forms of the separate tests. The correlations for the individual items ranged from .26 to .84, with 96.5 per cent of them between .30 and .84.

Further evidence of the construct and concurrent validity of the test is found in the correlations of the scores and I.Q.'s with those of other recognized tests of mental ability and academic achievement and with academic grades. These correlations as well as the lower limits of their 99 per cent confidence bands compare favorably with correlations typically reported for tests of these types and for academic grades (Anderson, 1964).

Evidence of the reliability of scores from Booklets D and EF is given by three sets of data. One set of data consists of the correlations between I.Q.'s which were secured on these two booklets by pupils in the normal sample who took both booklets. To the extent that these booklets are measuring the same mental capabilities and have nearly the same reliabilities, these reliabilities appear to be in the range of .83 to .89 (Anderson, 1964).

The directions to the teacher and the directions to the students were easily understood and accurately given. A time limit of 30 minutes for the eight sections permitted the faster readers to complete all items; the slower readers were able to complete part of the items.

The Gates-MacGinities Reading Tests, Form 1M, 2M, and 3M were used. Form 1M was given to all students the first of November, 1969. Form 2M and Form 3M were each given at the mid-test with one-half of the students taking Form 2M and one-half of them taking Form 3M. At the end of the study, the students took the opposite form of the test that they had taken mid-way. All tests were machine-scored and then spot-checked by the researcher.

This reading test is composed of three sections: (1) Speed and Accuracy, (2) Vocabulary, and (3) Comprehension. Only parts 2 and 3 were used in this study. The Vocabulary Test has 50 items, each with a test word which is followed by five other words, one of which is similar in meaning to the test word. The words go from the more common easy words to the less common, more difficult words. The Comprehension Test has 21 passages with 52 blank spaces. The student chooses which one of the five completions go with the meaning of the entire selection. The selections get progressively more difficult. The directions were

both easy to read and easy to follow. Time on the Vocabulary Test was 15 minutes and on the Comprehension Test it was 25 minutes.

When Gates and MacGinitie built the final forms of the test, it was seen that both the average scores and the variabilities of the alternate forms were very similar. The equivalence of forms was also confirmed by a more detailed analysis that showed a close similarity of standard scores at each raw score level for which norms are given. The norm tables in the Technical Manual therefore show norms representing averages over the alternate forms (Gates and MacGinitie, 1965). Gates and MacGinitie (1965) also state that the alternate-form reliability coefficients allow for differences in a student's daily performance and differences in the forms' content. It is a better estimate of reliability than the popular split-half procedure, but the reliabilities for the second are usually higher.

Sequence of Activities

1. Permission was obtained to conduct the study in Muskogee, Oklahoma, after a conference with the Assistant Superintendent of Schools and the Language Arts Supervisor. The researcher was introduced to the principals and teachers at each elementary school to be involved in the study. A conference was held with each teacher.

2. Although it was planned that the models would be written by the researcher to correlate with the themes of the current social studies units, it was suggested by the teachers that since their schools were departmentalized it might be better to have the models written about topics of high interest to their sixth-grade students. This idea was incorporated into the models and other materials. The

total script was tape recorded by the researcher. Overhead transparencies were made, charts were prepared, and dittoed handout sheets were made. When the students were in control groups, they had the regular course of study planned for the sixth-grade classes.

3. The four classes engaged in the study were randomly assigned to the method of instruction which would be used with them first. This was done by the researcher. Each class was to be involved in five lessons each week of 15 to 20 minutes' duration.

4. The Kuhlmann-Anderson Intelligence Tests and the pre-tests, mid-tests, and post-tests of the Gates-MacGinitie Reading Tests were given by the researcher to each student participating in the study. The day following each test, a make-up test was given for those absent the preceding day. All tests were machine-scored by the Bureau of Tests and Measurements at Oklahoma State University. These were spot-checked by the researcher.

5. Materials were taken to the schools each Friday which would be used in the next week's work and the students' original writings were picked up. Students were to mark "yes" or "no" at the tops of their original writings to show whether they wanted to share their creations with their classmates. The researcher typed those which were marked "yes" so they would be available for others to read.

6. At the end of each session, the students who had been working under the Structured Writing Method were given an opportunity to evaluate what they had been doing.

7. The week following the first session, the mid-test of the Gates-MacGinitie Reading Test, Survey D, Forms 2M and 3M were given to the students by the researcher. One-half of the students received one

form and one-half received the other form. At the end of the second session, the students were given the opposite form. The data were compiled and an analysis was made with the assistance of a graduate statistician.

Statistical Analysis of Data

Since intact classes were used and thus there could be no random assignment of students to classes, a repeated measures analysis of variance was calculated using the raw scores for each subject from the mid-test and post-test of the Gates-MacGinitie Reading Test, Forms 2M and 3M, parts 2 and 3. The repeated measures design is a variation of the completely randomized design. Instead of having several groups of subjects with each group having a different treatment, all of the subjects had each treatment. The analysis of the findings would be based on the subjects' performance upon completion of the treatment. The major advantages of this design are that fewer subjects are required and that increased statistical power is gained. This is because the random variability of a single subject from one testing period to the next is usually much less than the variability when different subjects are involved. With the help of a statistician the six hypotheses were tested using the following formulae for analysis of variance from Runyon and Haber (1967):

1. Total sum of squares:

$$\sum x^2 = \sum X^2 - (\sum X)^2 / N$$

2. Subjects sum of squares:

$$\sum x_s^2 = \sum x_1^2 + \sum x_2^2$$

3. Between groups sum of squares:

$$\sum x_B^2 = \frac{(\sum x_i)^2}{n_i} - \frac{(\sum x_{tot})^2}{N}$$

4. Error sum of squares:

$$\sum x_E^2 = \sum x^2 - (\sum x_B^2 + \sum x_S^2)$$

5. F equals

$$\frac{\text{mean square between groups}}{\text{mean square error groups}}$$

Statistical significance of the findings was determined by using the F table (Popham, 1967).

To find the total sum of squares, sum the total subjects squared and subtract the correction term.

For determining the subjects sum of squares, the summed total of subjects squared for the mid-test is added to the summed total of subjects squared for the post-test, and this is divided by the number of tests. The correction term is subtracted next. The result is the subject sum of squares.

The between groups sum of squares is achieved by adding the summed scored of everyone under treatment one squared to the summed scores of everyone under treatment two squared and this total is divided by the number of subjects involved. The correction term is then subtracted before you arrive at the between groups sum of squares.

The error sum of squares is calculated by adding the between groups sum of squares to the subjects sum of squares and then by subtracting that total from the total sum of squares.

The final formula is self-explanatory.

Chapter IV will contain a statistical analysis of the test data and will indicate the degree to which the hypotheses are found to be significant or not to be significant within recognized limitations.

CHAPTER IV

ANALYSIS OF DATA

This chapter presents and discusses the results of the statistical treatment of the data collected in this study to test certain hypotheses. The data were collected in a study conducted with intact, sixth-grade classes in Muskogee, Oklahoma, from October, 1969, to April, 1970. The study sample of 88 students was composed of four groups of 22 students each. The independent organismic variable was the intelligence quotient. The stimulus variable was the mode of instruction. The criterion or response variables were the vocabulary and comprehension raw scores gained from the mid-test and post-test of the Gates-MacGinitie Reading Tests, Forms 2M and 3M, parts 2 and 3.

This chapter will be divided into three sections followed by a chapter summary. The first section of this chapter is concerned with the analysis of the data for the entire study sample. The statistical procedures used will test the first two null hypotheses of this study, that Vocabulary is not increased as a result of the Structured Writing Experiences when considering the total study sample, and that Comprehension is not increased as a result of Structured Writing Experiences when considering the total study sample.

The next section of this chapter presents the analysis of the data for those students whose Intelligence Quotient is above the median of the total sample. Null hypotheses three and four will be tested to see

that Vocabulary is not increased as a result of the Structured Writing Experiences for those students whose Intelligence Quotient is above the median for the total study sample, and if Comprehension is not increased as a result of the Structured Writing Experiences for those students whose Intelligence Quotient is above the median for the total study sample.

The third section of this chapter covers the analysis of the data for those students whose Intelligence Quotient is below the median of the total study sample. These procedures will test null hypotheses five and six to see that Vocabulary is not increased as a result of the Structured Writing Experiences for those students whose Intelligence Quotient is below the median for the total study sample, and if Comprehension is not increased as a result of the Structured Writing Experiences for those students whose Intelligence Quotient is below the median for the total study sample.

These six hypotheses were designed to answer three of the five questions found in the Statement of The Problem. What effects would the structured writing experiences plus frequent opportunities in original writing have on the vocabulary development of students in the sixth grade? Would these experiences tend to increase students' comprehension skills? Would the intelligence quotient level have any influence on the growth in vocabulary and comprehension?

Study Sample

When the study sample is considered, the achievement test scores for the mid-test of the Gates-MacGinitie Reading Test and the post-test of the same Reading Test are needed to test the six hypotheses. Again

let it be noted that one-half of the subjects took Form 2M for the mid-test and Form 3M for the post-test, while the other half of the subjects took Form 3M for the mid-test and Form 2M for the post-test. Appendix A contains the raw scores of these two tests for the study sample.

The hypotheses were tested by a 1 by 2, analysis of variance with a repeated measures design with the same subjects observed under two treatments. The repeated measures design provided a greater control over individual differences than a matched subjects design and therefore permitted a more powerful statistical test of significance to be used. The formulas used may be found in Chapter III. Scores for both the mid-test and the post-test on each subject were used in the analysis of the data. These raw scores may be found in Appendix A, B, and C. The analysis was run six times to produce the results on vocabulary and comprehension for the total group, for those whose intelligence quotient was above the median for the total group, and for those whose intelligence quotient was below the median for the total group.

When testing Hypothesis 1, there was significance at the .025 level of confidence since the F value was greater than the 3.288 needed at the .025 level, thus the null hypothesis one is to be rejected. There was significant increase in vocabulary for the total sample. Table VI gives the data culminating in the F value. When comparing this table to Tables XIV and XVI it was difficult to see how there was significance, but there was. Of course, the larger degree of freedom and the smaller sum of squares of error may be the answer since they would make this a more powerful test.

TABLE VI
 DATA ANALYSIS YIELDING F VALUE FOR
 VOCABULARY OF TOTAL STUDY SAMPLE

Source	SS	df	MS	F	P
Total	13,969.795	175			
Subjects	13,714.795	87			
Treatments	15.364	1	15.364	5.578	<.025
Error	239.636	87	2.754		

No significance was found when testing Hypothesis 2; therefore, the null hypothesis was accepted. Comprehension was not increased for the total sample. Table VII gives the data which culminates the analysis of variance by giving the F value which was smaller than the 3.288 needed.

Higher Intelligence Quotient Portion of Study Sample

The repeated measures analysis of variance was again used, this time testing null hypotheses three and four which pertain to the students with intelligence quotients above the median of the study sample. No significance was found; therefore, the null hypothesis was accepted. Table VIII gives the data culminating in finding the F value.

No significance was found, when calculating the data for Hypothesis 4; therefore, the null hypothesis was accepted. Comprehension was not increased for students with intelligence quotients above the median for the study sample. Table IX indicates the data which culminated in the F value shown.

TABLE VII

DATA ANALYSIS YIELDING F VALUE FOR COMPREHENSION
OF TOTAL STUDY SAMPLE

Source	SS	df	MS	F	P
Total	27,273.994	175			
Subjects	20,843.994	87			
Treatments	0.142	1	0.142	0.002	N.S.
Error	6,429.858	87	73.906		

TABLE VIII

DATA ANALYSIS YIELDING F VALUE FOR VOCABULARY OF STUDENTS
WITH I.Q.'S ABOVE MEDIAN FOR STUDY GROUP

Source	SS	df	MS	F	P
Total	2,186.364	87			
Subjects	136,355.636	43			
Treatments	0.045	1	0.045	0.005	N.S.
Error	400.955	43	9.325		

TABLE IX

DATA ANALYSIS YIELDING F VALUE FOR COMPREHENSION OF
STUDENTS WITH I.Q.'S ABOVE MEDIAN FOR STUDY GROUP

Source	SS	df	MS	F	P
Total	5,471.273	87			
Subjects	2,448.273	43			
Treatments	55.682	1	55.682	.081	N.S.
Error	2,967.318	43	69.007		

Lower Intelligence Quotient Portion
of Study Sample

While testing null hypotheses five and six which consider students with intelligence quotients below the median of the study sample, no significance was found when the repeated measures analysis of variance was run. Therefore, the null hypothesis was accepted. Vocabulary was not increased for those with intelligence quotients below the median for the study sample. Table X gives the data culminating in the F value.

Null hypothesis six had to be accepted because no significance was found when the repeated measures analysis of variance was run. Thus comprehension was not increased for students whose intelligence quotient was below the median for the total group. Table XI gives the data which culminates in the F value.

TABLE X

DATA ANALYSIS YIELDING F VALUE FOR VOCABULARY OF STUDENTS
WITH I.Q.'S BELOW MEDIAN FOR STUDY GROUP

Source	SS	df	MS	F	P
Total	7,282.500	87			
Subjects	6,700.500	43			
Treatments	28.409	1	28.409	2.207	N.S.
Error	553.591	43	12.874		

TABLE XI

DATA ANALYSIS YIELDING F VALUE FOR COMPREHENSION OF
STUDENTS WITH I.Q.'S BELOW MEDIAN FOR STUDY GROUP

Source	SS	df	MS	F	P
Total	13,872.920	87			
Subjects	12,645.580	43			
Treatments	15.557	1	15.557	0.552	N.S.
Error	1,211.784	43	28.181		

Summary

This chapter has presented the statistical results from the treatment of the data. A repeated measures analysis of variance was used to test the possibility that the Experimental and Control groups might show significant difference in the development of vocabulary and comprehension. The repeated measures analysis of variance was also used to delve into the differences between those students whose intelligence quotients were above the median of the study sample and those students whose intelligence quotients were below the median of the study sample.

A figure was constructed showing the percentage of I.Q.'s in each I.Q. range of the Kuhlmann-Anderson Intelligence Test for the norm group, as stated in the Technical Manual of the Gates-MacGinitie Reading Test, the original sample, the study sample, and an overlay comparing the three.

Eleven tables recorded the statistical data from which the analysis could be made to see whether Structured Writing Experiences produced any increase in the development of vocabulary and comprehension.

Further discussion of these analyses will be found in Chapter V, as well as the conclusions and recommendations from this study.

CHAPTER V

SUMMARY

Overview

The purpose of this study was to see whether structured writing experiences with opportunities for original writing would be effective in increasing the development of vocabulary and comprehension for sixth-grade students. The teaching methods used were identified by the terms structured writing experiences (experimental) and traditional classwork (control). The structured approach was used as the experimental method because many educators from different fields had recommended it (Eastland, 1966; Thorndike, 1917).

The structured writing experiences were combined with opportunities for original writing for instruction and practice in outlining procedures, how to write the parts of a paragraph, five types of paragraphs which could be written, how to write four kinds of figures of speech, three types of verse which could be written and enjoyed, as well as the intricacies involved in rhythm and rhyme, and the approaches and plans for writing short stories.

The sixth-grade students involved in the study were from four intact classes in two elementary schools, Longfellow and Goetz, in Muskogee, Oklahoma. These were assigned to the method of instruction which they would receive first. After an eight-weeks session, the methods were rotated in the classes. Although it was not possible to

state that these schools when combined represented a normal distribution intellectually which would allow generalizing, Figure 1 gives an indication that this may be true.

The three teachers who were involved in the study agreed to participate in the experiment. All of them were qualified teachers, although one was not as experienced as the other two. When their groups were control groups, the teachers followed their traditional course of study for language arts in the sixth grade. When their groups were experimental, they were to present the materials, which had been provided by the researcher, to their students. They were not to enlarge upon the instruction given by the researcher on the tape recordings. The question they also had was whether the structured writing experiences would be effective or not in helping to develop vocabulary and comprehension for the sixth-grade students.

Four tests were given, two of them before the study began. These were the Kuhlmann-Anderson Intelligence Test, Seventh Edition, Form EF, and the Gates-MacGinitie Reading Test, Survey D, Form 1M. At the end of the first eight-weeks session, Forms 2M and 3M of the Gates-MacGinitie Reading Test, Survey D, were given with each form administered to one-half of the students. At the end of the second eight-weeks' session, the Gates-MacGinitie Reading Test, Survey D, was again administered with students taking the opposite form 2M or 3M from their mid-test. Because of the problem of mobility and absenteeism it was necessary to eliminate randomly some students so that the four groups would be of equal size. This was done according to Pophams (1967) Table of Random Numbers.

The entire period covered the time from October 31, 1969, to April 7, 1970. The lack of a desegregation plan and the unrest of the teachers in this school system during this period may or may not have affected the study.

Findings

The analysis of the data indicated that there was no significant difference between the effects of structured writing experiences upon the development of vocabulary and comprehension except in the area of vocabulary for the total study sample. This was significant at the .025 level of confidence. However, the mean for the experimental group was slightly higher than the control group mean for comprehension when I.Q. was not considered, when I.Q. above the median was considered, and also for vocabulary when I.Q. below the median was considered. The mean for the experimental group was slightly lower than the mean for the control group in vocabulary when I.Q. above the median was considered, and also for comprehension when I.Q. below the median was considered. None of these, however, was significant.

Therefore, the hypothesis that vocabulary is not correlated with the structured writing experiences when considering the total study sample was rejected because there was significant difference at the .025 level of confidence. The other five hypotheses were accepted since there were no significant differences resulting from the analysis of the data.

Conclusions

Vocabulary is increased as a result of Structured Writing

Experiences when considering the total sample. The significance of the increase in vocabulary for the total sample supports the belief of many educators that the vocabulary of children can be improved when using structured writing experiences. Mention might be made again that these students had many opportunities for original writing also when they put to use some of the skills they were learning. Because there was no random assignment of students to the method of instruction, the preceding statement had to contain the word "when." It was not possible to say "because of" or "by" using the structured writing experiences because this could not be proved in this study as it had to be set up.

Vocabulary is not increased as a result of Structured Writing Experiences for those students whose intelligence quotient is above the median for the total sample, or for those students whose intelligence quotient is below the median for the total sample. Comprehension is not increased as a result of Structured Writing Experiences when considering the total sample, for those students whose intelligence quotient is above the median for the total sample, or for those students whose intelligence quotient is below the median for the total sample.

Although no measuring or analyzing was done on the original writings of the students, a large per cent of the students were actively engaged in writing. Evidence of this writing was seen in the number of papers the researcher picked up each Friday, and the number who wanted to share their writings with their classmates. The researcher typed these for them.

The reason the vocabulary for the total study sample showed a significance appears to be because of the wide difference to be found

among the subjects with I.Q.'s below the median for the study sample. Since the sum of squares for error was fairly low on all of the analyses concerned with vocabulary, it also seems indicative of the element of potential that the structured writing experiences might have on vocabulary development over a greater length of time.

Recommendations

The following recommendations are suggested from the related literature, the findings, the conclusions, and the implications of the study.

General Recommendations

1. That language arts teachers help students become aware of structure through the use of model paragraphs (mainly based on local content) as guides for written work.
 2. That the materials of the studies be enlarged so that they cover a full year's work.
 3. That the teachers be instructed in the method so that they may be prepared to answer the questions of the students when they need them answered.
 4. That the materials be written on several grade levels so that all students might be able to read them and be challenged by them.
- While the findings were largely negative, the one significant finding was encouraging and gave impetus to the desire of the researcher to suggest some of the recommendations listed below.

Recommendations for Further Research

1. That the study be reproduced using randomly assigned students from various types of schools, socio-economic levels, intellectual levels, reading ability levels, and grade levels.
2. That a study be made using Structured Writing Experiences, Prescribed Vocabulary Training, and the Traditional Classwork as the methods of instruction.
3. That a study be made using Structured Writing Experiences, Models of Paragraphs from Children's Literature for Developing Comprehension, and the Traditional Classwork as the methods of instruction.

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APPENDIX A

VOCABULARY DATA SHEET

APPENDIX A

VOCABULARY DATA SHEET

Vocabulary Raw Scores (X) for the mid and post-tests for subjects taught by two different instructional methods, and put in columns according to intelligence quotient groups.

Traditional Method		Experimental Method	
Above Median I.Q.'s	Below Median I.Q.'s	Above Median I.Q.'s	Below Median I.Q.'s
38	35	37	36
46	35	44	32
38	29	46	36
48	40	46	43
35	30	44	30
44	41	46	41
32	35	35	42
42	33	40	25
41	32	41	34
40	20	41	19
45	39	43	39
42	37	43	37
46	25	41	28
43	26	43	27
43	45	45	43
42	25	35	31
40	36	36	40
32	15	38	29
46	36	46	36
42	30	37	32

Traditional Method		Experimental Method	
Above Median I.Q.'s	Below Median I.Q.'s	Above Median I.Q.'s	Below Median I.Q.'s
28	34	39	31
44	23	46	14
41	27	36	33
38	24	37	26
39	24	41	20
33	20	28	17
34	37	36	35
34	29	40	31
37	8	34	18
40	32	40	33
46	34	44	38
37	37	32	36
43	24	47	29
36	40	39	36
29	27	28	24
38	28	37	25
44	24	38	26
33	10	36	21
39	8	43	15
42	21	41	16
43	13	43	23
28	37	29	40
38	10	37	10
44	5	33	13

APPENDIX B

COMPREHENSION DATA SHEET

APPENDIX B

COMPREHENSION DATA SHEET

Comprehension Raw Scores (X) for the mid and post-tests for subjects taught by two different instructional methods, and put in columns according to intelligence quotient groups.

Traditional Method		Experimental Method	
Above Median I.Q.'s	Below Median I.Q.'s	Above Median I.Q.'s	Below Median I.Q.'s
45	45	42	41
50	27	45	43
50	16	52	20
50	49	52	47
45	24	46	19
47	46	49	48
19	42	17	44
46	35	50	35
45	42	45	39
45	28	49	22
50	48	47	46
50	41	50	47
50	31	51	33
52	40	51	43
50	52	48	49
46	27	48	14
46	14	47	41
44	10	47	16
52	36	51	15
46	36	46	38

Traditional Method		Experimental Method	
Above Median I.Q.'s	Below Median I.Q.'s	Above Median I.Q.'s	Below Median I.Q.'s
21	42	14	37
46	29	51	28
44	15	46	8
42	25	28	25
48	25	50	20
23	28	29	13
30	36	39	36
42	34	43	36
37	27	44	21
37	45	43	41
46	45	45	47
43	46	42	45
51	19	49	26
42	45	41	41
41	21	33	11
43	29	46	26
48	30	46	29
38	16	43	14
47	19	48	18
47	22	46	22
48	12	36	14
8	48	32	46
46	10	44	8
29	10	26	18

APPENDIX C

ANALYSIS TABLES THROUGH SUM OF SQUARES

TABLE XII

DATA ANALYSIS COMPARING EXPERIMENTAL AND
CONTROL GROUPS ON THE VOCABULARY PART OF
THE GATES-MACGINNIE READING TESTS

	EX	EX ²	X	EdX ²	(X) ²	(EX) ² /N	N
Experimental	3,021	110,369.00	34.330	6,659.443	9,126,441.0	103,709.557	88
Control	2,969	107,465.0	33.739	7,294.989	8,814,961.0	100,170.011	88

SS total = 13,969.795

CT total = 203,864.205

SS subjects = 13,714.795

SS between groups = 15.364

SS error = 239.636

TABLE XIII

DATA ANALYSIS COMPARING EXPERIMENTAL AND CONTROL
GROUPS ON THE COMPREHENSION PART OF THE
GATES-MACGINITIE READING TESTS

	EX	EX ²	\bar{X}	SSX	CT	N
Experimental	3,247	133,663.0	36.898	13,856.080	119,806.920	88
Control	3,242	132,856.0	36.841	13,417.773	119,438.227	88

SS total = 27,273.994

CT total = 239,245.006

SS subjects = 20,843.994

SS between groups = 0.142

SS error = 6,429.858

TABLE XIV

DATA ANALYSIS COMPARING EXPERIMENTAL AND CONTROL GROUPS, WHOSE
I.Q.'S ARE ABOVE THE MEDIAN OF THE STUDY GROUP, ON THE
VOCABULARY PART OF THE GATES-MACGINITIE READING TESTS

	EX	EX ²	\bar{X}	SSX	CT	N
Experimental	1,731	69,159.0	39.341	1,059.886	68,099.114	44
Control	1,733	69,383.0	39.386	1,126.432	68,256.568	44

SS total = 2,186.364

CT total = 136,355.626

SS Subjects = 1,785.364

SS between groups = 0.045

SS error = 400.95

TABLE XV

DATA ANALYSIS COMPARING EXPERIMENTAL AND CONTROL GROUPS, WHOSE I.Q.'S
ARE ABOVE THE MEDIAN OF THE STUDY GROUP, ON THE COMPREHENSION
PART OF THE GATES-MACGINITIE READING TESTS

	EX	EX ²	\bar{X}	SSX	CT	N
Experimental	1,945	87,473.0	44.205	1,495.159	85,977.841	44
Control	1,875	83,821.0	42.614	3,920.432	79,900.568	44

SS total = 5,471.273

CT total = 165,822.727

SS Subjects = 2,448.273

SS between groups = 55.682

SS error = 2,967.318

TABLE XVI

DATA ANALYSIS COMPARING EXPERIMENTAL AND CONTROL GROUPS, WHOSE
I.Q.'S ARE BELOW THE MEDIAN OF THE STUDY GROUP, ON THE
VOCABULARY PART OF THE GATES-MACGINITIE READING TESTS

	EX	EX ²	\bar{X}	SSX	CT	N
Experimental	1,290	41,210.0	29.318	3,389.55	37,820.45	44
Control	1,240	38,810.0	28.182	3,864.55	34,945.45	44

SS total = 7,282.5

CT total = 72,737.50

SS subjects = 6,700.500

SS between groups = 28.409

SS error = 553.591

TABLE XVII

DATA ANALYSIS COMPARING EXPERIMENTAL AND CONTROL GROUPS, WHOSE I.Q.'S
ARE BELOW THE MEDIAN OF THE STUDY GROUPS, ON THE COMPREHENSION
PART OF THE GATES-MACGINITIE READING TESTS

	EX	EX ²	\bar{X}	SSX	CT	N
Experimental	1,330	47,494.00	30.227	7,291.727	4,020.273	44
Control	1,367	49,035.0	31.068	6,564.796	4,247.0	44

SS total = 13,872.920

CT total = 82,656.920

SS subjects = 12,645.580

SS between groups = 15.557

SS error = 1,211.784

APPENDIX D

STRUCTURED WRITING EXERCISES

APPENDIX D

STRUCTURED WRITING EXPERIENCES

- I. Outlining procedures were given five 20-minute periods.
 - A. Articles were read together with the researcher reading orally on the tape and the students reading silently from their hand-out sheets.
 - B. The various parts of outlining articles were illustrated by using overhead transparencies with the taped recording: the alternating of numbers and letters for main ideas and sub-topics.
 - C. Additional articles were read each day using the procedures in A. The students were given the opportunities of making these outlines themselves. They were reminded that their outlines would not need to be alike.
 - D. On Friday, they made up an outline for something which they knew about. These were collected so they could be used during the following weeks' work.
- II. Paragraph writing: transitional expressions, topic sentences, "clincher" sentences, introductory paragraphs, and summary paragraphs were studied during the next five lessons of 20 minutes each.
 - A. Transitional expression is a word or group of words which helps to make sentence parts and different sentences go

together more smoothly.

1. A chart was made showing the most common transitional expressions.
2. Models of paragraphs were placed on the overhead transparency so the students could designate which were transitional expressions.
3. They were encouraged to write something they were interested in and then to see how many transitional expressions they used themselves.

B. A topic sentence gives the central idea or what you will find in one particular paragraph. It is usually found at or near the beginning of the paragraph.

1. Topic sentences were pointed to in the models on the overhead transparencies.
2. In other models the students were to find the topic sentences.
3. They wrote topic sentences for paragraphs of their own.

C. A "clincher" sentence will either summarize what has been said in the paragraph, or it will emphasize some main point to be found in it. It is usually the last sentence in the paragraph.

1. "Clincher" sentences were pointed to in the models on the overhead transparencies.
2. In different models, the students were to find the "clincher" sentences.
3. They wrote "clincher" sentences for their own paragraphs.

D. An introductory paragraph, in an article or a story, is the first one. The summary paragraph is putting into your own words the main ideas which a writer has already said.

1. From some of the articles used previously, the introductory and summary paragraphs were read and discussed.
2. After practicing, the students wrote a short article with an introductory and summary paragraph also.

III. Paragraphs of description in which is written the impression something has made, is done by writing in detail what has been seen, felt, heard, smelled, or tasted. Five lessons of 20 minutes each were spent on this type of paragraph because of the problem of detail.

- A. Model paragraphs written about topics which would interest these sixth graders were used. The details were noted on the overhead transparency as the researcher read them.
- B. The students were allowed several opportunities for writing descriptive paragraphs with a chart as their guide for steps to follow only.

IV. Paragraphs using comparisons, contrasts, or both were studied during the next five lessons.

- A. A comparison shows the ways or the points in which two or more persons or things are similar.
 1. As the model paragraphs were shown on the overhead transparencies, the ways in which things were compared were pointed to as the researcher discussed them.
 2. Using different models, the students were to decide which were paragraphs of comparisons.

3. Students wrote their own paragraphs of comparison using their own topic ideas.
- B. A contrast shows the ways in which persons or things are different, the ways in which they are not alike.
1. Ways in which things were contrasted were noted as model paragraphs were shown on overhead transparencies.
 2. Students were given the opportunity of selecting paragraphs of contrast on the overhead transparencies.
 3. Students wrote paragraphs of their own which showed contrasts.
- V. Paragraphs developed by using examples and paragraphs developed by giving reasons were learned during the next five lessons.
- A. Paragraphs using examples are developed by giving points which support the main idea.
1. Paragraphs used as models were about topics of interest to sixth graders. The examples used to develop the paragraphs were pointed out as they were discussed by the researcher.
 2. Short paragraphs were available from them to practice identifying paragraphs using examples.
 3. They had opportunities to write paragraphs using examples.
- B. Paragraphs giving reasons are developed similarly as the above, by giving reasons to support the main idea.
1. Model paragraphs on the overhead transparencies illustrated the use of reasons.

2. Practice in choosing paragraphs giving reasons was available to the students.
3. Students wrote paragraphs giving reasons, using their own topics.

VI. Figures of speech were studied during the next five lessons.

The ones chosen for the study were the simile, the metaphor, the personification, and the hyperbole. The models used for these figures of speech were primarily ones which were found in the writings which the students had done in the study thus far. The students were given opportunities to write their own figures of speech as each kind was discussed.

- A. The simile compares two quite different things and is often introduced by "like" or "as."
- B. The metaphor gives the idea of a comparison but it does not actually state it as in the simile.
- C. Personification gives some human characteristic to an object or an idea which, of course, is not alive.
- D. A hyperbole is an exaggeration which is so extreme that people know it is not really meant.

VII. Forms of verse or light poetry were the topic of the next five lessons. The meanings for several key words were studied, the four most popular kinds of poetic feet, the names for the different amounts of feet per line, and rhyme schemes were also studied in the five lesson time.

- A. The meanings for the key words which will not be listed separately are the following:
 1. A stanza is a group of lines or verses which are

together because of their topic or because of the rhyme scheme which is being used.

2. A rhyme means that the ending sound which begins with the last syllable, sounds the same in the last word of two or more verses.
3. Rhythm is when you have a fairly regular pattern of accented and unaccented syllables.
4. Blank verse is the name given to verse which does not rhyme.

B. A foot is a way to measure rhythm in verse.

1. Iambic foot is often called a "running rhythm" and has an unaccented syllable followed by an accented syllable.

(u / u /)

2. Trochaic foot has an accented syllable followed by an unaccented syllable and is often called a "marching rhythm." (/ u / u)

3. Anapaestic foot is made up of two unaccented syllables which are followed by one accented syllable and which gives it the name of a "galloping rhythm." (u u /)

4. Dactylic foot has an accented syllable followed by two unaccented syllables and can be called a "waltzing rhythm." (/ u u)

C. The number of feet per line is the same as the number of accented syllables.

1. Monometer is a line of one foot.
2. Dimeter is a line of two feet.
3. Trimeter is a line of three feet.

4. Tetrameter is a line of four feet.
 5. Pentameter is a line of five feet.
 6. Hexameter is a line of six feet.
 7. Heptameter is a line of seven feet.
 8. Octameter is a line of eight feet.
- D. Rhyme scheme is the way the lines of a stanza are marked to show which rhyme. Those with the same letter rhyme. Three popular examples of rhyme scheme are aabb, abba, and abca.
- E. The three forms of verse which were studied are the couplet, the quatrain, and the limerick.
1. The couplet, which was the shortest form of verse studied, has two lines which rhyme and any number of accents.
 2. The quatrain consisting of four lines of different rhyming schemes usually has five accents per line, but it may have more.
 3. The limerick is an amusing form of verse usually because of funny spelling or a crazy punch line. It has a definite pattern which will be illustrated.

la LA la la LA la la LA (a)

la LA la la LA la la LA (a)

la la LA la la LA (b)

la la LA la la LA (b)

la LA la la LA la la LA (a)

Unaccented beats may be dropped or added.

- F. In each section of the discussion of verse, models on the overhead transparencies were given; identifying features

were pointed out; examples which they could complete were available to them; there were opportunities for identifying them from a selection; and they could write and identify their own using the dittoed sheets if they needed to refresh their minds.

VIII. The writing of short stories was covered during the last five lessons. This included the type of story, the setting, telling whom or what is involved and why, the speech of the characters, the purpose for writing the story, "catchy" titles, the mechanics of writing a short story, and then they saw and heard illustrations which were from their own writing.

VITA

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Claudia White Baxter

Candidate for the Degree of

Doctor of Education

Thesis: THE EFFECT OF STRUCTURED WRITING EXPERIENCES AND ORIGINAL WRITING ON THE DEVELOPMENT OF VOCABULARY AND COMPREHENSION FOR SIXTH-GRADE STUDENTS

Major Field: Elementary Education

Biographical:

Personal Data: Born in Broken Arrow, Oklahoma, May 14, 1929, the daughter of Laura F. and Claud E. White; married to Donald D. Baxter, Jr., April 12, 1963; stepchildren - Donald III, Jess, and Martha.

Education: Graduated from Tulsa Central High School, Tulsa, Oklahoma, in May, 1947; received the Bachelor of Arts degree from the University of Tulsa in 1951, with majors in English and Speech; received the Master of Education degree from the University of Oklahoma in 1957, with a major in Elementary Education; attended Western Reserve University in 1967 as a recipient of an NDEA Institute; attended Oklahoma State University, 1968-1970, working toward a Doctor of Education degree in Elementary Education as a Delta Kappa Gamma Scholar.

Professional Experience: Teacher at Owen Elementary School/Tulsa, Oklahoma (1951-1954), speech and/or music, grades one through six (1954-1962), third and/or fourth grade; fourth grade teacher at Centennial Elementary School/Littleton, Colorado (1962-1963); teacher at Bell Junior High School/Tulsa, Oklahoma (1964-1969), seventh, eighth, or ninth grade English and/or seventh and ninth grade speech, and/or eighth grade civics and economics, and/or seventh, eighth, and ninth grade corrective reading; recently appointed to the faculty of Indiana State University/Terrehaute as an Assistant Professor.

Professional Organizations: Oklahoma Reading Council; International Reading Association, Life member of National Classroom Teachers of English; National Education Association; Oklahoma Education Association; Student Education Association Life member Oklahoma University Alumni; The Delta Kappa Gamma Society; American Personnel and Guidance Association.