WRITING INSTRUCTION AND ITS INFLUENCE
ON THE READING ABILITIES OF SELECTED GRADE ELEVEN
STUDENTS: AN EXPLORATORY STUDY

by

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We accept this thesis as conforming
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Abstract

This exploratory study examined the effect of a process-oriented writing programme on reading skills during one semester in which students were given writing, but not formal reading instruction.

Twenty-five students enrolled in English 11 during the first semester served as the experimental group, while twenty-five students not taking English 11 first semester served as a control group. The experimental group participated in a process-oriented writing programme, Writing 44, for nineteen weeks.

Both groups were pre- and posttested with the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2 and the Writing 44 Diagnostic Test, Forms C and D, the latter a locally-developed criterion-referenced test of writing skills.

Independent t-tests and Repeated Measures Analysis of Variance were used to compare pre- and posttest scores of reading comprehension and vocabulary on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, and pre- and posttest scores of writing on the Writing 44 Diagnostic Test. A Pearson R Correlation was also carried out to examine relationships between reading comprehension, vocabulary, and writing.

T-tests for independent samples showed a non-significant difference favouring the experimental group in the vocabulary subtest. The Repeated Measures of Analysis of Variance showed no group differences on the vocabulary subtest, but there was a significant time effect (p < .01).
There was no significant difference in the comprehension subtest on either t-tests or Repeated Measures Analysis of Variance.

Both t-tests and Repeated Measures Analysis of Variance showed the experimental group made significant gains in writing after participating in the Writing 44 Programme for one semester.

In the control group, the writing pretest correlated with both comprehension and vocabulary posttest, significant at .05; the writing posttest correlated with both comprehension and vocabulary pre-and posttests at the .01 level.

In the experimental group, the writing pretest correlated with both comprehension and vocabulary pre-and posttests at the .01 level. Writing posttest correlations were non-significant.

A process-oriented writing programme did not improve reading comprehension for this selected group of Grade Eleven students during one semester, but it did improve writing ability.

The distinction is made that while two areas of language processing are related to each other, the relationship is not necessarily a causal one. The implication is that while reading and writing are related, improvement in one area of language processing does not necessarily result in improvement in another.

It is recommended that research be carried out in the following areas: 1) a longitudinal study of reading and writing; 2) a study in syntactic growth in writing and reading comprehension; 3) a study of the effect of sentence combining and reading and writing;
4) a comparison of the writing subskills scores and reading comprehension scores; 5) a study of the traits of good readers/poor writers and poor readers/good writers; 6) use of other evaluative instruments, such as cloze, to measure reading achievement; 7) a study on how the reading-writing relationship is affected by different kinds of prose and different modes of writing; 8) a study of the effect of oral language on writing.
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To my mother, my four children, and above all, my husband, Bill, who encouraged me and often put my needs before their own.
CHAPTER I

The Problem

The interrelationships of reading and writing have been the focus of a great deal of research (Armstrong, 1976; Dechant, 1970; Loban, 1966; Moffett, 1968; Robinson, 1963; Robinson and Burrows, 1974; Smith, 1971; Spache and Spache, 1969). Many studies indicated that achievement in one language skill correlates with achievement in another language skill (Applebee, 1977; Chomsky, 1973; Crews, 1971; Obenchain, 1971; Reed, 1967).

Notwithstanding the correlations between language skills found in many studies (as Belanger (1978) pointed out), a correlational relationship is not the same as a causal relationship. In his study, a programme that improved reading, for example, did not produce an improvement in writing skill.

An examination of the literature bears out Belanger's conclusion. With the exception of a few studies the evidence shows that attempts to improve writing by teaching reading or to improve reading by teaching writing have been fruitless. Stotsky (1975), in fact, in her review of literature on reading and writing relationships, concluded that although the assumption that improvement in one area would naturally result in improvement in another had had great influence on teaching practices,
the assumption had little empirical basis. In a similar review of literature, Shanahan (1980) stated that most of the studies on the relationships of reading and writing had been done in a global, correlational manner and did not warrant the conclusion that a focus of attention on one process would result in improvement in another.

Despite this expert agreement about the lack of clear evidence to show that instruction in one language process will produce beneficial effects in another, school systems continue to produce curricula based on that idea and seldom seek to test its validity. It is suggested here that specific research is needed by all school boards whose teachers use curricula based on an assumption that language processes interact to their mutual benefit. Until such research is done, teaching will be based on invalid assumptions.

Background of the Study

In 1978 results of the British Columbia Assessment of Written Expression showed that of the 31 writing skills assessed, Grade Twelve students were rated satisfactory on only three. English placement tests such as those used by British Columbia universities for entrance showed poor results. As a result, in a desire to improve writing, the North Vancouver School District decided to investigate the possibility of producing a process-oriented writing programme modelled on "Project Literacy" of the Huntington Beach Union High School District, California,
a programme that had been based, it was claimed, on research in the composing process (Beach, 1976; Bridwell, 1980; Emig, 1971; Matsuhashi, 1979; Perl, 1979; Pianko, 1979; Squire and Applebee, 1968).

In April, 1980, the Programme and Development Division of the school district organized workshops for English teachers to learn about Project Literacy. After the English teachers had expressed overwhelming support for a programme of this type sixteen teachers worked fulltime over one summer to adapt Project Literacy for North Vancouver schools. The result was the locally-developed writing programme, Writing 44.

Writing 44 was designed, it was claimed, to address and expand on the following goals of reading and writing instruction as delineated in the _Secondary Guide to the Teaching of English 8-12_ (1978) of the B.C. Ministry of Education:

- Develop in students a range of reading and study skills (underlining added).
- Help students develop appropriate skills for writing sentences, paragraphs, and essays.
- Provide students with opportunities for writing various types of prose.
- Help students develop wide speaking, listening, reading, and writing vocabularies (underlining added).
- Encourage students to express themselves in a variety of genres.

The _Writing 44 Teachers' Manual_ states as well, "Writing 44 will also improve students' speaking, listening, and reading skills" (p.12).

As no research was available to substantiate this claim, it must
be thought to have been based on the assumption from the literature relating reading and writing skills, that improvement in one area of language will produce improvement in another.

As an adjunct to the curriculum two types of testing were proposed: The Writing 44 Diagnostic Test and an impromptu writing sample.

The Diagnostic Test includes the subsections apostrophes, capitalization and spelling; commas, quotation marks and related punctuation, semi-colons, colons and dashes; subject-predicate agreement, verb usage, pronoun usage, preposition usage, misplaced modifiers, and dictionaries and Thesaurus, vocabulary. Marking is objective.

The impromptu writing sample is on a given topic, marked holistically by a trained group of English teachers.

Statement of the Problem

The study examines the effect of the Writing 44 programme on reading skills during one semester in which students were given writing, but not formal reading instruction.

Design of the Study

The study examined the influence of writing instruction on the reading ability of Grade 11 students at Carson Graham Secondary School, North Vancouver. Twenty-five students enrolled in English 11 during the first semester served as the experimental group, while twenty-five
students not taking English 11 first semester served as a control group.

Both groups were pretested in May, 1982, with the Gates-MacGinitie Reading Test, Level F, Form 1 and the Writing 44 Diagnostic Test, Form C, the latter a locally developed criterion-referenced test to test writing skill.

The experimental group engaged in the Writing 44 Programme for 19 weeks, from September, 1982 to January, 1983. As Carson Graham Secondary School is on the semester system, Grade Eleven students are enrolled in Writing 44 for only one semester. In January, 1983, the experimental group was post-tested with the Gates MacGinitie Reading Test, Level F, Form 2 and the Writing 44 Diagnostic Test, Form D. One week later, in February, 1983, the beginning of second semester, the control group was post-tested, using the same measures.

Independent t-tests and Repeated Measures Analysis of Variance were used to compare pre-and post-test scores of reading comprehension and vocabulary on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2.

The same measures were computed on the pre-and posttest of the Writing 44 Diagnostic Test. A Pearson R Correlation was also carried out to examine relationships between reading comprehension, vocabulary, and writing.

Permission for this study was granted by the Assistant Superintendent of the North Vancouver School District, the Language Arts Consultant, and by the Principal of Carson Graham Secondary School.
Questions for Investigation

Specifically, the following questions were addressed:

1. Was there a difference in the reading ability of Grade Eleven students who participated in the Writing 44 programme for one semester and those who did not participate for that semester?

2. Was there any difference in the writing ability of students who participated in the Writing 44 programme for one semester and those who did not participate for that semester?

3. Were there any correlations among reading abilities and writing abilities of students who participated in the Writing 44 programme for one semester and those who did not participate for that semester? Specifically between control and experimental groups:
   a. writing pretest and vocabulary pre-and post-tests
   b. writing pretest and comprehension pre-and post-tests
   c. writing post-test and vocabulary pre-and post-tests
   d. writing post-test and comprehension pre-and post-tests.

Null Hypotheses

The following null hypotheses were tested for the study:

1. There will be no significant difference in reading ability as measured by the Gates-MacGinitie Reading Test, Forms 1 and 2, Level F, between those students who participated in the Writing 44 programme for one semester and those who did not participate for that semester.
2. There will be no significant difference in writing ability as measured on the Writing 44 Diagnostic Test, Forms C and D, between those students who have participated in the Writing 44 programme for one semester and those who have not participated for that semester.

3. There will be no significant correlations between reading comprehension as measured on the Gates-MacGinitie Reading Test, Forms 1 and 2, Level F and writing ability as measured on the Writing 44 Diagnostic Test, Forms C and D. Specifically:
   a. writing pretest and vocabulary pre-and post-tests
   b. writing pretest and comprehension pre-and post-tests
   c. writing post-test and vocabulary pre-and post-tests
   d. writing post-test and comprehension pre-and post-tests.

Significance of the Study

The results of a study on any perceived effect of the Writing 44 Programme on students' reading ability should prove valuable for future planning and assessment of process-oriented writing programmes in the community involved, contribute to the growing body of research on the influence of writing on reading achievement, and suggest further factors to explore with reference to writing growth and concomitant growth in reading.

Limitations of the Study

There are three limitations to the study:
1. The study, confined to a randomly selected group of Grade Eleven students at Carson Graham Secondary School in North Vancouver, took place over only one semester. While a semester may not be sufficient to show definitive results, trends in the data may be helpful to educators.

2. The results of the study apply to the North Vancouver School population for whom the Writing 44 Programme was developed. Only insofar as the sample reflects the larger population can the results be generalized to other groups.

3. The study is limited to the use of two measures, the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, reading comprehension and vocabulary subtests, and the Writing 44 Diagnostic Test, Forms C and D.

   While holistic scores on students' writing samples (ranging from 1 to 6) were felt to be too gross a measure for statistical analysis, the researcher had hoped to examine the control and experimental groups' writing samples in order to measure growth in syntactic fluency. However, the individual scores became unavailable during the course of the study. The scored writing samples were not retained by the District.

   The study was limited to measuring reading ability by the subtests of vocabulary and comprehension of the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, generally used by the District of North Vancouver, and to measuring writing ability on the Writing 44 Diagnostic
Test, Forms C and D, a criterion-referenced test developed by the District. Thus, the findings can be generalized only to these particular tests.

**Definition of Terms**

Vocabulary scores are defined as those scores obtained on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2.

Comprehension scores are defined as those scores obtained on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2.

Writing scores are defined as those scores obtained on the Writing 44 Diagnostic Test, Forms C and D.

**Organization of the Paper**

The report is organized into five chapters as follows:

1. **Chapter One** provides an introduction and overview of the study. This chapter discusses the nature of the problem, provides the background of the study, the rationale, problems and hypotheses, states the significance and limitations of the study, defines terms, and gives an overview of the organization of the study.

2. **Chapter Two** contains the review of literature. This chapter outlines research on the relationship of reading and writing and examines in detail correlational and descriptive studies in reading and writing, studies which attempt to teach reading in order to improve writing
skills, and the converse, those teaching writing to improve reading skills. The chapter ends with a section on the effects on sentence combining on reading comprehension.

3. **Chapter Three** describes the experimental procedures. This chapter describes the research design, states the hypotheses, details the sample, instrumentation, treatment, and data collection, and explains the data processing and analysis of the data. The chapter ends with a discussion of the limitations of the study.

4. **Chapter Four** describes the analysis and evaluation. This chapter reports the reading pre-and post-test results, writing pre-and post-test results, and correlations between reading and writing results. This chapter also includes appropriate charts and tables illustrating the data.

5. **Chapter Five** includes the results, implications and recommendations. This chapter discusses the results of the investigation of the effect of writing instruction on reading ability and makes recommendations for further research into the nature of the relationship between reading and writing.
CHAPTER II

Review of the Literature

The purpose of the chapter is to present research on the relationship of reading and writing. The chapter begins with summaries of correlational and descriptive studies of reading and writing. Following are summaries of studies that attempted to teach reading in order to improve writing skills. The review of literature concludes with summaries of studies that attempted to teach writing to improve reading skills.

The review is intended to establish the research base for examining the question of whether reading ability will improve as a result of a process-oriented writing programme in use in a suburban Vancouver community.

Correlational and Descriptive Studies

Although reading and writing relationships are often taken for granted, there is conflicting evidence in the data. Researchers have examined the relationship from many aspects.

In his longitudinal study on the interrelationships of language development, Loban (1966) found high correlations between reading and writing above Grade Two. His subjects were 338 children in Oakland, California, followed from Kindergarten to Grade Six. A cumulative
record of reading as well as the Stanford Reading Test was used.

Fishco (1966) examined 95 Grade Seven students to see whether there was a relationship between creativity in writing and comprehension in reading, using the Gates Basic Reading Test as the reading measure and a Creativity Scale especially constructed for scoring students' writing. He found reading comprehension and creativity in writing correlated beyond the .05 level.

Evanechko, Ollilia, and Armstrong (1974) studied Grade Six students to determine the combination of indices of writing performance which might predict reading achievement and to identify and apply valid indices of written language behaviour based upon transformational grammar theory. The correlational analysis showed all measures were highly related, reinforcing the concept of a strong relationship among language skills. Of the 13 indices used as predictors of reading achievement, four were significant at the .05 level. These were number of communication units, two-count structures, sentence patterns, and the average number of words per communication unit.

Lazdowski (1977) constructed a formula to predict reading level from such features of student writing as mean sentence length, syllables per thought unit, and polysyllabic words per sentence. Studying 338 writing samples from high school students as well as college students who had reading levels ranging from Grades 2 to 14, Lazdowski predicted reading achievement to within one grade level of actual achievement with a reliability of .88.
D'Angelo (1977) reported reading and writing ability correlated at the .01 level in his study of 245 Grade Nine students. However, he concluded that listening comprehension and listening memory were more effective predictors of reading ability than was writing ability.

Bippus (1977) investigated the relationship between measures of quality of written language, productivity of writing, and reading comprehension and attempted to determine the best indices of students' written language performance to predict reading comprehension. She tested 57 students in Grades 4 and 6. The measures used for qualities of written language were ideas, organization, wording, flavour, usage, punctuation, spelling and handwriting. Each composition was evaluated by two trained raters with criteria set by the Educational Testing Service Composition Scale.

The reading measure was the reading comprehension subtest of the SRA Achievement Test. Partial correlation coefficients were computed over all aspects of quality of written language, productivity of writing, and reading comprehension. Stepwise multiple regression analysis was used to identify the best indices of students' quality of written language and productivity of writing to predict reading comprehension. Significant relationships were found between certain aspects of students' quality of written language, productivity of writing, and reading comprehension.

Thomas (1976) examined the extent of the relationships between reading and writing of 405 college freshmen. Subtests for reading
comprehension and vocabulary of the Scholastic Aptitude Test were used to measure reading achievement. Sentence maturity and overall writing quality were examined in a 500 word writing sample done by each student. Thomas found a correlation of .128, significant at the .028 level, between reading comprehension and writing achievement.

Grobe and Grobe (1977) also examined college freshmen to see whether there was a correlation between reading ability and writing. The data showed that the standardized reading test discriminated among levels of writing ability. Correlations showed that those with the highest scores tended to be classified into the highest writing level group.

Bebensee (1977) studied 300 Grade Five students from the inner city to determine the relationship between reading comprehension and achievement in written composition. He concluded that reading and writing achievement were not strongly related when writing ability was measured in composition content. Bebensee suggested that differences in purpose and procedure of various measures of writing ability caused conflicting conclusions.

Simmons (1977) selected 100 students according to reading scores on the Iowa Silent Reading Test to discover whether significant differences existed in writing abilities among students who are high, medium, and low in reading achievement. Analysis of total writing scores data revealed significant differences between low and medium reading achievement groups, medium and high groups, and between low and high groups.
A correlation of .61 was obtained between writing mechanics scores and total reading scores of the 100 students.

Hamill and McNutt (1980) surveyed the literature on language abilities and reading as a basis for identifying the constructs for linking the language processes. They examined 20 journals on psychology, reading, special education, and speech between 1950 and 1978. They had stringent criteria for selecting correlational studies. Each had to have at least 20 subjects; researchers had to have used some type of correlational procedure to relate measures of reading to measures of listening, speaking, or writing. They located 89 studies which met the criteria, a total of 992 concurrent coefficients which had reading as the dependent variable. The independent variables were listening comprehension, meaningful speaking, meaningful writing. However, in examining the constructs for meaningful writing, sufficient data which satisfied the investigators' requirements was found for only the constructs of spelling and mechanics. These results contrast with the many studies reporting correlations in other constructs of meaningful writing.

Summary of correlational studies. Despite the diversity of instruments used—Gates Basic Reading Test, SAT, SRA, and the Iowa Silent Reading Test—and the diverse aspects of writing tested—creativity, communication units, sentence patterns, usage, punctuation, spelling—correlations were found among reading and writing skills in all but one study. Reading and writing were found to be related.
Teaching Reading to Improve Writing Skills

Researchers have been attempting since 1931 to teach reading to improve writing skills, using as their rationale the assumed relationship between reading and writing skills.

As early as fifty years ago, Eurich (1931) conducted a two-year study attempting to enhance skill in written composition by improving reading at the college level. Eurich performed four twelve-week experiments in which the 83 experimental group students were taught vocabulary and paragraph reading skills while the 87 control group students studied the normal freshman composition course. The experimental groups showed significant gains on two out of eleven measures, the two vocabulary measures. Both groups made equal gains on four other measures, one of which was reading comprehension. No conclusions could be drawn about reading-writing relationships.

More recently, Schneider (1971) did a fifteen-week study of remedial students at a junior college. The experimental group had 20 hours out of a total of 75 hours of reading instruction. The control group had no reading instruction. The three measures used were a standardized reading test, a writing mechanics test, and an essay test. No significant difference was found on growth in either reading or writing ability. No conclusion could be drawn on the relationship between growth in reading and growth in writing ability.

O'Donnell (1974) used two different methods of teaching reading to 42 black remedial college freshmen in a one-month intensive course, a
traditional method and a psycholinguistic tutorial method. Neither method resulted in significant gains in syntactic maturity, composition quality, or reading comprehension as measured on a standardized test.

Campbell (1976) taught an integrated reading and writing course to two sections of freshman composition for 12 weeks. Two control groups studied writing skills only. A slight, non-significant difference favoured the experimental group on the reading comprehension measure. Campbell found that reading ability could be predicted from a writing sample.

Maat (1977) asked whether improvement in comprehension of expository and argumentative prose would be accompanied by improvement in writing such prose. He studied two groups of Grade Twelve students, having 40 subjects in each group. For nine weeks the treatment group did not write any compositions, but had instruction in reading. The control group wrote compositions and had reading instruction. Analysis of raters' scores showed significant improvement in the total writing of all students. Small, non-significant differences in gain were found in the total writing scores for the treatment group and a significant gain in comprehension scores for the treatment group, but no significant gain or loss in comprehension scores for the control group.

Belanger (1978) asked whether a change in reading skill would produce a consequent change in writing skill. In reviewing the literature in this area, Belanger expressed surprise at the small number of empirical studies examining this particular aspect. He noted that
most of the studies were inconclusive because of the inability of the investigators to alter reading skill. In Belanger's own study (1978), he confirmed significant changes on the reading measure before analysis of the writing samples was done.

Belanger used 8 intact classes of Grades 9 and 10, 194 students in all. The Davis Series 2 Reading Test was administered and writing samples on assigned topics were collected in November, February, and May, providing three test comparisons - pre-mid, mid-post, and pre-post. The reading treatment was the S.O.S. Reading Technique (Martin and Martin, 1974), and gains were confirmed at the end of treatment. Writing samples were analysed for overall quality, syntactic density, t-unit length, and fluency. A sub-sample of the compositions was analysed for 4 major sentence errors: run-on sentences, fragments, errors in subject-verb agreement, and errors in pronoun agreement. Analysis of the reading measure showed the experimental groups were superior to the control groups on both pretest-midtest comparison and pretest-posttest.

Analysis of the 4 major writing measures showed differences which were only randomly significant between experimental and control groups. Subsidiary analysis of major errors was the only writing measure to show promise. The correlation between the reading and quality measures for the sample were above .47 (p ≤ .0001). The correlation between reading and writing fluency measures ranged from .19 to .27 (p ≤ .008). Correlation between reading and syntactic density and reading and t-unit length measures were very slight and often negative. When the mean
reading and writing scores of experimental and control boys and girls were compared, no consistent relationship was evident.

Belanger concluded that the study produced no evidence to suggest a causative relationship between reading skill and writing skill or that statistically significant changes in the reading measure produced statistically significant changes in writing ability. One possible explanation suggested by Belanger is that one-half year's growth in reading is not sufficient to produce a change in writing.

Summary of studies teaching reading to improve writing skills.
Teaching reading in order to improve writing has frustrated many researchers because of the difficulty of significantly improving reading. In spite of overcoming that particular difficulty, Belanger was unable to show that improvement in reading resulted in improvement in writing. Of the researchers cited here, only Maat (1977) found differences in the writing scores of the treatment group, but the gains were small and non-significant, despite the significant gain in comprehension scores for the treatment group.

Teaching Writing to Improve Reading Skills

The studies investigating the effect on reading skills of teaching writing are subdivided into three categories: general composition and reading, syntax and reading, and sentence combining and reading.
General Composition and Reading

Nagle (1972) examined the effects of a directed writing activity in Grade 8 social studies instruction on general reading achievement and on social studies reading achievement. After giving the 371 students a series of writing assignments, he found that reading improved significantly ($p \leq .05$).

Oehlkers (1972) investigated the contribution of creative writing to reading achievement in a language experience approach with Grade One pupils. No significant differences were found on a reading measure between the creative writing group and the control group after one year. He concluded, however, that students who receive early training in creative writing achieve equally as well in word recognition as those who engage mainly in reading activities in the early part of Grade One, evidence that writing instruction may at times be substituted for direct reading instruction.

In examining the effect of writing in the expressive mode on the general and specific reading comprehension of underprepared, college-level readers, DeLuca (1980) worked with two groups of remedial reading students. The experimental group of 25 did expressive writing exercises as both pre- and post-reading activities, while the control group of 25 took part in discussions as pre- and post-reading activities. The Nelson-Denny Reading Test was used to measure reading improvement in general reading ability during the 15-week semester. Specific reading comprehension was measured by specially designed cloze tests. While both
groups improved significantly in reading comprehension, no significant differences were found between groups. The recommendation was made that studies should be conducted to see whether there were any facilitating effects of different kinds of writing, transactional and persuasive, and longer expressive writing on the general and specific reading comprehension of college-level readers.

Weiner (1979) evaluated the effectiveness of a writing programme on the accuracy of oral reading in Grades 4-12. The average number of major errors dropped from six to one after treatment, evidence again that writing instruction may be substituted for direct reading instruction.

**Summary of studies teaching general composition to improve reading.** The studies reviewed covered all levels of instruction from Grade One to College. While a directed writing activity in social studies had a significant effect on reading, attempts to teach creative writing appeared to have no effect on reading comprehension.

**Syntax and Reading**

Studies teaching syntax in written composition in an effect to improve reading have yielded more positive results.

In examining reading and writing from the aspect of instruction in syntax and paragraph structure and its effect on reading, Reed (1967) found that after 15 weeks, the Grade Seven experimental group showed gains in comprehension superior to the control group (p ≤ .01).
Kuntz (1975) studied 96 Grade Seven students to see if there was any correlation between reading achievement and the ability to make sentence transformations. She reported correlations ranging from .68 to .80 (p ≤ .001) between total syntactic attainment and total reading achievement as measured on the Gates-MacGinitie Reading Test and the Sentence Construction Test. These findings support the view that there is a close relationship between reading achievement and written syntactic attainment.

Heller (1980) similarly investigated reading comprehension of 34 university freshmen in relation to 21 syntactic elements appearing in their expository writing. Heller chose elements for their known contribution to syntactic maturity and possible relationship with reading comprehension. His study indicated at least 11 elements of written language are significantly related to reading comprehension. These are number of words per T-unit, T-units per sentence, words per subordinate clause, words per main clause, passive verbs, prepositional phrases, gerunds, participles, intra-T-unit co-ordinators, free final modifiers, words per clause, and Syntactic Density Score, a composite score reflecting total syntactic complexity.

Good readers' writing, characterized by long T-units expanded through nonclausal structures such as prepositional phrases, intra-T-unit coordination of detail, and passive verb phrases, contained more deletion transformations than the writing of the poor readers. The low reading groups produced shorter T-units expanded primarily through the addition
of subordinate clauses. Their writing also used more coordinated main clauses and run-on sentences than the good readers. Discussion of possible reasons accounting for the reading-writing connection centered around characteristics common to both language processes.

Stilley (1982) designed a study to investigate the role of knowledge about syntax in the reading comprehension and writing ability of 149 Grade Seven students. Reading comprehension was measured by the Comprehension sub-test of the Gates-MacGinitie Reading Test, twenty 50-item teacher-made cloze passages, and a sub-test of the Test of Reading Comprehension (TORC). Writing ability was analyzed on the basis of a holistic evaluation for quality and a T-unit analysis of a writing sample to assess syntactic maturity. Scores from the Precision Transformations Test were used as a measure of syntactic competence. Results of a Pearson product-moment correlation indicated that there was:

1. a moderate relationship between reading comprehension as measured by a global test of reading comprehension and writing ability.
2. a moderate relationship between reading comprehension as measured by a cloze test and writing ability.
3. a moderate relationship between reading comprehension as measured by a sentence similarities test and writing ability.
4. a moderate relationship among the various measures of reading comprehension.
5. a low to moderate relationship among the measures of writing ability.
Stilley concluded that a relationship between reading comprehension and writing ability exists, but not a strong one. These findings suggest that knowledge of syntax is only one aspect of the reading process. The results did not support the hypothesis that a cloze test of reading comprehension may be more sensitive than a standardized test in measuring syntactic maturity. While all poor readers in the study were also poor writers, all good readers were not good writers. Stilley suggested that while reading and writing seem to have underlying processes in common, there are also differences which must be kept in mind.

Johnson (1981) did a similar study to distinguish relationships between syntactic writing maturity and reading achievement. The sample was chosen from 283 students in Grades 3, 4, 5 and 6. At each grade level, two Black females, ten White females, two Black males, and ten White males were selected for a total population of 96. The SRA Achievement Series (1978) was used to measure reading achievement. Syntactic writing maturity was measured by a writing sample of at least 100 words from each student with each sample analyzed for number of words per T-unit, number of words per clause, and number of clauses per T-unit.

For the total group, statistically significant correlations were found for three syntactic measures. The syntactic measure that was significant for each of the three reading scores was words per T-unit. Words per clause correlated significantly with reading vocabulary and with total reading. Clauses per T-unit correlated significantly with reading comprehension. Results for individual grades varied, with the following conclusions being drawn:

1. All three syntactic writing measures correlated significantly
2. There were more statistically significant correlations found between the writing measure and vocabulary than between the writing measure and comprehension.

3. The most significant syntactic writing measures appeared to be words per T-unit and words per clause.

**Summary of studies teaching syntax to improve writing.** Teaching syntax in writing appeared to have more conclusive results in improving reading achievement. Researchers have been able to isolate elements of written language which are related to reading comprehension. There is a relationship between certain syntactic elements in expository writing and reading comprehension. The research suggests that efforts to improve syntactic fluency may lead to improvement in reading skill. A writing programme incorporating instruction in syntactic fluency, through sentence manipulation or sentence combining, might produce such an improvement. This appears to be a promising area of research.

**Sentence Combining and Reading Comprehension.**

Sentence combining as a practice was developed initially as a way of improving writing. However, some researchers have hypothesized that such practice, given certain assumptions about the mental processes required, should result in improved reading comprehension and that hypothesis has been tested by Klein (1980) and Sternglass (1980). Both Klein and Sternglass have discussed sentence combining as an instructional technique and have presented their views about the processes involved.
Klein (1980) described sentence combining as the putting together of several short sentences which have been derived by transformational analysis. Pointing out that students are expected to eliminate redundant words and phrases while retaining key ideas presented in the passages, Klein suggested that the mental activity involved in sentence combining is central to both language production and language analysis and that manipulation of sentence structure and sentence content engages the student in comprehension.

Sternglass (1980) has suggested the type of language used in sentence combining is consistent with the psycholinguistic model of reading that claims fluency develops as readers learn to process larger units of language. Students learn that the word groups in sentence combining must be treated as meaning-bearing units. The student must select a relationship among the units of reading and also create syntax for that meaning. Sternglass suggested the practice of chunking verbal patterns develops fluency in reading.

Levine (1976) tested 112 Grade Three students on sentence combining exercises. The experimental students showed gains on the S.A.T. reading test ($p < .001$), but not on a cloze test. Levine concluded transformational sentence combining exercises have a positive effect upon written composition and reading comprehension.

McAfee (1981) investigated the effects of sentence combining instruction on reading comprehension and writing maturity of Fifth Grade children. She had 25 children in both control and experimental groups. The treatment lasted six weeks and attempted to examine questions about
whether sentence combining instruction improved reading comprehension, and written language. Results indicated that students who received sentence combining instruction had significantly improved reading and writing scores.

Similarly, Combs (1977) found that after eight weeks of instruction in sentence combining, experimental Grade Seven classes showed a gain in reading comprehension \((p \leq .001)\) on a standardized test.

Simmons (1981) conducted a twelve week study of 87 students in four Grade Seven classes, with experimental and control groups divided into regular and advanced language arts classes by reading ability. Each of two teachers taught an experimental and control class. The treatment consisted of 1½ hours per week of both the open and closed types of written and oral sentence combining exercises and sentence combining cloze activities. Two-way analysis of variance showed no significant differences between groups for reading or listening comprehension. There were no significant changes among reading, listening, and mean T-unit length correlations from pre-to post-test.

Howie (1979) evaluated the effect of sentence combining on the writing ability and reading level of Grade Nine students. The reading test was a cloze instrument constructed on six passages of the Gray Oral Reading Test. The composition assignments were in two modes, description and exposition. The study lasted for fifteen weeks with 91 Grade Nine students participating in four different classes. Results showed a significant difference in syntactic writing ability between the groups.
in descriptive composition, favouring the experimental group ($p \leq .001$). No significant difference was found between the two groups in reading level. Howie suggests the transfer of combining skills in writing to de-combining skills in reading should be studied further.

Straw (1978) hypothesized that instruction which affects growth in one area of language processing ability will affect growth in listening comprehension and reading comprehension because of the high positive relationships found among tasks involving these three language processing abilities. One hundred and twenty-four students from a suburban high school were assigned one of two instructors and to one of three treatment groups. Treatment was for a five-week period, consisting of one group receiving sentence combining instruction, one sentence reduction instruction, and one instruction in written composition from a language arts text.

Three-way analysis of variance on post-test scores indicated that sentence combining had a significant effect over the textbook approach on the four measures of syntactic fluency, the measure of listening comprehension, and an experimenter-designed cloze test. Analysis of post-test scores on the standardized reading measure showed no significant effect.

Menendez (1979) examined the effects of sentence combining on remedial college students' syntactic ability, punctuation skills, and reading ability. While the experimental group showed gains in syntactic ability on two measures, there was no significant difference in writing
quality or reading comprehension.

The purpose of Ledesma's study (1981) was to determine whether sentence combining practice contributes to reading comprehension at the literal, reasoning, and evaluative levels, and to accuracy in comprehending material at various levels of syntactic complexity. The subjects were freshmen at West Virginia University enrolled in Developmental English 1 during the fall semester. They were randomly assigned to research groups designated sentence combining (sc) and grammar lessons (gl). The independent variable was the treatment: sentence combining versus grammar lessons. The 14 dependent variables were 1) comprehension scores on the Iowa Silent Reading Test (literal, reasoning, evaluative, and total); 2) comprehension scores on the Constructed Passages (6th, 10th, and average adult syntactic complexities, and at literal and reasoning levels, and the total on the passages); and 3) syntactic complexity scores in free and controlled writing measured by mean clause length and mean T-unit length.

Analysis of variance on the Iowa Silent Reading Test revealed a significant difference at the reasoning level in favour of the sentence combining groups and no significant differences between the groups for literal and evaluative levels. Analysis of variance on the Constructed Passages revealed a significant difference at the literal level in favour of the grammar lessons group. When pre-and post-tests were considered, there was a specifiable relationship which showed that among the sentence combining group, the more clauses and T-units the student
wrote in controlled composition, the higher the reading comprehension scores on the Iowa Silent Reading Test. When pretests for writing and post-tests for reading were examined, the sentence combining group had more significant relationships between reading and writing than the grammar lessons group. Also, more significant relationships were found between writing and reading on the Constructed Passages than reading on the Iowa Silent Reading Test and more relationships were found between controlled writing than on free writing and reading on the Constructed Passages.

The results indicate a possibility that sentence combining may aid reasoning comprehension. On the Constructed Passages, the results seem to justify a tentative conclusion that sentence combining aided students with the syntactic complexity element of reading comprehension. Tentative conclusions on the relationships of writing and reading are as follows:
1. Sentence combining may have contributed to more relationships for the sentence combining than for the grammar lessons group.
2. Reading and writing scores are more closely related when more reading is required to complete the writing task.
3. The syntactic complexity element may be an important factor in reading and writing.

Summary of evidence on sentence combining practice and reading comprehension. With such equivocal results, definite relationships between sentence combining practice and reading improvement cannot be
stated conclusively. The research leads to examination of other components of a writing programme to determine the effect of writing on reading.

Chapter Summary

To provide a theoretical framework for the study, this chapter reviewed studies in three areas related to reading-writing relationships.

The first section reviewed correlational and descriptive studies. Many different aspects of reading and writing were examined, with sample populations ranging from Kindergarten to college. Overall relationships were found to exist between reading and writing. Correlational studies continue to interest educators for both theoretical and practical reasons. It is useful to investigate the inherent relationships among the language arts so that curricula based on sound educational theory can be developed.

The second section of the review of literature dealt with efforts to improve writing skills through the teaching of reading. The difficulty of significantly improving reading in relation to writing has resulted in few studies reporting the teaching of reading to have a significant effect on writing ability.

The final section of the literature review examined studies which were the converse of those reviewed in the preceding section: those teaching writing to improve reading skills. There has been little research into the effect of creative writing on reading. Studies teaching syntax in writing yielded more significant results when reading
achievement was measured. Certain elements of written language have been identified as being related to reading comprehension. The research suggests improved syntactic fluency may improve reading comprehension. Studies in the practice of sentence combining and its effect on written composition yielded varying results; definite relationships between sentence combining practice and reading comprehension cannot be conclusively stated.

The research suggests that there may be elements in a writing programme which may have an effect on reading skills. The chapters which follow in the study examine a process-oriented writing programme and its effect on reading skills.
CHAPTER III

Research Design and Procedures

After detailing the research design, this chapter explains the population of the study, instrumentation, treatment, and classroom procedures. It concludes with a description of data collection and recording, and data treatment.

Research Design

The design of the study was quasi-experimental, the setting many different classrooms where it was not possible to control all the relevant variables. A randomized control-group pretest-posttest design was used as shown below:

\[ T_1 \quad E_R \quad X_1 \quad T_2 \]

\[ T_1 \quad C_R \quad X_2 \ldots \quad T_3 \]

\( T_1 \) refers to the pretest

\( T_2 \) the posttest

\( E \) the experimental group

\( C \) the control group

\( R \) random selection
The independent variable was the Writing 44 Programme; the dependent variable, reading as measured by the Gates-MacGinitie Reading Test.

The study was conducted during one 19-week semester, September to January, 1982-83.

Null Hypotheses

The following null hypotheses were tested for this study:

1. There will be no significant difference in reading ability as measured by the Gates-McGinitie Reading Test, Forms 1 and 2, Level F, between those students who participated in the Writing 44 Programme and those who did not participate in the Programme for one semester.

2. There will be no significant difference in writing ability as measured on the Writing 44 Diagnostic Test, Forms C and D, between those students who have participated in the Writing 44 Programme and those who have not participated for one semester.

3. There will be no significant correlations between reading comprehension as measured on the Gates-MacGinitie Reading Test, Forms 1 and 2, Level F and writing ability as measured on the Writing 44 Diagnostic Test, Forms C and D.

Specifically:

a. between writing pretest and vocabulary pre- and posttests.

b. between writing pretest and comprehension pre- and posttests.

c. between writing posttest and vocabulary pre- and posttests.
d. between writing posttest and comprehension pre-and posttests.

Sample

An experimental group of 25 students was randomly selected from six Grade Eleven English classes at Carson Graham Secondary School. A control group of 25 students was randomly selected from among those Grade Eleven students not enrolled in English 11 in first semester. At Carson Graham, students are placed on class lists by computer. Grade Eleven students in Band who are timetabled as a group, with Band alternating with English throughout the year, are not included in this study, nor are remedial students.

Grade Eleven students for the sample were selected from a table of random numbers, after being randomly assigned to English classes by computer.

The students from Carson Graham come from a wide variety of socioeconomic backgrounds.

Instrumentation

The instruments selected for this study included the Gates-MacGinitie Reading Test which is generally favoured by the District, and the Writing 44 Diagnostic Test, Forms C and D. The researcher had hoped to use the holistically marked writing samples as a second measure, but the students' impromptu writing samples were not available. The compositions would have been used to measure gains in syntactic fluency.
As a result, the analysis was restricted to the objective test.

Reading

The vocabulary and comprehension subtests from Level F, parallel Forms 1 and 2, of the Gates-MacGinitie Reading Test were used. The Kuder-Richardson Formula 20 reliability coefficient is .85 - .94 for vocabulary and .85 - .92 for comprehension.

Reading passages in the test are said to have been selected from published sources that represent the wide range of material students encounter in reading. The percentages of comprehension passages from various content areas are

- Narrative-Descriptive - 32.5
- Social Sciences - 32.5
- Natural Sciences - 25
- The Arts - 10

(Gates-MacGinitie Reading Test Manual, 1979, p. 59)

Reading tests were marked by hand.

Writing

The Writing 44 Diagnostic Test (see Appendix A) consists of two parallel forms, each having 100 multiple choice items. All test items were written by District 44 English teachers and revised where necessary to ensure validity. Reliability of the parallel forms are .88 - .93. The Diagnostic Tests were scored by computer.

The criterion-referenced test is designed to identify the strengths and weaknesses of the students in reading and writing-related
skills such as punctuation system, usage, diction, and vocabulary. The students are pre-tested at the beginning of the semester; weaknesses in writing skills are identified; specific skills are prescribed for the students to work on in the writing lab; the students are post-tested at the end of the semester to measure improvement in writing skills. Posttest scores are used as a diagnostic tool for the students' subsequent writing course.

Treatment

The Writing 44 programme is described as process-oriented. The school week is divided into workshop days, on which students are taught composing strategies, and lab days, when they improve in the mechanics of writing.

In the workshop, students participate in the following stages of the writing process: pre-writing, writing, revising, and presenting.

In the lab, students work on material designed to strengthen weaknesses in writing which were previously diagnosed by testing.

Workshop

Stage I - pre-writing. During this stage a language experience approach is used to develop and improve thinking processes. Research shows emphasizing pre-writing strategies has significant effect on writing (Emig, 1971; Odell, 1974; Graves, 1975). Pre-writing, often neglected in traditional English classes, includes the following strategies:
**Brainstorming and Clustering:** generating ideas through free association.

**Analogy:** developing metaphors

**Free Association:** responding to cues on a given topic.

**Meditation/Introspection:** visualizing

**Games:** playing simulation games to encourage discussion.

**Models:** examining the works of literary figures for style.

**Role-Playing:** engaging in role-play to facilitate seeing another point of view or depicting character traits.

**Films, Recordings:** viewing material to provide background for a topic or to provoke controversy.

**Heuristics:** using problem solving to generate ideas.

**Journals:** writing informally to explore thoughts and ideas.

**Stage II - writing.** Stage II in the writing process is when the writer commits to paper the thoughts developed in the pre-writing stage. A rough draft is produced by the student to which peers or teachers respond.

In this stage, students learn to organize ideas by writing passages of different lengths, using appropriate formats for varying purposes and adjusting style and tone for different audiences.

**Stage III - revising.** Revising is an on-going process, using strategies of addition, deletion, substitution, and rearrangement.

1. Addition and Deletion: words, phrases, and sentences may be added to or deleted from the student's writing.
2. Substitution: words, phrases, sentences or longer units of discourse may be substituted for what has been written in the first draft.

3. Rearrangement: sequence of words may be changed to make writing more fluent. Sentence combining, an integral part of the Writing 44 programme, is practised both orally and in written form at this stage of the writing process in order to develop style, variety, and sentence sense.

These revision strategies are practised in the workshop in partners or small groups. Revision is seen as a reformulation of ideas for clarity, tone, or style, with a specific audience in mind.

Proof-reading also occurs at this stage when students apply editing skills to their own and to their partners' papers before presentation.

Stage IV - presenting. Papers are presented to the teacher or to peers for evaluation. Writing 44 encourages publication of students' work in class newspapers, school magazines, on bulletin boards so that the student may experience the effects of different audiences.

Writing Lab

Instruction in the lab is individualized. During one semester, a student may select three or four skill packages on which to work, applying skills and information learned in the lab to papers presented in the workshop.
In the lab there are nineteen packages of skills material from which the student may choose to work. Each lab package contains an information sheet and a set of practice exercises which are graduated in difficulty. There is also a list of A-V material, educational games, and resources that apply to the topic.

Pre-and posttests are available for each individual topic. Students must achieve mastery on one topic before proceeding to another. Tests are machine-scored in the lab.

A Week's Programme

A typical week in the Writing 44 programme would have the following outline:

Day 1 - Pre-writing - writing in the journal, clustering ideas related to the topic, brainstorming, oral sentence combining activities.

Day 2 - Writing - discussing the rubric for the topic, writing about the topic; first draft begun, completed for homework.

Day 3 - Revising - writing sentence combining exercises, practising revision strategies, peer critiquing of first draft.

Day 4 - Editing - working in the lab on appropriate skill packages as identified by the Diagnostic Test.

Day 5 - Presenting - reading of the paper by peers or teacher for evaluation.
Data Collection

The following timetable was used in collecting data for the study:

May, 1982: All Grade 10 students entering Carson Graham in September, 1982, were administered the Writing 44 Diagnostic Test, Form C, and the Gates-MacGinitie Reading Test, Level F, Form 1.

September, 1982: Twenty-five students were randomly selected for the experimental group, twenty-five randomly selected for the control group.

January, 1983: All students completing English 11 at Carson Graham were administered the Gates-MacGinitie Reading Test, Level F, Form 2, and the Writing 44 Diagnostic Test, Form D.

February, 1983: Students not enrolled in English 11 September to January are administered the Gates-MacGinitie Reading Test, Level F, Form 2, and the Writing 44 Diagnostic Test, Form D.

Data Processing and Analysis

The following procedures were used to examine the effect of the Writing 44 Programme on reading vocabulary and comprehension:

1. Independent t-tests were used to examine differences of means between the experimental and control groups pre-and
posttest scores on the subtests of vocabulary and comprehension on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2.

2. A Repeated Measures Analysis of Variance, computer programme BMD P:2V (Dixon, 1983) was performed on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, Vocabulary and Comprehension subtests to examine and compare growth in reading between the experimental and control groups.

The following procedures were used to measure differences in writing between the experimental and control groups:

1. Independent t-tests were used to examine differences of means between the experimental and control groups' pre-and posttest scores on the Writing 44 Diagnostic Test, Forms C and D.

2. A Repeated Measures Analysis of Variance, computer programme BMD P:2V (Dixon, 1983) was performed on the Writing 44 Diagnostic Test, Forms C and D to examine group differences and time differences.

In order to examine relationships between reading comprehension, vocabulary, and writing scores, an SS Pearson Correlation procedure (Nie et al, 1975) was computed on pre-and posttest results on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, and the Writing 44 Diagnostic Test, Forms C and D.
CHAPTER IV

Analysis of Data

This chapter reports the findings of the study which investigated the effect of the Writing 44 Programme on selected Grade Eleven students' reading ability after one semester.

Both experimental and control groups were pretested with the Gates-MacGinitie Reading Test, Level F, Form 1 and the Writing 44 Diagnostic Test, Form C. The experimental group received instruction in the process-oriented Writing 44 Programme for 19 weeks. The control group was not enrolled in English 11 that semester, but had instruction in other academic and elective areas. They did not receive direct reading or writing instruction.

At the end of the semester, January, 1983, the experimental group was given the Gates-MacGinitie Reading Test, Level F, Form 2 as a post-test, as well as the Writing 44 Diagnostic Test, Form D. One week later, February, 1983, the control group was administered the same posttests.

Independent t-tests and Repeated Measures of Analysis of Variance were used to compare pre- and posttest scores of the Vocabulary and Comprehension subtests of the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, and the Writing 44 Diagnostic Test, Forms C and D.
Pearson Product Moment correlations were computed to examine relationships between pretest scores in reading comprehension, vocabulary, and writing and relationships between posttest scores.

**Reading Results**

Independent t-tests were used with the results of the Gates-MacGinitie Reading Test Level F, Forms 1 and 2, vocabulary and comprehension subtests to test the first hypothesis of this study:

There will be no significant difference in reading ability as measured by the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, between those students who participated in the Writing 44 Programme and those who did not participate for one semester.

**Reading Pretest Results**

Table 1 shows that there was no significant difference between experimental and control groups on t-tests of independent samples on the Vocabulary measure of the Gates-MacGinitie Reading Test, Level F, Form 1. The mean for the experimental group was 30.32; the control group's 30.12. As both experimental and control groups were equal in ability on the pretest measure, no further statistical procedure was necessary.

It should be noted that when both groups were pretested at the end of Grade Ten, in May, 1982, the Grade Equivalent in the Vocabulary
subtest for both experimental and control group was 11.4. This would appear to be an above average group of students as the pretest mean ranked on the 62nd percentile.

In the experimental group, 44% scored above the pretest mean, 52% above the posttest mean. In the control group, 48% scored above the pretest mean, 60% above the posttest mean.

In the Comprehension subtest, both experimental and control groups scored at the Grade Equivalent of 11.8 at the end of Grade Ten. These scores rank on the 66th percentile and on Stanine 6. In the experimental group, 52% scored above the mean on the pretest, 64% on the posttest. In the control group, 68% scored above the pretest mean, while 64% scored above the posttest mean.

TABLE 1

GATES-MacGINITIE READING TEST, FORM 1, LEVEL F VOCABULARY SUBTEST

t-test for independent samples on pretest scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>d.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>30.12</td>
<td>4.6</td>
<td>.09 (N.S.)</td>
<td>48</td>
</tr>
<tr>
<td>Experimental</td>
<td>30.32</td>
<td>8.8</td>
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<td></td>
</tr>
</tbody>
</table>

p ≤ .05
Table 2 shows that there was no significant difference between experimental and control groups on t-tests of independent samples on the Comprehension subtest of the Gates-MacGinitie Reading Test, Level F, Form 1, as shown in Table 2. As there was equivalence of groups on the comprehension pretest, no further statistical treatment was necessary.

**TABLE 2**

GATES-MACGINITIE READING TEST, FORM 1, LEVEL F
COMPREHENSION SUBTEST

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>d.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>34.60</td>
<td>3.8</td>
<td>.35(N.S.)</td>
<td>48</td>
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<tr>
<td>Experimental</td>
<td>35.04</td>
<td>4.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

p ≤ .05

Reading Posttest Results - Vocabulary

On the t-tests for independent samples on the Vocabulary subtest of the Gates-MacGinitie Reading Test, Level F, Form 2 (as shown on Table 3) there was a difference in mean raw scores favouring the experimental group. This difference was not significant at the .01 level.

Both groups improved over time, but the experimental group appears to show greater growth in vocabulary after participating in the
Writing 44 Programme. The mean for the experimental group was 34.00; the mean for the control group 32.76.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>MEAN</th>
<th>S.D.</th>
<th>T-VALUE</th>
<th>D.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>32.76</td>
<td>5.74</td>
<td>-.75 (N.S.)</td>
<td>48</td>
</tr>
<tr>
<td>Experimental</td>
<td>34.00</td>
<td>5.73</td>
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<td></td>
</tr>
</tbody>
</table>

\( p \leq .05 \)

**Differences: Vocabulary**

Repeated Measures Analysis of Variance was used on the Gates-MacGinitie, Level F, Forms 1 and 2 Vocabulary subtest scores. The result shows no statistically significant difference between groups. However, on the Vocabulary subtest, there is a trials effect, significant at the .01 level, showing that the posttest scores of both groups are greater than pretest scores. See Table 4. The mean for the experi-
mental group was 34.00; the mean for the control group was 32.76.

TABLE 4

REPEATED MEASURES ANALYSIS OF VARIANCE OF GATES-MacGinitie READING TEST, LEVEL F, FORMS 1 AND 2, VOCABULARY SUBTESTS SCORES

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group</td>
<td>12.96</td>
<td>1</td>
<td>12.96</td>
<td>0.19</td>
<td>0.67</td>
</tr>
<tr>
<td>Within group</td>
<td>3287.04</td>
<td>48</td>
<td>68.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3300.00</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between times</td>
<td>249.64</td>
<td>1</td>
<td>249.64</td>
<td>32.60</td>
<td>0.0000</td>
</tr>
<tr>
<td>time x group</td>
<td>6.76</td>
<td>1</td>
<td>6.76</td>
<td>0.88</td>
<td>0.35</td>
</tr>
<tr>
<td>Within group</td>
<td>367.60</td>
<td>48</td>
<td>7.66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reading Posttest results - Comprehension

Posttest scores on the Comprehension subtest of the Gates-MacGinitie Reading Test, Level F, Form 2, showed no significant differences between groups on the t-tests for independent samples. As shown on Table 5, the mean for the experimental group is 34.56 and 35.24 for
for the control group, a slight, non-significant decrease in mean for the experimental group.

**TABLE 5**

**GATES-MacGinitie Reading Test, Form 2, Level F COMPREHENSION SUBTEST**

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>d.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>35.24</td>
<td>4.59</td>
<td>.46 (N.S.)</td>
<td>48</td>
</tr>
<tr>
<td>Experimental</td>
<td>34.56</td>
<td>5.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P ≤ .05

**Differences: Comprehension**

The Test of Repeated Measures Analysis of Variance was performed on the Comprehension subtest scores of the Gates-MacGinitie Reading Test, Form F, Levels 1 and 2, and showed no significant differences either within or between groups. The pretest mean for the experimental group was 35.04; for the control group, 34.60. The posttest mean for the experimental group was 34.56; for the control group 35.24. While the control group showed slight improvement over the experimental group, the difference is non-significant. The posttest mean of the experimental group showed a slight decrease over time. See Table 6.
The Writing 44 Programme appears to have had no effect on reading comprehension scores after one semester.

**TABLE 6**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group</td>
<td>0.36</td>
<td>1</td>
<td>0.36</td>
<td>0.01</td>
<td>0.92</td>
</tr>
<tr>
<td>Within group</td>
<td>1680.68</td>
<td>48</td>
<td>35.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1681.04</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between times</td>
<td>0.16</td>
<td>1</td>
<td>0.16</td>
<td>0.02</td>
<td>0.92</td>
</tr>
<tr>
<td>Time x group</td>
<td>7.84</td>
<td>1</td>
<td>7.84</td>
<td>0.75</td>
<td>0.38</td>
</tr>
<tr>
<td>Within</td>
<td>499.00</td>
<td>48</td>
<td>10.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Writing Results**

Independent t-tests were used to analyze the results of the Writing 44 Diagnostic Test, Forms C and D to test the second hypothesis of this study.

There will be no difference in writing ability as measured on the Writing 44 Diagnostic Test, Forms C and D, between
those students who participated in the Writing 44 Programme and those who did not participate for that semester.

Writing pretest results

Although the mean of the experimental group was greater than that of the control group on the Writing 44 Diagnostic Test, Form C, using the t-test for independent samples as the statistical test, this was not a significant difference. Therefore the groups are considered equal for statistical purposes. As shown in Table 7, the mean for the control group is 55.56 and 59.88 for the experimental group, resulting in a non-significant t-value of 1.3.

TABLE 7

WRITING 44 DIAGNOSTIC TEST, FORM C

t-test for independent samples on writing pretest scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>d.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>55.56</td>
<td>10.2</td>
<td>1.3 (N.S.)</td>
<td>48</td>
</tr>
<tr>
<td>Experimental</td>
<td>59.88</td>
<td>13.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

p ≤ .05
Writing posttest results

Writing 44 Diagnostic Test, Form D, posttest results are shown in Table 8. On the independent t-test, there was a significant difference between experimental and control groups \( (p \leq 0.05) \), showing the experimental group had greater growth in writing skill over the period of one semester.

**TABLE 8**

**WRITING 44 DIAGNOSTIC TEST, FORM D**

* t-test for independent samples on writing posttest scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>d.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>64.76</td>
<td>8.3</td>
<td>-2.62 (S)</td>
<td>48</td>
</tr>
<tr>
<td>Experimental</td>
<td>73.00</td>
<td>13.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( p \leq 0.05 \)

**Differences: Writing**

Results of the Repeated Measures Analysis of Variance on the Writing 44 Diagnostic Test, Forms C and D scores show that when scores from the two groups were considered, there was a statistically significant difference at the .01 level between the two groups in the mean writing score at time one and the mean writing score at time two. The time two mean score was higher than the time one mean score, 68.9 vs 57.7.
Table 9 shows that when pretest scores and posttest scores on the Writing 44 Diagnostic Test, Forms C and D were considered for each group, there was a statistically significant difference at the .01 level between the mean writing score for the experimental group and the mean writing score for the control group. The mean score for the experimental group was larger than that of the control group, 66.4 vs 60.2.

The Writing 44 Programme appears to have had an effect on the writing skills of the experimental group of Grade Eleven students.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group</td>
<td>985.96</td>
<td>1</td>
<td>985.96</td>
<td>5.07</td>
<td>.03</td>
</tr>
<tr>
<td>Within group</td>
<td>9341.04</td>
<td>48</td>
<td>194.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10327.00</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between time</td>
<td>3113.64</td>
<td>1</td>
<td>3113.64</td>
<td>40.94</td>
<td>.0000</td>
</tr>
<tr>
<td>time x group</td>
<td>96.04</td>
<td>1</td>
<td>96.04</td>
<td>1.26</td>
<td>.27</td>
</tr>
<tr>
<td>Within</td>
<td>3650.32</td>
<td>48</td>
<td>76.05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A Pearson Product Moment Correlation Test was performed on pre- and posttest results of experimental and control group scores of the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, and the Writing 44 Diagnostic Test, Forms C and D to examine possible relationships between reading and writing, testing the third hypothesis of the study:

There will be no significant correlations between reading ability as measured on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, and writing ability as measured on the Writing 44 Diagnostic Test, Forms C and D.

Specifically between control and experimental groups:

a. writing pretest and vocabulary pre- and posttests.
b. writing pretest and comprehension pre- and posttests.
c. writing posttest and vocabulary pre- and posttests.
d. writing posttest and comprehension pre- and posttests.

Relationships of Reading and Writing in Control Group

Table 10 shows the following correlations for the control group scores between the Writing 44 Diagnostic Test, Forms C and D, and the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2:

The writing pretest correlated with the vocabulary posttest \( (r = .34) \), significant at the .05 level, with the vocabulary pretest \( (r = .26) \), with the comprehension pretest \( (r = .23) \) and with the comprehension posttest \( (r = .16) \). Only the correlation with the vocabulary posttest was significant.
TABLE 10
PEARSON PRODUCT MOMENT CORRELATIONS BETWEEN READING AND WRITING SCORES OF
THE CONTROL GROUP ON THE GATES-MacGINTIE READING TEST, LEVEL F,
FORMS 1 and 2, AND THE WRITING 44 DIAGNOSTIC TEST, FORMS C AND D.

<table>
<thead>
<tr>
<th></th>
<th>Pre-writing</th>
<th>Pre-comprehension</th>
<th>Pre-vocabulary</th>
<th>Post-writing</th>
<th>Post-comprehension</th>
<th>Post-vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-writing</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-comprehension</td>
<td>.23</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-vocabulary</td>
<td>.26</td>
<td>.62**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-writing</td>
<td>.64**</td>
<td>.36**</td>
<td>.47**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-comprehension</td>
<td>.16</td>
<td>.39**</td>
<td>.26</td>
<td>.37*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Post-vocabulary</td>
<td>.34*</td>
<td>.51**</td>
<td>.79**</td>
<td>.61**</td>
<td>.37*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* $p \leq .05$

** $p \leq .01$
The writing posttest correlated with the comprehension pretest ($r = .36$), significant at .05; with the comprehension posttest ($r = .37$), significant at .05; with the vocabulary pretest ($r = .47$), significant at .01; with the vocabulary posttest ($r = .61$) significant at .01.

**Relationships between Reading and Writing of the Experimental Group Scores**

Table 11 shows the following correlations for the experimental group scores between the Writing 44 Diagnostic Test, Forms C and D, and the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2:

- The writing pretest correlated with the comprehension pretest ($r = .76$); with the comprehension posttest ($r = .69$); with the vocabulary pretest ($r = .65$); and with the vocabulary posttest ($r = .46$). All correlations were significant at the .01 level.
- There were non-significant correlations between the writing posttest and the comprehension pre- and posttest and the vocabulary pre- and posttest. The correlation between writing and reading was reduced by the teaching of writing. It would appear that the writing scores improved so much more than the reading scores that significant correlations no longer existed between writing and reading.
TABLE I1

PEARSON PRODUCT MOMENT CORRELATIONS BETWEEN READING AND WRITING SCORES OF THE EXPERIMENTAL GROUP ON THE GATES-MacGINTIE READING TEST, LEVEL F, FORMS 1 AND 2, AND THE WRITING 44 DIAGNOSTIC TEST, FORMS C AND D.

<table>
<thead>
<tr>
<th></th>
<th>Pre-writing</th>
<th>Pre-comprehension</th>
<th>Pre-vocabulary</th>
<th>Post-writing</th>
<th>Post-comprehension</th>
<th>Post-vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-writing</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-comprehension</td>
<td>.76**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-vocabulary</td>
<td>.65**</td>
<td>.82**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-writing</td>
<td>.34*</td>
<td>.08</td>
<td>.08</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-comprehension</td>
<td>.69**</td>
<td>.66**</td>
<td>.65**</td>
<td>.16</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Post-vocabulary</td>
<td>.46**</td>
<td>.69**</td>
<td>.87**</td>
<td>-.05</td>
<td>.67**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* \( p \leq .05 \)

** \( p \leq .01 \)
In testing the first hypothesis,

There is no difference in reading ability as measured by the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, between those students who have participated in the Writing 44 Programme and those who have not participated for one semester.

T-tests for independent samples showed a difference in mean raw scores favouring the experimental group in the vocabulary subtest. This difference was not significant. The Repeated Measures of Analysis of Variance showed no group differences on the vocabulary subtest, but there was a significant time effect (p < .01), showing posttest scores greater than pretest scores.

There was no significant growth in the comprehension subtest on either t-tests or Repeated Measures of Analysis of Variance. The post-test mean of the experimental group showed a slight, non-significant decrease over time.

In this study, the null hypothesis is not rejected.

In testing the second hypothesis,

There is no difference in writing ability as measured on the Writing 44 Diagnostic Test, Forms C and D, between those students who have participated in the Writing 44 Programme and those who have not participated for one semester.

Both t-tests and Repeated Measures Analysis of Variance showed the experimental group made significant gains after participating in the
Writing 44 Programme for one semester. The null hypothesis is rejected.

In testing the third hypothesis,

There will be no significant relationship between reading ability as measured on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, and writing ability as measured on the Writing 44 Diagnostic Test, Forms C and D, for either experimental or control groups.

Pearson Product Moment Correlation Tests showed varying correlations between reading and writing pre-and posttests of the control group and experimental group.

In the control group scores, the writing pretest correlated with the vocabulary posttest, significant at .05; the writing posttest correlated with both comprehension and vocabulary pre-and posttests at the .01 level.

In the experimental group, the writing pretest correlated with both comprehension and vocabulary pre-and posttests at the .01 level. However, the writing posttest correlations were non-significant. The teaching of writing appeared to reduce the correlations between reading and writing in the posttest scores of the experimental group.

It would appear that relationships exist between some but not all the subtests of reading comprehension, vocabulary, and writing as measured on the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2 and the Writing 44 Diagnostic Test, Forms C and D. The third hypothesis is, therefore, not totally rejected.
CHAPTER V

Results, Implications and Recommendations

The study examined the relationship between measured changes in reading and writing abilities of selected Grade Eleven students, half of whom were participating in a nineteen-week semester writing programme and half of whom were enrolled in other instruction. A standardized reading test and a criterion-referenced objective writing test were administered prior to the writing treatment. Parallel reading and writing tests were given to the treatment and control group at the end of the semester. T-tests for independent samples, the Test of Repeated Measures Analysis of Variance, and Pearson product-moment correlations were used in analysing the data.

Results

Reading Changes - Vocabulary Measure

On the t-tests for independent samples, using the Vocabulary subtest of the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, there was a slight and statistically non-significant difference favouring the experimental group on the posttest.

On the Vocabulary subtest, the Test of Repeated Measures Analysis of Variance revealed no statistically significant difference between groups, although there was a trials effect, significant at .01.
Posttest scores obtained in January, 1983, were greater than pretest scores of May, 1982.

While both groups improved during the semester, the experimental group appeared to show greater gains in vocabulary after participating in the Writing 44 Programme. The experimental group made a gain in vocabulary growth equivalent to 1.4 years, according to the Gates-MacGinitie norms. The experimental group, after participating in the writing treatment, had a Grade Equivalent score of 12.8. The control group's was 12.5.

As noted in Chapter IV (Page 44), when both groups were pretested, the Grade Equivalent score for both experimental and control groups was 11.4, above average for a group of Grade Ten students.

For purposes of this study, remedial students were excluded from the sample population, thus possibly skewing the results towards the high end of the scale. When the students are already scoring a Grade Equivalent of 11.4 at the end of Grade 10, there is probably not as great an opportunity for statistically significant changes as the students are above average to begin with. Both control and experimental pre-and posttest scores are on the sixth stanine. The experimental group's posttest scores ranked on the 66th percentile, while the control group's ranked on the 62nd percentile.
Reading Changes - Comprehension Measure

On the t-tests for independent samples on the Comprehension sub-test of the Gates-MacGinitie Reading Test, Level F, Forms 1 and 2, there were no significant differences between groups, although there was a slight, non-significant decrease in mean for the experimental group.

The Test of Repeated Measures Analysis of Variance showed no significant differences within or between groups on the Comprehension subtest.

As noted in Chapter IV (Page 45), the sample for the study was well above average in reading ability before the writing treatment was administered during the 1982-1983 school year. Possibly there was not as much opportunity for growth as there would have been had the sample been average or slightly below average. Both groups showed a .9 year increase in growth in reading comprehension. Although there was a slight, non-significant decrease in mean for the experimental group on the posttest, the Grade Equivalent for both groups was 12.7 on the posttest, ranking at the 62nd percentile and on Stanine 6.

Thus, in answer to the research question posed in Chapter I, the Writing 44 Programme, a process-oriented writing programme, did not improve reading ability as measured by a standardized group test for the selected group of Grade Eleven students during one semester. It would appear the Writing Programme had no effect on reading ability in this study.
**Writing Changes**

On the t-tests for Independent samples on the Writing 44 Diagnostic Test, Forms C and D there was a statistically significant difference ($p \leq .05$) favouring the experimental group.

Results of the Repeated Measures Analysis of Variance on the Writing 44 Diagnostic Test, Forms C and D, show a statistically significant difference at the .01 level between the mean writing score at time one and time two, the time two mean being higher.

There was also a statistically significant difference ($p \leq .01$) between the mean writing score for the experimental group and the mean writing score for the control group, favouring the experimental group.

As the experimental group made significant gains in writing during one semester, the Writing 44 Programme appears to have had an effect on the writing skills of the experimental group of Grade 11 students.

These results concur with those of Jeroski (1983) who analyzed Writing 44 test data for the District of North Vancouver. The Grade Eleven population of North Vancouver made significant gains in writing during the 1982-1983 school year. Jeroski found all grades showed statistically significant ($p \leq .001$) increases in student scores when the data was examined by repeated measures analyses of variance, controlling for school and grade level.

**Changes in the Relationships Between Reading and Writing**

Relationships between reading and writing scores were examined using Pearson product moment correlations. The correlational data,
with one important exception, supports that reported by previous researchers, that is, relationships do exist between reading and writing.

**Control group findings.** The writing pretest correlated significantly with only the vocabulary posttest \( (r = .34) \), significant at .05. It did not correlate significantly with the vocabulary pretest or comprehension pre- and posttests.

The writing posttest correlated with the comprehension pretest \( (r = .36) \), significant at .05; the comprehension posttest \( (r = .37) \), significant at .05; the vocabulary pretest \( (r = .47) \), significant at .01, and the vocabulary posttest \( (r = .61) \), significant at .01. Apparently more correlations occurred between reading and writing at the end of the semester than at the beginning.

**Experimental group findings.** The writing pretest correlated significantly with the comprehension pretest \( (r = .76) \); the comprehension posttest \( (r = .69) \); the vocabulary pretest \( (r = .65) \); the vocabulary posttest \( (r = .46) \). All correlations were significant at the .01 level.

The writing posttest had no significant correlations with any of the measures of reading comprehension and vocabulary.

The results of the writing posttest contrast with the results of the writing pretest. The correlations between writing and reading were reduced by the teaching of writing.

One explanation may be the fact that writing scores improved significantly after the writing treatment. Reading scores, already
showing a ceiling effect at the pretest, did not have as much opportunity for showing growth. The restricted range of reading scores in the study may have led to a correlation coefficient which represents an underestimate of the relationship between the two variables.

For the experimental group, the correlations of the writing pretest with the comprehension and vocabulary subtests ranged from .46 to .76, significant at the .01 level. In contrast, the writing posttest had no statistically significant correlation with the comprehension and vocabulary subtests.

This is an interesting finding in view of the research which supports the view that reading and writing are related. The success of the Writing 44 Programme with this selected group of Grade Eleven students ruled out the possibility of reading and writing scores being related at the end of the study as the writing scores improved so significantly compared to the non-significant change in reading scores.

**Implications and Recommendations**

While writing improved after one semester for the experimental group, a concurrent growth in reading did not occur. Improvement in
one area of language did not appear to have an effect on the other. In this study, teaching writing did not appear to have any effect on reading as measured by a standardized reading test. Where reading and writing scores showed correlations before the Writing 44 Programme was taught, there were fewer correlations between scores after the Programme was taught.

Findings of the study relate to previous research in the following areas:

1. **Teaching reading to improve writing skills**

   Where Eurich's study (1931) was unsuccessful teaching reading in order to improve writing, this study was successful in teaching writing, but unsuccessful in attempting to improve reading through the teaching of writing. Results of the study were similar to those of Schneider (1971), who after teaching reading for fifteen weeks could not state conclusively that there was a relationship between growth in reading and growth in writing ability. Where Belanger (1978) failed to produce statistically significant changes in writing in spite of change in the reading measure, this study failed to produce statistically significant changes in reading in spite of change in the writing measure. Belanger concluded that there was no simple cause-and-effect relationship between the two skills. Results of this study support his conclusion.
2. Correlational and descriptive studies

Reading and writing pretest results showed generally that reading and writing were correlated. These results were similar to previous correlational studies (Loban, 1963, 1966; Fishco, 1966; Harris, 1975; Evanecho et al, 1974; Lazdowski, 1976; D'Angelo, 1977; Bippus, 1977; Grobe and Grobe, 1977; Simmons, 1977, and Hamill and MacNutt, 1980).

In this study reading and writing posttest results of the experimental group did not show any significant correlations, contrary to the research cited above. While there were factors in reading and writing which showed a relationship in the pretests, because of the great improvement in writing after the treatment, compared to no improvement in reading, those factors no longer bore any relationship to each other. Had the reading improved, the reading and writing posttest scores of the experimental group might have shown correlations similar to those of the pretests.

The data revealed no significant change in reading for the selected Grade Eleven students in the Writing 44 Programme. The implication is that the Writing Programme did little to improve students' reading, although the Programme led to improved writing results, as it was designed to do. Programmes which suggest that improvement in one area of language will lead to improvement in another, as Writing 44 does, should be monitored to determine if they are producing the desired effect.

Correlational pretest data revealed significant relationships in
reading and writing as measured on the Gates-MacGinitie Reading Test, 
Level F, Form 1 and the Writing 44 Diagnostic Test, Form C. There were 
no significant relationships for the experimental group in reading and 
writing as measured on the Gates-MacGinitie Reading Test, Level F, 
Form 2, and the Writing 44 Diagnostic Test, Form D.

The distinction is made that while two areas of language processing 
are related to each other, the relationship is not necessarily a causal one. The implication is that while reading and writing are related, 
 improvement in one area of language processing does not necessarily 
result in improvement in another.

Suggestions for Research

This exploratory study indicates further research should be 
conducted to determine if the claims made in the Writing 44 Teachers' 
Manual (page 12) are realistic. The findings of this exploratory study 
indicate the following recommendations be considered:

1. A longitudinal study of reading and writing development should be 
undertaken as the Writing 44 Programme is now in use in the elementary 
schools, as well as the secondary schools in North Vancouver. While 
detailed writing data are collected at the school and District level, 
cumulative records of reading are not maintained. Standardized testing 
of reading is done on a sporadic basis, except for students entering 
Grade Eight in September.
2. In view of the great amount of research relating reading comprehension to syntactic fluency in writing (Reed, 1967; Kuntz, 1975; Heller, 1980; Stilley, 1982; Johnson, 1981), a study of syntactic growth in writing and reading comprehension would be worthwhile. To do this, the District would have to retain student writing samples. Student compositions are holistically marked for content at the District level. They could be examined for syntactic fluency at the same time.

3. As sentence-combining is such an important part of Writing 44, research should be undertaken to study its effect on reading and writing. It would be interesting to compare the results of such a study at the elementary level with those of Levine (1976), McAfee (1981), Combs (1977), and Simmons (1981) and at the secondary level with those of Howie (1979) and Straw (1978).

4. A comparison of individual scores on the sub-skills tested in the Writing 44 Diagnostic Test and the reading scores of this sample should be made to investigate which skills in writing appear to correlate most highly with reading skills.

5. Research is needed on the traits of good readers/poor writers and poor readers/good writers. It would be worthwhile to examine the traits of each in order to develop good remedial programmes in both reading and writing.
6. Other evaluative reading instruments, such as cloze, should be used to measure reading achievement. One reason for the slight decline in scores of the experimental group on the reading comprehension test might be over-familiarity with the Gates-MacGinitie Reading Test. Studies in sentence-combining (see Chapter 2) had inconclusive results when standardized reading tests were used, but more definite results when cloze was used.

7. A study on how the reading-writing relationship is affected by different kinds of prose and different modes of writing would be valuable to teachers in designing writing topics. This should be part of a monitoring system for reading and writing.

8. A study of the effect of oral language on the Writing Programme would be worthwhile as so much of the pre-writing stage is done orally. It would be worth noting whether or not, as is suggested in the Writing Teacher's Manual (page 12), oral language improved as a result of the Programme. It would be of interest to ascertain whether those students who possess good discussion skills are better writers than those students who are less verbal.

9. As reading did not improve as a result of the writing programme, it would appear that planned reading instruction is still necessary at the secondary level. This is particularly crucial in the content area, especially with greater emphasis being placed on reading in academic courses as proposed in the new curriculum changes made by the Ministry
of education.

While this exploratory study of reading and writing did not show that writing instruction had a significant effect on reading ability, it did raise worthwhile research questions. As reading and writing are so closely linked in the curriculum, it is imperative that teachers be made aware of the relationship if they are to develop better methods of instruction.
References


D'Angelo, J.L. Predicting reading achievement in a senior high school from intelligence, listening, and information writing. (Unpublished doctoral dissertation, University of Pittsburgh, 1977.) Dissertation Abstracts International, 38, 2027 A.


Grobe, C.H. & Grobe, S.F. Reading skills as a correlate of writing ability in college freshmen. Reading World, 1977, 17, 50-54.


Weiner, E.S. Improvement in reading through writing. Academic Therapy, 1979, 14, 589-595.
WRITING 44 IS UNIQUE

WORKSHOP

- holistic scoring
- conferencing
- strategies for all writing phases
- developing rubrics
- sentence-combining
- one skill at a time
- mastery level
- idea book writing
- writing and rewriting
- many audiences
- trying a variety of genres
- transfer of lab learning
- individualized
- enrichment
The writing workshop will be a centre of action. Many words come to mind to describe its atmosphere: highly charged, noisy, messy, purposeful, variable. Students will be busy exchanging ideas, sharing their efforts, experimenting with words, and, most important, writing — lots! As for us, we'll be madly changing hats — at one moment we'll be facilitator and manager, at another mentor and consultant, and sometimes even writer and participant. Obviously, pacing and careful planning will be our keys to orchestrating and making meaningful what goes on:

Clearly, the writing workshop differs from the traditional English classroom. It's more like an artist's studio or the Guild Hall in which apprentices learned their craft from a master. Although at the outset of Writing 44, we may feel more like amateurs than masters, workshop teaching offers us an exciting opportunity to at last make writing a craft.
Nineteen packets of materials have been prepared to teach editing and related skills to students:

1. APOSTROPHES
2. CAPITALIZATION
3. COMMAS TO SEPARATE
4. COMMAS TO ENCLOSE
5. SEMI-COLON
6. COLON
7. DASHES, PARENTHESES, BRACKETS, THREE DOTS
8. QUOTATIONS AND RELATED PUNCTUATION
9. SUBJECT-PREDICATE AGREEMENT
10. VERB USAGE
11. PRONOUN USAGE
12. PRONOUN-ANTECEDENT USAGE
13. PREPOSITION USAGE
14. DICTION AND VOCABULARY
15. SPELLING
16. USE OF DICTIONARIES AND THESAURUS
17. ENRICHMENT RESEARCH
18. VERBALS USAGE
19. MISPLACED MODIFIERS

These nineteen topics were selected because they deal with "coherent systems," and, as such, are to be taught "as systems, not randomly. In other words, if a student can't punctuate, he or she needs to grasp the system of punctuation as a whole, not to correct random errors on this paper and that." (Winterowd)
LEARNING OUTCOMES

TO GENERATE IDEAS

The students will:

* learn that there is a writing process, that it is unique to the individual, and that each writer can practise using it to advantage

* learn and apply prewriting strategies

* learn and seek new words from the dictionary and thesaurus

* increase their vocabularies

* develop and improve their thinking processes

* develop their powers of observation

* develop depth and imagination

TO WRITE

The students will:

* understand the concept of audience and its implications for the writer

* learn that writing has various purposes

* learn and apply formats appropriate to audience and purpose

* learn to adjust and vary style and tone for different audiences and writing purposes

* learn to organize ideas into passages of various lengths

* learn to organize ideas according to a variety of patterns and modes

* learn about and practice writing in different genres

* develop sentence sense

* learn to manipulate sentences (expand, contract, and restructure)

* learn to choose effective words to suit the tone, style, and purpose of writing

* learn and apply transitional devices
* learn and apply strategies for writing introductions and conclusions
* develop a sense of style and voice in writing

**TO REVISE AND CRITICIZE**

The students will:

* learn and apply the four revision operations: addition, deletion, substitution, and rearrangement
* learn to read their own writing with a sense of detachment and objectivity
* develop and expand their powers of discrimination
* learn to recognize inconsistencies and strengths in a piece of writing
* learn to recognize voice and style in writing
* learn criteria for determining quality and aesthetics in writing, both their own and that of others

**TO EDIT**

The students will:

* understand the purpose and learn the rules of punctuation
* apply appropriate usage and punctuation to their writing according to the demands of audience and form
* become effective proofreaders
* learn rules and strategies for spelling correctly
* use correct spelling in their final drafts

**ABOUT ATTITUDE**

The students will:

* develop a tolerance for the views of others as expressed in their writing
* develop self-confidence through expression in writing
* learn to reduce concerns about mechanics in order to permit free expression
* learn to be adventuresome in trying out new styles, methods, and forms of writing
* develop appreciation for writing as a reflective act and a means of getting in touch with themselves

* develop an appreciation of writing as a creative act

* learn that writing can provide pleasure and satisfaction
<table>
<thead>
<tr>
<th>THE WRITING PROCESS:</th>
<th>THE TEACHER PROVIDES:</th>
<th>THE STUDENTS LEARN TO:</th>
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<tbody>
<tr>
<td>* PREWRITING</td>
<td>* STRATEGIES FOR GENERATING IDEAS</td>
<td>* GET IDEAS</td>
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<td>* WRITING</td>
<td>* COMPOSING STRATEGIES</td>
<td>* WORK OUT, SHAPE, AND RECORD IDEAS</td>
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<td>* FORMATS</td>
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<td>* ADJUST FOR AUDIENCE AND PURPOSE</td>
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<td>REFORMULATING</td>
<td>* REVISION STRATEGIES</td>
<td>* REWORK A PIECE OF WRITING FOR STYLE, TONE, STRUCTURE, AND CONTENT</td>
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<tr>
<td>* REVISING</td>
<td>* IDENTIFICATION FOR THE STUDENT OF SPECIFIC SKILL AREAS WHICH NEED ATTENTION</td>
<td>* ACHIEVE A MASTERY LEVEL IN A SKILL</td>
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<tr>
<td>EDITING AND PROOFREADING</td>
<td>* GUIDANCE IN LAB ACTIVITIES</td>
<td>* APPLY EDITING SKILLS</td>
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<td>* PRESENTING</td>
<td>* AVENUES FOR PUBLICATION</td>
<td>* GAIN CONFIDENCE AS A WRITER</td>
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<td>(as writer)</td>
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<td>* EXPERIENCE THE EFFECTS OF AUDIENCE</td>
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<td>* DESIRE EXCELLENCE</td>
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<td>* RESPONDING</td>
<td>* CRITICAL TOOLS FOR EVALUATION</td>
<td>* APPRECIATE AND DISCRIMINATE</td>
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<td>(as reader)</td>
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WRITING 44

DIAGNOSTIC TEST II - FORM D

(GRADES 10 & 11)

TEST DIRECTIONS:

TO STUDENTS:

1. Choose the answer which makes a correct sentence.

2. Darken the letter of the correct answer in the appropriate space on the answer sheet.

3. Use black lead pencil only. Do NOT use ink, ballpoint or felt pens.

4. Make heavy black marks that fill the circle completely.

5. Erase cleanly any answer you wish to change.

6. Make no stray marks on the answer sheet.

PLEASE DO NOT WRITE IN THIS BOOKLET.
APOSTROPHES, CAPITALIZATION & SPELLING

Choose the answer which makes a correct sentence.

1. It's not theirs; it's somebody else's.
   (a) (first) It's, (second) it's, else's
   (b) (first) It's, theirs
   (c) (first) It's, (second) it's
   (d) Their's, else's

2. Wouldn't you say he'll succeed?
   (a) Wouldn't, he'll
   (b) he'll
   (c) Wouldn't, he'll
   (d) no apostrophes required

3. This computer is theirs, not ours.
   (a) their's
   (b) our's
   (c) their's, our's
   (d) no apostrophes required

4. Your essay has more ifs and buts than Sam's.
   (a) 'if's, but's
   (b) if's, but's, Sam's
   (c) Sam's
   (d) no apostrophes required

5. My sister's boyfriend's a superb soccer player.
   (a) sister's
   (b) sister's, boyfriend's
   (c) sister's, boyfriend's
   (d) no apostrophes required
### 6. Somebodys singin the blues Im feelin.

(a) somebody's, singin', feelin'
(b) somebody's, singin', I'm, feelin'
(c) singin', I'm, feelin'
(d) no apostrophes required

### 7. The merchants of gastown have planted maple tree square with small flowering azaleas.

(a) Gastown, Maple, Tree, Square
(b) Maple, Tree, Azaleas
(c) Merchants, Gastown, Maple, Tree, Square
(d) Gastown, Square

### 8. After attending the rod stewart concert, don went home to work on his arrangement of "gasoline alley."

(a) Rod, Stewart, Concert, Don
(b) Rod, Stewart, Concert, Don Gasoline, Alley
(c) Rod, Stewart, Don, Gasoline, Alley
(d) Rod, Stewart, Don

### 9. After the attempted assassination of the pope, the vatican announced an increase in security measures.

(a) Pope, Security, Measures
(b) Pope, Vatican
(c) Pope, Vatican, Security, Measures
(d) Vatican, Security, Measures

### 10. "Listen carefully," bellowed the teacher, "to smokey the bear's warnings about forest fires."

(a) Smokey, Bear's
(b) Teacher, Smokey, The, Bear's, To
(c) Smokey's, The, Bear's, Forest, Fires
(d) Smokey, Bear's, To
11. "How is it," screamed the understudy, "that i've never been included in your tours of the south?"

(a) Understudy, That
(b) Understudy, South
(c) Understudy, Tours
(d) That, South
(e) I've, South

12. Last summer the prince was married in St. Paul's.

(a) Summer, St. Paul's
(b) Summer, Prince
(c) Prince, St. Paul's
(d) St. Paul's

13. Tom found a ____________ amount of water in the rain gauge.

(a) measureable
(b) measurible
(c) measurable
(d) measerable

14. I intend to become completely ____________.

(a) independant
(b) indipendent
(c) indipendant
(d) independent

15. His popularity depended upon his new ____________.

(a) convertable
(b) convirtible
(c) convertible
(d) convirtible

16. The ____________ government has raised the taxes again!

(a) provincial
(b) provinsial
(c) provinciale
(d) provintial
# APOSTROPHES, CAPITALIZATION & SPELLING

## 17. That ________ disturbed me more than I can say.

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<tr>
<td>(a)</td>
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<td>(c)</td>
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<td>(d)</td>
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## 18. Please visit the ________ at the end of this class.

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<tr>
<td>(a)</td>
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<td>(b)</td>
<td>councillor</td>
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<td>(c)</td>
<td>counsellor</td>
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<td>(d)</td>
<td>councillor</td>
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## 19. If you wish to win the scholarship you will need to review this material.

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<td>(a)</td>
<td>, after &quot;wish&quot;</td>
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<td>(b)</td>
<td>, after &quot;scholarship&quot;</td>
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<tr>
<td>(c)</td>
<td>, after &quot;scholarship&quot; and &quot;need&quot;</td>
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<td>(d)</td>
<td>, after &quot;wish&quot; and &quot;scholarship&quot;</td>
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<td>(e)</td>
<td>no commas required</td>
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SECTION II.

COMMAS, QUOTATION MARKS & RELATED PUNCTUATION,
SEMI-COLONS, COLONS & DASHES

Choose the answer which makes a correctly punctuated sentence.

20. One of the best restaurants in Vancouver is the Teahouse but The William Tell La Cachette and Darios are also superb.

(a) , after "Cachette"
(b) , after "but"
(c) , after "Teahouse" and , after "but"
(d) , after "Tell" and , after "Cachette"
(e) no commas required

21. Class you must use your time efficiently if you are to complete this assignment on time.

(a) , after "Class"
(b) , after "Class" and , after "if"
(c) , after "assignment"
(d) , after "class" and , after "assignment"
(e) no commas required

22. Once we had eaten the cat demanded her own food.

(a) , after "eaten"
(b) , after "once" and , after "demanded"
(c) , after "cat"
(d) , after "once" and , after "eaten"
(e) no commas required

23. Some critics think Mozart's operas are the greatest; others Verdi's.

(a) , after "think"
(b) , after "others"
(c) , after "think" and , after "others"
(d) , after "operas" and , after "Verdi's"
(e) no commas required
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| 24. After I watched the news I watched "Nova" "Dallas" "Mork and Mindy." | (a) , after "Nova" and "Dallas"
|   | (b) , after "news" and "Nova" and "Dallas" and "Mork"
|   | (c) , after "Nova" and "Dallas" and "Mork"
|   | (d) , after "news" and "Nova" and "Dallas"
|   | (e) no commas required |
| 25. Beethoven's Third Symphony is now called The <span class="red">Eroica</span> not The <span class="red">Napoleonic Symphony</span>. | (a) , after "Beethoven's"
|   | (b) , after "Beethoven's" and "Symphony"
|   | (c) , after "Eroica"
|   | (d) , after "Eroica" and "not"
|   | (e) no commas required |
| 26. Frank thought Meryl Streep should win best actress award; Jill Diane Keaton. | (a) , after "thought"
|   | (b) , after "thought" and "Jill"
|   | (c) , after "Jill"
|   | (d) , after "Streep" and "Jill"
|   | (e) no commas required |
| 27. I don't know Mom if I will be finished work by eleven or twelve. | (a) , after "know"
|   | (b) , after "work"
|   | (c) , after "Mom" and "eleven"
|   | (d) , after "know" and "Mom"
<p>|   | (e) no commas required |</p>
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<td>28. The team excited and happy pushed the coach into the pool.</td>
<td>(a) , after &quot;happy&quot;</td>
<td>(b) , after &quot;team&quot; and &quot;happy&quot;</td>
<td>(c) , after &quot;happy&quot; and &quot;coach&quot;</td>
<td>(d) , after &quot;team&quot; and &quot;coach&quot;</td>
<td>(e) no commas required</td>
</tr>
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<td>29. Mohammed Ali a former world champion has become a tragic figure.</td>
<td>(a) , after &quot;champion&quot;</td>
<td>(b) , after &quot;become&quot;</td>
<td>(c) , after &quot;Ali&quot; and &quot;become&quot;</td>
<td>(d) , after &quot;Ali&quot; and &quot;champion&quot;</td>
<td>(e) no commas required</td>
</tr>
<tr>
<td>30. Be quiet Robert or you'll have to go to bed.</td>
<td>(a) , after &quot;quiet&quot; and &quot;Robert&quot;</td>
<td>(b) , after &quot;Robert&quot;</td>
<td>(c) , after &quot;or&quot;</td>
<td>(d) , after &quot;Robert&quot; and &quot;have&quot;</td>
<td>(e) no commas required</td>
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<td>31. The woman who wishes to visit the moon must know her basic physics.</td>
<td>(a) , after &quot;woman&quot;</td>
<td>(b) , after &quot;moon&quot;</td>
<td>(c) , after &quot;woman&quot; and &quot;moon&quot;</td>
<td>(d) , after &quot;know&quot;</td>
<td>(e) no commas required</td>
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32. Freedom is usually considered the opposite of tyranny; in fact both concepts have given mankind trouble especially during revolutions.

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<td>(a)</td>
<td>after &quot;fact&quot;</td>
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<td>(b)</td>
<td>after &quot;fact&quot; and &quot;mankind&quot;</td>
</tr>
<tr>
<td>(c)</td>
<td>after &quot;considered&quot; and &quot;trouble&quot;</td>
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<td>(d)</td>
<td>after &quot;fact&quot; and &quot;trouble&quot;</td>
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33. Existentialism which is a term applied to a 20th century philosophy was popularized by Jean Paul Sartre and Albert Camus.

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<td>(a)</td>
<td>after &quot;philosophy&quot;</td>
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<td>(b)</td>
<td>after &quot;Existentialism&quot;</td>
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<td>(c)</td>
<td>after &quot;Existentialism&quot; and &quot;philosophy&quot;</td>
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<tr>
<td>(d)</td>
<td>after &quot;Existentialism&quot; and &quot;philosophy&quot; and &quot;Sartre&quot;</td>
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34. The Crux of Christianity is found in the first four books of the New Testament.

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<td>(a)</td>
<td>after &quot;Christianity&quot;</td>
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<td>(b)</td>
<td>after &quot;books&quot;</td>
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<tr>
<td>(c)</td>
<td>after &quot;Christianity&quot; and books</td>
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<tr>
<td>(d)</td>
<td>after &quot;crux&quot;</td>
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<tr>
<td>(e)</td>
<td>no commas required</td>
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</table>
55. Danny replied, I don't own a Honda. I've never owned a Honda. I hate Hondas. .......................... (a)
Danny replied, "I don't own a Honda." I've never owned a Honda; I hate Hondas." .......................... (b)
Danny replied, "I don't own a Honda. I've never owned a Honda. I hate Hondas." .......................... (c)
Danny replied', I don't own a Honda, I've never owned a Honda. I hate Hondas." .......................... (d)

56. To Lucy from Wordsworth's Lyrical Ballads is a heartbreaking poem. .... (a)
'To Lucy' from Wordsworth's Lyrical Ballads is a heartbreaking poem. .... (b)
To Lucy from Wordsworth's "Lyrical Ballads" is a heartbreaking poem. .... (c)
'To Lucy' from Wordsworth's "Lyrical Ballads" is a heartbreaking poem. .... (d)
'To Lucy' from Wordsworth's "Lyrical Ballads" is a heartbreaking poem. .. (e)

57. The heart is a lonely hunter is a quotation used as a title for a novel by Carson McCullers, who also wrote the play The Member of the Wedding. ............................................. (a)
The heart is a lonely hunter is a quotation used as a title for a novel by Carson McCullers who also wrote the play "The Member of the Wedding". ............................................. (b)
The heart is a lonely hunter is a quotation used as a title for a novel by Carson McCullers, who also wrote the play "The Member of the Wedding". ............................................. (c)
'The heart is a lonely hunter" is a quotation used as a title for a novel by Carson McCullers, who also wrote the play "The Member of the Wedding". ............................................. (d)
'The heart is a lonely hunter" is a quotation used as a title for a novel by Carson McCullers, who also wrote the play "The Member of the Wedding". ............................................. (e)
38. He's a reasonable fellow, Andy explained. That's what the sheriff said. It's us who ain't reasonable. ........................ (a)

"He's a reasonable fellow," Andy explained. "That's what the sheriff said." "It's us who ain't reasonable." ......................... (b)

"He's a reasonable fellow" Andy explained. "That's what the sheriff said. "It's us who ain't reasonable." ......................... (c)

"He's a reasonable fellow," Andy explained. "That's what the sheriff said. It's us who ain't reasonable." ......................... (d)

39. When asked, for her favourite quotation, Moira replied:
   Peanut's line, "Drop dead." "  ........................................ (a)

   When asked for her favourite quotation Moira replied,
   "Peanut's line "Drop dead."  ............................. (b)

   When asked for her favourite quotation, Moira replied,
   "Peanut's line: 'Drop dead.'"  ......................... (c)

   When asked for her favourite quotation, Moira replied,
   "Peanut's line: 'Drop dead.'"  .......................... (d)

   When asked for her favourite quotation, Moira replied,
   Peanut's line "Drop dead."  .......................... (e)

40. The husband asked. Did Princess Diana use "obey" in her marriage vows?  ........................................ (a)

   The husband asked, "Did Princess Dianna use obey in her marriage vows?  ............................ (b)

   The husband asked, "Did Princess Diana use "obey" in her marriage vows?"  ........................................ (c)

   The husband asked, "Did Princess Diana use 'obey' in her marriage vows'?  ........................................ (d)

   The husband asked, "Did Princess Diana use 'obey' in her marriage vows'?"  ........................................ (e)
41. The results of her exam came yesterday she hadn't expected them.
   (a), after "yesterday"
   (b); after "yesterday"
   (c): after "yesterday"
   (d) no further punctuation required

42. Much to his frustration, he lost another lure furthermore, he knew he could not get more.
   (a); after "lure"
   (b), after "lure"
   (c) - after "lure"
   (d) no further punctuation required

43. The following selections will be played "Dance of the Sugar Plum Fairy," "The Dance of the Toy Soldiers," and "The Little Drummer Boy."
   (a); after "played"
   (b): after "played"
   (c) ["Dance of the Sugar Plum Fairy," "The Dance of the Toy Soldiers," and "The Little Drummer Boy"]
   (d) no further punctuation required

44. Shakespeare tells us "Frailty, thy name is woman."
   (a) ("Frailty, thy name is woman.")
   (b): after "us"
   (c); after "us"
   (d) no further punctuation required

45. Fred was spending Christmas in Hawaii Jodi, at Whistler Chris, at Big White.
   (a), after "Hawaii" and "Whistler"
   (b); after "Hawaii" and "Whistler"
   (c): after "Hawaii" and "Whistler"
   (d) no further punctuation required

46. Her plans are as follows to graduate from high school, to work for six months, and to travel to South America.
   (a) - after "follows"
   (b); after "follows"
   (c): after "follows"
   (d) no further punctuation required
47. Did you know that Sea Attle sic was named after a wonderful Indian chief.
   (a) [sic]
   (b) [sic]
   (c) (Sea Attle)
   (d) no further punctuation required

48. The wind howled at over 80 kph trees fell down, power lines broke, creeks overflowed their banks.
   (a) ; after "kph"
   (b) : after "kph"
   (c) , after "kph"
   (d) no further punctuation required

49. In her Jane Fonda's performance I felt real pathos.
   (a) (her)
   (b) (Jane Fonda's)
   (c) [Jane Fonda's]
   (d) no further punctuation required

50. One of your purposes in studying in Quebec is to improve your fluency in French in addition, you should expand your awareness of French culture.
   (a) : after "French"
   (b) (in addition,)
   (c) ; after "French"
   (d) no further punctuation required

51. Skiing he had skiied since he was three was his favourite sport.
   (a) — he had skiied since he was three —
   (b) ; he had skiied since he was three
   (c) , he had skiied since he was three
   (d) no further punctuation required

52. The sum of eighty dollars $80 was paid to the Scouts for the wood.
   (a) .... $80
   (b) [$80 ]
   (c) ($80 )
   (d) no further punctuation required
SECTION III:

SUBJECT-PREDICATE AGREEMENT, VERB USAGE,
PRONOUN USAGE, PREPOSITION USAGE, MISPLACED MODIFIERS

Choose the answer which makes a correct sentence.

53. Betsy is one of those parrots who ________ too much.

(a) talk
(b) have talked
(c) to talk
(d) talks

54. Weather analyses ________ suggested a coming new ice age.

(a) has
(b) did
(c) are
(d) have

55. Each of us who ________ Paris finds something beautiful.

(a) visit
(b) visiting
(c) visits
(d) do visit

56. Neither the employees nor the employer ________ pleased with the wage settlement.

(a) are
(b) were
(c) is
(d) being

57. John, along with his twenty friends, ________ to spend the summer with us.

(a) hope
(b) hoping
(c) hopes
(d) hopefully

58. None of the passengers ________ injured in the train derailment.

(a) were
(b) are
(c) was
(d) wasn't
59. There ______ an elephant and a crocodile on my back porch.
(a) is
(b) be
(c) has been
(d) are

60. The convict knew he would be _______ in the morning.
(a) hanged
(b) hunged
(c) hung
(d) hanging

61. The young girl _______ in bed all day Sunday.
(a) lied
(b) layed
(c) lay
(d) laid

62. For the past week I have _______ about the house with nothing to do.
(a) lain
(b) laid
(c) layed
(d) lied

63. _______ the stewpot on the stove, Maisie.
(a) Set
(b) Sit
(c) Sat'
(d) Setted

64. She _______ the truth from me by various devious devices.
(a) rung
(b) rang
(c) wrunged
(d) wrung
65. Michael and ___________ plan to run five miles each day.
   (a) him  
   (b) I 
   (c) us 
   (d) me 

66. Why aren't the coaches in favour of ___________ changing my training regime?
   (a) me 
   (b) us 
   (c) mine 
   (d) my 

67. Both Peter and Natalie play very well, but she plays more beautifully than ___________.
   (a) himself 
   (b) him 
   (c) his 
   (d) he 

68. The person ___________ I despise sits next to me in the library.
   (a) who 
   (b) that 
   (c) whom 
   (d) which 

69. The school presented Fonzie and ___________ the Nerd Award for 1982.
   (a) he 
   (b) me 
   (c) I 
   (d) we 

70. Everyone must bring ___________ donations to school tomorrow.
   (a) their 
   (b) its 
   (c) his 
   (d) they're
71. I admire that policeman because her job is so taxing.
(a) because her job is so taxing.
(b) because it is such a taxing job.
(c) because their job is so taxing.
(d) because you have such a taxing job.

72. The team won the final league game which meant it would play in the finals.
(a) This victory .......
(b) which .......
(c) This .......
(d) That .......

73. That idea is certainly inferior to the last one I heard.
(a) from
(b) to
(c) as
(d) between

74. It is unwise for the student to compare herself to others who have different interests.
(a) to
(b) besides
(c) between
(d) with

75. There is little similarity among my tastes and yours.
(a) among
(b) between
(c) from
(d) as to
76. Most counsellors convince their students to agree _________ a regular routine of home study.

   (a) on  
   (b) with 
   (c) from 
   (d) to

77. Your opinion of the Premier's performance differs quite radically _________ mine.

   (a) to 
   (b) with 
   (c) from 
   (d) than

78. In my pocket I looked for the keys I had lost.

   I looked for the keys I had lost in my pocket. .................. (a) 
   I looked in my pocket for the keys I had lost. .................. (b) 
   I looked for the keys in my pocket I had lost. .................. (c) 
   I looked for the keys I had lost in my pocket. .................. (d)

79. Striding aggressively into the room, my eyes fell upon the figure cowering in the corner.

   My eyes, striding aggressively into the room, fell upon the figure cowering in the corner. .................. (a) 
   Striding aggressively into the room, I gazed upon the figure cowering in the corner. .................. (b) 
   Striding, my eyes fell aggressively upon the figure cowering in the corner. .................. (c) 
   Striding, my eyes fell aggressively upon the figure cowering in the corner. .................. (d)
80. The Cheshire cat hid himself behind the T.V. with cunning. .......... (a)
    With cunning behind the T.V. the Cheshire cat hid himself. .......... (b)
    The cunning Cheshire cat hid himself behind the T.V. ............... (c)
    The Cheshire cat behind the T.V. with cunning hid himself. .......... (d)

81. Romeo received news that Juliet was dead from another messenger. .... (a)
    Romeo received news that Juliet from another messenger was dead. .... (b)
    From another messenger, Romeo received news that Juliet was dead. .... (c)
    Romeo received news from another messenger that Juliet was dead. ..... (d)

82. I only caught one salmon on that fishing trip. ...................... (a)
    I caught one salmon only on that fishing trip. ...................... (b)
    I caught only one salmon on that fishing trip. ...................... (c)
    I caught one salmon on that fishing trip only. ..................... (d)

83. The old gardener was only able to do part of the yardwork. ........... (a)
    The old gardener was able only to do part of the yardwork. .......... (b)
    The old gardener was able to only do part of the yardwork. .......... (c)
    The old gardener was able to do only part of the yardwork. .......... (d)

84. Ten years ago girls used to come to school where I was a teacher in barefeet. ........................ (a)
    Ten years ago girls used to come in barefeet to the school where I was a teacher. .................. (b)
    Where I was a teacher in barefeet, girls used to come to school. .... (c)
    In bare feet I used to be a teacher in a school where girls came. .................................... (d)
85. They had almost raked all of the leaves before their folks got back.  
They had raked all of the leaves almost before their folks got back.  
They had raked all of the leaves before their folks almost got back.  
They had raked almost all of the leaves before their folks got back.  

86. Seeing Vivien Leigh, a fainting spell overcame me.  
Seeing Vivien Leigh, I fainted.  
Me seeing Vivien Leigh caused a fainting spell.  
Seeing Vivien Leigh, the vapours occurred.  

87. The actor was asked to only repeat the last line.  
The actor was asked to repeat only the last line.  
The actor repeating only the last line was effective.  
Repeating only the last line, an effective performance was given by the actor.  

88. The coach choosing Wayne Gretzky surprised me.  
The coach's choosing Wayne Gretzky surprised me.  
Choosing Wayne Gretzky, everyone was surprised by the coach.  
Chosen by the coach, everyone was surprised by Wayne Gretzky.  

89. Considering all the suggestions, Handsworth should win the pennant.  
All indications suggest Handsworth winning the pennant.  
All indications suggest Handsworth's winning the trophy.  
All suggestions considered, Handsworth should win the pennant.
90. Starring in *French Lieutenant's Woman*, Meryl Streep gives a superb performance. ................................................................. (a)

Starring in *French Lieutenant's Woman*, a superb performance is given by Meryl Streep. ................................................................. (b)

Starring in *French Lieutenant's Woman*, everyone admired Meryl Streep's performance. ................................................................. (c)

Starring in *French Lieutenant's Woman*, everyone praised Meryl Streep. ................................................................. (d)
### Section IV.

**Dictionaries and Thesaurus, Vocabulary**

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
</table>
| 91. A standard Thesaurus contains | (a) pronunciation  
(b) word origins  
(c) syllabication  
(d) correct usage  
(e) a list of synonyms |
| 92. The correct syllabication of "acquisition" is | (a) ac - qui - si - tion  
(b) ac - qui - sition  
(c) acqui - si - tion  
(d) acquis - i - tion |
| 93. In the dictionary the word "costume" is followed by the abbreviations "n." and "v." | (a) parts of speech  
(b) "new" and "variable"  
(c) the origins of the word  
(d) the fact that the word is a proper noun  
(e) none of the above |
| 94. The Latin root "manu" means "hand." "Manuscript" means | (a) left handed  
(b) written by hand  
(c) medieval script  
(d) carbon copy  
(e) none of the above |
95. A dictionary contains

(a) pronunciation, synonyms, history of the language
(b) word meanings, pronunciation, and syllabication
(c) word meanings, autobiography, word origings
(d) word origins, biographies, parts of speech
(e) all of the above

96. Train your dog ________

Barbara Wodehouse does.

(a) like
(b) how
(c) as
(d) by

97. I cannot ________ his explanation

for being away from class again.

(a) exsept
(b) assept
(c) accept
(d) except

98. Your statement leads me to the ________

that the economy is worse than I thought.

(a) implication
(b) implying
(c) inference
(d) inferring

99. Your constant complaining ________

me.

(a) aggravates
(b) irritates
(c) either "aggravates" or "irritates"
(d) neither "aggravates" nor "irritates"

100. The visual ________ were stunning.

(a) effects
(b) affects
(c) effections
(d) effectations