THE IMPACT OF COMPUTER-ASSISTED AND NON COMPUTER-ASSISTED INSTRUCTION ON GRADE XI STUDENTS' WRITING

A Thesis

Submitted to the Faculty of Graduate Studies

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For the Degree of

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by

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ABSTRACT

This research compared the impact of three types of prewriting and editing instruction (computer-assisted, non computer-assisted, and textbook-based) on the writing fluency, quality and style, and errors counted in Grade XI students' compositions.

Eighty Grade XI English 201 students from four individual classrooms of one Canadian suburban school in Winnipeg, Manitoba wrote a pre-test composition. Students within each of two of the classes were randomly assigned to one of two instructional patterns, each of which involved the use of computers at a minimum of one point in the instructional sequence. Students within a third class received the same instruction without computers. Students in a fourth class received textbook-based instruction. After completing their instruction, all subjects wrote a post-test composition. The researcher recorded the number of words and errors in each pre- and post-test, randomized and distributed the tests to two independent markers who scored them for general impression, quality and style.

Analyses of variance indicated an interaction between prewriting and editing instruction. Subjects who used computers for prewriting and composing or for composing and editing demonstrated more growth than subjects who used computers at every stage or than subjects who used computers for composing only. Comparisons between each word processing group and the control group, who received the same instruction without computer assistance, showed significant differences in favor of the word processing groups. Comparisons between each word processing group and a reference group, who received textbook-based instruction, revealed that the single most successful group was the one given computer-assisted prewriting and composing. Comparisons between the control and reference groups indicated significant differences favoring the reference group.

The results of the study led the researcher to conclude that: (1) some computer assistance was more beneficial than computer assistance at every stage of instruction; (2) computer-assisted prewriting or editing combined with word processing was more effective than the same instruction given without computers; (3) word processing combined with non computer-assisted instruction in prewriting or editing was more beneficial than the same instruction without word processing; (4) the most efficacious instructional pattern involving computers as compared with textbook-based instruction was computer-assisted prewriting combined with word processing; (5) the number of errors subjects made was unaffected by any method of editing instruction used in this study.

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CHAPTER I

INTRODUCTION

Background to the Study, Rationale

Recently, computer programs have been developed to assist students in generating and organizing their ideas before composing. It is possible that this assistance might enhance students' writing in terms of fluency, style and other qualities. While some research indicates that computers might provide a valuable aid during prewriting (Gillis, 1983), other investigations cast doubt upon the benefit of computer- assisted prewriting (Woodruff, Bereiter and Scardamalia, 1981).

Many reports exist citing the positive results observed after students have been introduced to word processing for composing. Some teachers who initiated word processing among their students claim that writing with a computer develops in students a deeper sense of audience (Jacoby, 1984; Womble, 1984; Brisk, 1985) and a greater consciousness of the process they utilize when writing (E. Sommers, 1984; Womble, 1984). In studies done by (Kane (1983), Kurth and Stromberg (1984), and Phenix and Hannan (1984), students using word processing programs stayed longer with their drafts making changes, and some even produced more drafts than they had using pen and paper. Faigley and Witte's research (cited in Bridwell, 1981) suggests that the more drafts students create, the more they tend to revise for meaning. Technology that aids writers in

producing a number of drafts with relative ease might help students to initiate important revisions in their drafts that will result in more satisfactory finished products.

Rodrigues (1984), Brisk (1985), and Daiute (1985), instructors who have described their experiences using computers in teaching composition, attest to the favorable change in attitude toward writing that results when students are taught word processing skills. Protocols collected in studies undertaken by Bridwell and Ross (1984) and Phenix and Hannan (1984) support the observations of Rodrigues, Brisk, and Daiute. However, the results of studies completed by Bridwell and Ross (1984) and Lansing (1984) suggest that the ease with which a student adjusts to using a word processing program and the degree to which he is successful in using it to produce improved writing depends upon his personal composing style. As Lansing notes, "The value of a word processor is equal to a student's ability to use it to become a better writer." (1984 p.27).

Research in the use of computers in composition instruction at the point of revision or editing has shown that students do not change their revision strategies when using a computer. The studies of Gerrard (1981), Collier (1983), Harris (1985), and Daiute (1984) reveal that students using computers might make more superficial changes to their text than they would without computers. However, not one of the researchers discovered an increase in the number of changes for meaning when their subjects began to

revise on computers. The results of experimental use of computer- based text analysis programs are less conclusive. Whereas Anandam (1979) noted no improvement in her subjects' editing ability, Keifer and Smith (1983) found their subjects outperformed non-computer groups significantly. It is quite possible that appropriate use of the right text analysis program will help students to produce writing that is freer from error than their writing had been when edited following more conventional methods.

At the present time it is not clear whether introducing computers into the composing process will result in measurable improvements in the quality of student writing. It may be the case that computer assistance is more beneficial at some points in the process than at others. It would appear that the ability of computers to provide an individualized interactive environment, to permit easy revision of text, to analyze text for particular features providing feedback regarding possible errors make them ideal tools for student writers.

Statement of the Problem

Significance

It is hoped that the present study will help to answer some of the questions concerning the effects of using computers within the writing process. The body of previous research examining the use of computers in composition instruction is relatively small. Recently, as the number of

microcomputers in schools and homes has rapidly risen, educators have become increasingly interested in discovering ways in which the technology can be applied best in the teaching of writing. Many questions concerning what materials should be used, and how and when instruction in computer use will prove most efficacious for learners, have yet to be to be answered. Insufficient research into the nature of effective software has made it difficult for teachers of writing to choose programs with confidence. Few researchers have examined whether employing computers will lead to improvements in student writing performance over more conventional instructional methods. Great gaps exist between claims that writing with computers improves students' attitude toward writing while increasing their awareness of audience and writing as a process, and conclusive research findings that writing with computers produces better writing than that done without computers.

Purpose of the Study

The purpose of this study was to compare the impact of three types of prewriting and editing instuction on the writing fluency, quality and style, and number of errors counted in the compositions of Grade XI students. The three types of instruction are computer-assisted, non-computer-assisted, and textbook-based.

From the stated purpose of this study the following research questions were generated:

1. Do students composing with a word processing

program produce better quality writing when they use a computer program designed to assist them through their prewriting?

2. Do students composing with a word processing program produce better quality writing when they use a computer-based text editor?

3. Is there a differential effect on the writing of students when they are exposed to word processing and different combinations of prewriting and editing instruction (with or without computers)?

4. Does composing with a word processor combined with either computer-assisted or non computer-assisted instruction in prewriting and editing improve performance more than methods not employing word processing or any sort of computer-assisted instruction?

5. Does any single instructional pattern involving word processing, prewriting, and editing affect perfomance more than the same instruction without word processing?

6. Does any single instructional pattern involving word processing, prewriting, and editing affect performance more than textbook-based instruction?

7. Does systematic instruction in prewriting and editing without computers affect performance more than textbook-based instruction?

Student performance was evaluated on the measures of fluency, quality and style, and error.

Definition of Terms

1. Analytic Scales . A group of measurements devised by the researcher based on several components of the 1982 Manitoba Writing Assessment. After student compositions had been read and scored for general impression, they were reread and marked on the following seven major qualities:

   1. Organization and Coherence
   2. Wording
   3. Style
   4. Paragraph Focus
   5. Quality of Ideas
   6. Choice of Details and Elaboration of Ideas
   7. Sentence Structure

   (See Appendix A for a description of the Analytic Scales.)

2. "Better Writing" . A judgement proferred upon those compositions that contained more words, fewer errors, and gained higher marks on the Analytic Scales and GIM.

3. Character Sketch . A composition focusing on an analysis of external and internal qualities of a real or fictitious person.

4. Computer- Assisted Instruction (CAI) . For the purposes of this study, commercially- designed computer software.

5. Conventional Teacher- Designed Editing . For the purposes of this study, the procedures of editing normally followed by the students with or without teacher assistance.

6. Editing . Proofreading to find and correct errors in

style, mechanics, and usage.

7. Fluency . The number of words written by a student in a single composition.

8. Freedom from Error . An assessment based on a count of the number of errors of any of the twenty-two types compiled by the researcher based on the twenty-two types of errors flagged by "MECC EDITOR", the text analysis program used in this study. (See Appendix B for a description of the twenty-two types of errors.)

9. General Impression Marking Scale (GIM) . A scale used to rate quality and effectiveness of compositions in a general, global manner. (See Appendix C for a description of the use of the GIM Scale.)

10. Keyboard Experience . For the purposes of this study, exposure to at least one typing class and / or previous experience in using a computer at home or at school.

11. Prewriting . Any activity preceding composing that engages a student writer in finding ideas, a point of view, details, reasons, examples, or an approach to a writing task. Examples of such activities include brainstorming, discussions, and freewriting.

12. Quality and Style . A dependent variable measured with the aid of the GIM Scale and the Analytic Scale devised by the researcher.

13. Software . Computer programs; the list of instructions that tell a computer what to do.

14. Systematic Non- Computer-Assisted Instruction . For the

purposes of this study, teacher-led lessons planned to resemble as closely as possible, both in content and in presentation style, the computer- assisted instruction used in the study.

15. Text Analysis (or computer-assisted (CA) text analysis) . For the purposes of this study, a proofreading done by a computer-based text editor or by a student. The text editor or the student reads through a composition to identify any of the twenty-two types of errors the computer-based text editor is programmed to flag.

16. Textbook-based Instruction . Instruction focused on Chapter 12, pp. 291-313 of Developing Writing Skills . Canadian Third Edition. Edited by W. W. West, S. D. Bailey, & B. L. Wood. Scarborough, Ontario: Prentice- Hall, 1981. (See Appendix D.)

17. Text Editor . For the purposes of this study, a computer program that analyzes a composition and points out possible errors in style, usage, and mechanics. Appendix B lists the twenty-two possible errors flagged "MECC EDITOR" which was used in this study.

18. Tutorial . A computer program that instructs a student in some area of knowledge. Most tutorial programs resemble Socratic dialogues in which the computer presents information and asks questions calling for the student to type in responses that the tutorial program has prepared the computer to anticipate. Depending upon the content of the response, the computer provides more information and asks

further questions. The tutorial employed in this study is "Writing a Character Sketch". (See Appendix E for a description of the objectives and an outline of this program's content.)

19. Word Processing Program (or Word Processor) . A computer program that enables a user to correct mechanical errors, move text around, delete or add words, sentences, or whole pages, and implement a variety of other changes on a video screen before printing the final version of a paper.

Limitations of the Study

The following limitations to this study are perceived by the investigator to be the most important:

1. Since all the participants originated from one suburban high school, the generalizability of the findings to a larger population of English 201 students is limited.
2. The researcher's inability to select students randomly might have affected the results. Some students were randomly assigned, but this was impossible to do in all cases.
3. The small numbers of subjects involved in the word processing groups might also have affected the outcome.
4. This study examined the impact of three specific computer programs on students' writing. The findings herein cannot be generalized to predict the impact of other programs developed to assist students with their writing.
5. No doubt the results might have been somewhat different

had the instruction been extended over a longer period of time. Although all the students had used computers previously at home or in school, they had never before encountered the programs to which they were exposed in this study. Given more time to work with the programs, students might have overcome any difficulties or been less affected by novelty.

6. The control group underwent the same instruction given the word processing groups but without the computers. However, the word processing groups were instructed by their regular teacher while the control group was taught by the researcher. This fact alone might have influenced the results which indicate little or no growth on the part of the control group. However, as was discussed in Question 5 of Chapter IV, the control group's progress was possibly affected to some degree by its previous writing experiences and the nature of its pre-test assignment.

Overview of the Study

This study compared the effects of different patterns of composition instruction (computer-assisted, non computer-assisted, and textbook-based) on the fluency, quality and style, and number of errors found in the writing of Grade XI English 201 students.

Chapter I has presented the rationale for the study, discussed the significance of the investigation, stated the purpose of the study, listed the questions generated from

the stated purpose, defined the terminology pertinent to the study, and documented the limitations of the study.

Chapter II will review the relevant literature and research.

Chapter III will describe the sample and the design and procedures followed in the study.

Chapter IV will present and discuss the results of the analyses of the data.

Chapter V will offer a summary of the findings, conclusions drawn from the findings, and implications of the investigation.

CHAPTER II

REVIEW OF RELATED RESEARCH

Introduction

Traditionally in composition class, a student wrote his paper on an assigned topic before submitting it to the teacher who marked the errors, made some comments, and returned the paper to the student for correction. From this process some students learned to write, while others learned only that it was important to submit a finished product that was as grammatically and mechanically correct as they could make it. For the most part, the teacher was the assumed audience. Over the past fifteen years the traditional composition paradigm has been rejected by an ever increasing number of writing teachers. They have been discouraged by their lack of success in teaching children how to write effectively.

A new writing model is gradually replacing the linear, product-focused paradigm. The more recent model emphasizes the importance of the writing process as a dynamic act of discovery involving the general activities of prewriting, composing, revising, and editing. Prewriting activities include choosing and thinking about a topic, writing notes, and making a plan. Composing involves transcribing these ideas into text for the purpose of communication. Revising is an activity that is likely to occur at any given point in the writing process. It is

undertaken to make changes in ideas, organization, and style. Editing encompasses the making of further changes to correct spelling, punctuation, and usage. Unlike more traditional composition instruction, the new model describes a recursive, multi- step process during which writers may go back and forth between the steps as needed. This process-oriented model is supported by several experts who have examined what writers of varying capabilities do when they are engaged in writing (Britton, 1978; Elbow, 1973; Emig, 1971; Flower and Hayes, 1980; Murray, 1968,1978; Perl, 1980; Sawkins, (cited in Petty, 1978); N. Sommers, 1980; Stallard, (cited in Petty, 1978); Warters, 1981). Although not all of these experts describe the newer model in precisely the terms used in this paper, all advocate a process approach to writing instruction, an approach supported by research.

A number of studies suggest that instruction involving prewriting strategies results in improved student writing. Radcliffe (cited in Cooper and Odell, 1976), and Zoellner (cited in Cooper and Odell, 1976) concluded from their respective studies that students who discuss their ideas before beginning to write are later better able to clarify their thoughts in writing. In her review of composition research involving studies with college freshmen, Bamberg (1978) cites studies by Rhoman and Wlecki, McColly and Remstad, Widvey, and Sanders and Littlefield, all of whom found that the various prewriting methods they employed in instruction operated consistently as factors

responsible for improving student writing. Hilgers' (1980) discusses the results achieved by experimenters using tagmemic heuristics as aids to invention (Findlay, 1974; Odell, 1974; Young and Koen, 1973). Evidently, while some of these researchers cited by Hilgers encountered success with the tagmemic approach, others experienced failure. Hilgers also describes the results of his own study which involved college freshmen and which supports freewriting as a useful invention heuristic.

Other studies described by Braddock, Lloyd-Jones and Schoer (1963) imply that instruction in revision and / or editing is also a factor in improving the writing skill of students. Fellows' (cited in Braddock, Lloyd-Jones and Schoer, 1963) sixth-grade subjects, who revised their compositions after their teachers had corrected them, showed small gains in their ability to use correct grammar and punctuation. Lyman's (cited in Braddock, Lloyd-Jones and Scoer, 1963) subjects, drawn from grades six to nine, reduced their number of grammatical and mechanical errors by more than half after having learned how to identify and correct such errors before submitting their papers.

Later studies, all concentrating on college freshmen, point to the benefits students gain from instruction in revision and editing techniques. Bamberg (1978) reviews the research of Maize; Buxton; and McColly and Remstad all of whom combined guided revision with increased writing frequency to achieve significant results.

While Maize's subjects participated in peer evaluations and Buxton's received intensive teacher evaluation, McColly and Remstad's students had the benefit of both peer and teacher feedback. All three studies discussed by Bamberg suggest that some form of revision instruction, which gives students immediate opportunities to act on suggestions for improvement, is vital in improving student writing.

Studies conducted by Hansen (cited in Gentry, 1980), Calkins (cited in Beach and Bridwell, 1984), Beach (cited in Beach and Bridwell, 1984), and Faigley and Witte (cited in Bridwell, 1984) further support the contention that greater emphasis on revising and editing results in improved student writing. Hansen's students benefitted noticeably from guided discussion of revision and editing techniques that could be effective in improving writing. Both Calkins and Beach noted that the more substantive revisions their students performed, the higher the quality of their writing. Faigley and Witte discovered that the more drafts their students created, the more they revised for meaning instead of merely "touching up" surface structure.

Experts on instruction in composition appear to agree that writing can and should be taught as a process (Britton, 1978; Elbow, 1973; Emig, 1971; Flower and Hayes, 1980; Murray, 1968, 1978; Perl, 1980; Sawkins (cited in Petty, 1978); N. Sommers, 1980; Stallard (cited in Petty, 1978); Warters, (1981). Although prewriting activities often aid students in thinking of ideas, teachers should impress

upon their pupils that they do not have to know everything they want to say before they begin to compose. Murray (1978) writes that composing should be seen as an adventure without enormous risk, and revision as a natural part of the writing process. He theorizes that more revision should improve the writing of students of all abilities. Furthermore, Murray suggests that more attention to revision may also increase students' appreciation of literature as they achieve a better understanding of the process undertaken to produce great works. However, as Warters (1981) points out, merely exposing students to activities designed to alert them to the idea that writing is a process will not necessarily result in permanent changes in their writing behavior. If a major obstacle to improving student writing is negative attitude, unless students adopt a positive attitude toward writing as a process they can learn, they will fail to internalize strategies and never really break out of their ineffective writing patterns (Warters, 1981).

Introducing Computers into the Writing Process: A Rationale

Many experts think that writing with computers makes students view writing more positively (Selfe, 1984; Marcus, 1984a; Brisk, 1985; Rodrigues, 1984; Kane, 1983; Gerrard, 1981; Keifer and Smith, 1983). In her recent book Writing and Computers , Daiute suggests that the computer can aid students in overcoming some of the cognitive difficulties to

which they fall prey in writing. "Such a writing instrument can blur the distinctions between thinking, talking, and writing in a way that the pencil and typewriter have not" (p.vi). The cognitive processes of speaking and writing are similar. Both speakers and writers must find information, set goals, and select appropriate language for expressing their ideas. Writing is the less natural of the two modes. Daiute posits that students who learn to compose with the computer may find it easier to bridge the gap between oral and written expression because working on the computer is interactive. A writer gives a command, and the computer program carries it out. This interaction may serve to remind the writer of the fact that he is writing not just for himself, but for a potential reader. These benefits of using a computer in writing, as well as others, should improve student attitude toward writing.

The computer may give writers greater conscious control over their cognitive processes (Daiute, 1985). Writing is slower than speaking and subject to more intense scrutiny. Writers who try to do everything at once- collect ideas, set goals, choose appropriate language, and express themselves- tend to be less successful than those who exert greater control over their writing process. Less successful writers may be overloading themselves cognitively. "Writing a draft can be like trying to get dressed in a small closet; the mental space available for researching, planning, composing, transcribing, and revising is too small for all

the necessary activities" (Daiute, 1985, p.60). Computers may have the capacity to reduce the task load.

In fact, according to many people experimenting with the use of computers in compostion, computers are ideally suited to the process approach to writing (Arms, 1983; Daiute, 1984, 1985; Wheeler, 1985). The process approach helps writers to overcome short-term memory overload and to reflect on their thoughts and texts more objectively (Daiute, 1985). Programs are available to lead students through a number of prewriting strategies. Claims have been made that, since students find revision easier to do on a computer, they will make more revisions to improve their work. The computer takes over the tedious tasks for the writer.

Not only do Daiute (1984, 1985) and Wheeler (1985) see the computer as advantageous in assisting writers when they need help, but as a tool which can be used by teachers to aid them in their endeavours to encourage improved writing. Both Daiute and Wheeler suggest that computers can actually compel learners to focus on the various stages of the writing process. In addition, Wheeler points out that computers can individualize a student's progress, promote peer interaction and collaboration, or facilitate student / teacher interaction. Contrary to the fears of some people, one thing computers cannot do is replace teachers who train students in making informed decisions about what to include in their compositions and where (Arms, 1983).

Perhaps computers can effect changes to student writing behavior, but can they actually change student writing in any identifiable way? In an effort to answer that question, researchers have examined the impact of computers on writers at each step of the writing process. It is to a consideration of that work that this paper now turns.

Computers and Prewriting

The objective of prewriting is to provide a strategy that writers can use to enhance the discovery of ideas to write about and a structure in which to express those ideas. Students should be able to work at a higher level of composing if a heuristic helps with the invention and organization of ideas (Smye, 1984). Beginning writers need encouragement to develop cognitive skills that will stimulate the kind of thinking necessary for productive prewriting. They must learn how self-questioning can lead to a workable topic. They should practise analysis of their ideas to try to identify relationships between them and to evaluate their data. Teachers can help students to unify and organize their material to support a thesis. The abilities to exemplify, to render the abstract topic concrete, and the general topic specific will also develop with the proper guidance.

Although authorities agree that prewriting is important, it is not always given the attention it should. Teachers must decide to allow more time for students and

groups of students to utilize the various strategies, many of which are now available in the form of computer programs. Burns' (1984) programs are composed of a series of questions based on Aristotle's topics, Burke's pentad, or Young, Becker, and Pike's tagmemic matrix. The questions prompt students to explore their topic, generating notes and an approach for discussion of their ideas. Wresch's (1982) "Essay Writer" program forces students to narrow their chosen subject and select an approach. Then, through questions, it elicits detail from the student, helps him to discover his major points and suggests a possible organization for a short essay. The prompting heuristics designed by both Burns and Wresch set up a conversation much like a student might have with a teacher during a conference. The question prompts require the student to clarify his ideas. They remind the student that there will be a reader. Daiute (1985) points out that, unlike a list of similar questions given on paper, computer prompts can be presented individually when the writer requests them. Thus, a writer progresses through his prewriting one step at a time, at his own pace, and independent of a teacher.

At the University of California, Marcus (1984) reports on the "invisible writing" technique employed by the South Coast Writing Project. The brightness was turned right down on the monitors of the computers at which students were working. Students could not see their prewriting although it was recorded by the word processor. Later they reported that

"invisible writing" helped them to produce writing that "came more from within" (Marcus,1984, p.6). Marcus suggests that, since his students were not revising all along as they usually did, they were able to concentrate solely on their ideas.

As Rodrigues and Rodrigues (1984) point out, there are a number of heuristics possible for prewriting. The one that works best for a particular writer depends upon how he thinks and writes. Daiute (1985) suggests that the kind of writing may also be a determining factor in the writer's choice of strategy. Ideally then, a computer program for prewriting should offer writers a range of options. Typically, studies involving the use of computers in prewriting reveal that researchers have not provided subjects with any choice of strategies.

To evaluate the impact of computer programs designed for prewriting on the quality of writing produced by college freshmen, Gillis (1983) divided his subject pool into three groups. The first group received instruction and practice in prewriting provided by a teacher. The second group worked with tutors who gave the same instruction given the first group but on an individual basis. The third group were exposed to computer-assisted prewriting. Gillis' results show that the computer-assisted group of subjects gained in every category of measurement utilized. Their performance was reported to be significantly better than both of the other groups on two of the post-test measures. Gillis

concluded that computer assisted prewriting is as good a means of prewriting instruction as a human tutor method and better than whole class instruction.

Also working with college freshmen, Hocking (1983) introduced his self-written program to structure brainstorming. His intention was to force students to think deeply about their subjects and to give them an opportunity to discover more possibilities for handling those subjects. The students' efforts were collaborative to an extent because groups of four worked at the computers, one student doing the program with the others watching. Hocking observed that the program helped the students to select and narrow a topic. They either discarded a topic part way through when they realized it was not useful or modified their original topic. Hocking felt they sought his advice more often, seemed more committed, and worked harder writing their papers. They liked the small group collaboration and prewriting with the computer, but told Hocking that they felt they could benefit more from individual attention. After grading their papers, Hocking concluded that the better students, who had seemed much more motivated than when traditional methods were employed, benefitted most from their use of the computer. Average students appeared to have been affected more in motivation than in the quality of their finished writing. The weakest students in Hocking's class, he felt, did better than former weak students had done without computer assisted prewriting. At the end of his

report Hocking remarks that while computer-assisted prewriting can help teachers to individualize their compostion classes, it is not the most appropriate method of providing prewriting experience for all students.

Hocking's observations did not follow formal research methods and are, therefore, far from conclusive. They are based on the experiences of one group of students who were using his prewriting program for the first time. Formal research procedures and measurement as well as several exposures to computer-assisted prewriting might have yielded different results. For example, Hocking might have determined that the computer was no more than a novelty to his group or that it was a significant factor in improving the quality of his students' writing increasingly over time as they became more familiar with its use as a tool. Furthermore, it is unclear to what extent collaboration among his students affected their attitudes and the quality of their written products.

At the Ontario Institute of Studies in Education, Bereiter and Scardamalia (cited in Woodruff, Bereiter, and Scardamalia, 1981) have investigated the effect on children's writing of presenting them with "procedural facilitators" (idea starters, question prompts, brainstorming, and other prewriting strategies). They have learned that these strategies greatly assist writers, seemingly by lightening their cognitive load. Woodruff, Bereiter and Scardamalia (1981) decided to try to determine

whether the computer would provide greater assistance to students since it could present procedural facilitators one at a time.

Their first study involved sixth grade children with no previous computer experience and little or no typing skill. The children composed more slowly on the computer, but they did take advantage of the facilitators offered by the computer. Whereas the subjects involved in Bereiter and Scardamalia's earlier studies (cited in Woodruff, Bereiter, and Scardamalia, 1981) had been given no option in the type of facilitator they would use, the children in this study could choose from a list of alternatives. The researchers claim that the pupils' compositions reveal efforts to implement some of the ideas generated by the prewriting activities. Although the computer represented a novelty, the children were motivated to use the computer's help to improve their work.

In a second study, Woodruff et al. (1981) presented to eighth graders an improved version of the computer program they had used in their initial study. The program was expected to elicit ideas for use in writing an opinion paper, clarify the writer's position, and help him to support it. All of the subjects had had some experience with computer-assisted instruction. The outcomes of this experiment indicate better quality compositions were produced by the children who did not have question prompts provided by the computer. The researchers speculated that

even the subjects who had had some experience in typing were overloaded in trying to handle the demands of the keyboard and the novelty of the questioning routine all at once. They concluded that the computer progam was introducing a new, more sophisticated strategy for composing, one which the students would need much more time to adopt. In post experiment interviews, few students said that they thought about the kinds of things the computer asked about during their writing prior to working on the computer, but most indicated that they would in the future. They had enjoyed using the computer and thought it made their writing easier.

Daiute (1985) hypothesizes that the programs employed by Woodruff et al. (1981) interrupted the thought processes of the children too often, thus adversely affecting the quality of their work. She suggests that writers need freedom to progress through writing stages at their own rate (1985, p.78). This could have been achieved had the researchers designed their program to permit more user control over the speed at which prompts were presented. Bereiter and Scardamalia's earlier research implies question prompting does seem to stimulate writers' memories and help them to look at what they know in new ways. If this is so, students should benefit from prompting done with or without a computer.

Computers in Composing

Catano's (1985) observations and interviews

involving two successful novelists who use word processors demonstrate that experienced writers who have adopted the new technology have done so because they have discovered its benefits. Catano's subjects told him that their word processors help them to work more efficiently and sometimes to work more creatively. They can assemble drafts in blocks from freewriting, notes, or outlines, insert ideas as they come to mind, and shift sections of text about easily to experiment with wording and structure. If, as a writer is composing, his thinking about his content changes, it is an easy matter to reflect that change through additions or deletions to his text. The computer allows one to scan a great amount of material at once, thus facilitating "retrospective sructuring", which Perl claims all writers use (cited in Aschauer and White, 1984). Writers who have opted to use a computer have discovered the freedom of producing "fluid" text which permits them to sift through their composed text and implement changes readily (Catano, 1985).

The reports of positive effects of word processing on student writers are many. According to teachers who have introduced their students to computers for writing, students stay longer with a draft making changes and may even produce more drafts than they would using pen and paper (Womble, 1984; Jacoby, 1984). Some teachers have written that youngsters who experience difficulty in forming letters, or whose handwriting is illegible, find these problems

alleviated when they compose at the computer (Daiute, 1985; Brisk, 1985; Jacoby, 1984). Others claim that writing with the aid of a word processor develops in their students a deeper sense of audience (Jacoby, 1984; Womble, 1984 ;Brisk, 1985) and a greater consciousness of the students' own writing processes (E. Sommers, 1984; Womble, 1984). E. Sommers writes that some supporters of the new technology claim it enhances the fluidity of the writers' text. Most articles about computers in composing are testimonials to the positive change in attitude toward writing that results when students are taught word processing skills (Bridwell and Ross, 1984; Rodrigues, 1984; Brisk, 1985; Daiute, 1985).

Not all reported experiences with computers in educational settings have been altogether positive. If the word processing program an instructor has selected for his class is complicated and takes great mental energy and time to master, he may be overburdening his pupils. Some word processing software was originally designed for business purposes and is not easy for novices to use. Furthermore, unless this kind of software is used frequently, users tend to forget how to operate it. Although ease in using a word processor comes with practice, students must not be overburdened with having to learn too many commands and functions at once. If they find the software too frustrating to use, they may use it to perform only the most rudimentary functions that any typewriter could provide. Rodrigues (1984) introduced word processing to her students in stages

demonstrating commands as they complemented the writing process. She did not feel that learning how to use the program interfered with her students' thinking processes as some teachers have indicated (Herrmann, 1984). Her students were enthusiastic about using the computer and did at least as well as her other similar students had previously. However, until recently, when a few pioneering teachers introduced computers to their students, the machines were not used in English classrooms. Research on their impact on student writing is still in its infancy, and findings are far from conclusive.

In a case study of six grade one children using microcomputers for composing, Phenix and Hannan (1984) claim the students spent more time at their writing, included more detail, and made more revisions than they normally did with pencil and paper. These children, accustomed to writing daily, had usually started a new piece each day. After the computers were introduced, many of them began to read what they had written the previous day, and then revise or continue with that text. Phenix and Hannan claim the students gained in confidence and were more willing to engage in risks with their writing. Many came closer to using standard spelling, and after a few sessions working with a computer and their printouts, they began spontaneously to insert spaces between words. When the computers were removed from the classroom, some children exhibited signs that they might have become dependent on the

machines, but this was temporary. The researchers noted that the young writers continued to insert, delete, revise, and edit for spelling and punctuation only after their drafts had been composed. However, the computer was not altogether responsible for the children's healthy approach to their writing process since they were practised in composing in this way before their introduction to computers (Phenix and Hannan, 1984).

Kurth and Stromberg (1984) conducted a study to determine the impact of introducing a simple word processing program on the writing quality of their subjects. Fifth, sixth, and seventh grade children in remedial classes for reading and writing were divided into two groups, one of which used word processors, while the other did not. The word processing group received less instruction than the control group in such composition strategies as prewriting, draft writing, revising, and editing so that they could be given keyboard practice. The compositions submitted by the two groups of subjects were analyzed to determine differences in length of papers, kinds of revisions performed, and number of revisions of each kind. Kurth and Stromberg had classified revisions as to one of three types: surface and word level, phrase and clause level, or sentence and paragraph level. While analysis indicated little difference in finished length or total number of revisions done, the researchers noted that the subjects in their word processing group had done more sentence and paragraph

revisions than their counterparts in the control group. They also turned in more rough drafts than did the other students. Kurth and Sromberg noted that the presence of computers stimulated discussion and collaboration among the students exposed to them.

Kane (1983) wondered whether teaching eighth graders to use a word processor designed for use on microcomputers would help them write to discover their ideas instead of merely writing all they knew about a subject in a linear fashion. She discovered that compositions written on the computer were also developed in a sequential style and that the students' revisions tended to consist of spelling and punctuation changes as they had before computers were introduced. However, they did spend much more time on a single paper and appeared to be more involved in their writing than ever before. All students who completed a composition had modified its sentence structure at some point. Kane concluded that her ten-week mini-course had been too brief to result in much impact on composing processes that had developed over years. She hypothesizes that, with more exposure time, word processing may motivate students to learn new revision strategies that require deeper changes because the computer makes such changes readily.

Bridwell and Ross' (1984) studies of experienced and student writers reveal that different writers employ different composing styles that seem to affect their adjustment to composing on microcomputers. Those writers who

were in the habit of working out a global plan and then executing it made the fastest adjustment to computer writing. Writers who relied on elaborate outlines seemed unable to make the computer work effectively for them. Those who composed many segments of text and then tried to determine the connections between them, as they discovered the text's structure, were not altogether comfortable using computers. Bridwell and Ross suggest that this last group may have preferred working on paper because it is difficult to see many things simultaneously or in juxtaposition on a screen. The researchers concluded that, judging by the quality of papers produced and the variety of techniques used, there is no one right method for writing, and that writers who elect to use computers will have to determine to what extent they want to use them in their writing process. While some may opt to use computers at every stage, others may choose to prewrite and compose by hand before going to the computer to revise.

Lansing's (1984) case studies of two high school students with differing composing styles seem to confirm the findings of Bridwell and Ross. Both subjects were introduced to a simple word processing program designed for use with a microcomputer. One student, a girl, was a reviser more than a planner. The other subject, a boy, preferred to make extensive plans before composing. Holistic evaluation of impromptu essays collected from each of the students provided qualitative analysis. In a quantitative analysis,

Lansing counted the number of words, errors in spelling and punctuation, use of sentence fragments and run-on sentences, and computed the average sentence length of each essay.

Lansing did not see much change in attitude or writing quality in the case of the boy, but in the girl's work Lansing noted a definite improvement in quality of ideas, focus, and development. The girl liked using the computer to help her to revise, but because she refused to proofread, her essay contained
many errors as revealed by the quantitative analysis. The boy, who had never liked writing despite the fact that he was a better than average writer, did not feel relaxed working at the computer. Lansing deduced that neither writer had changed his/her composing habits at the computer. An extensive planner like the boy may find composing on a computer too frustrating to make the adjustment smoothly.

A review of the research reveals that a number of factors influence the impact of word processors on the quality of writing produced by students. The observations of several researchers suggest that teachers planning to integrate word processors into writing classes should choose a program that students can learn to use quickly. If a program is intricate, students may be forced to concentrate more on manipulation of the software than on what they are trying to communicate. Some researchers contend that students are less likely to be overwhelmed with the task of learning how to use a new program if commands are introduced

gradually as needed. No one has suggested that word processors will teach writing as a process. Rather, researchers typically urge teachers to act as guides in assisting students to achieve a fuller understanding of how effective writing evolves. As Lansing (1984) made clear in her research report, a word processor is a tool, and some students may make better use of it than others.

Computers in Revision and Editing

Research on the impact of computers on revision and editing overlaps with work investigating the potential of word processors. This is understandable since word processors include text editors that permit users to make changes to whatever they type at the computer keyboard. Many studies examine both revision and editing done with computers although most experts agree that these are not identical functions. Revision may occur at any time throughout the writing process and involves making changes to the deep structure of text, changes that will affect meaning and organization. Ideally, editing should take place after the text is complete and involves proofreading to find and correct errors in the surface features of text. At this stage a writer tries to "clean up" his text by purging it of errors in spelling, punctuation, and word usage. Both revising and editing can be done on a word processor, but they should not be undertaken simultaneously. Doing the two together is thought to be too demanding mentally

(Daiute,1985).

Recently, a few specialized programs for text analysis have become available. They enable a user to request analyses of various textual features such as spelling, grammar, sentence structure and length, word choice, and paragraph development. Text analysis programs cannot respond to content and must be progammed to attend to certain forms as errors. At times they flag (identify) errors that are not actually erroneous in a particular context or are spellings that were not included in the program's vocabulary. Thus, a writer should be advised that the "advice" provided by analysis progams is one possible analysis, not the only one, and not necessarily accurate in every respect.

The computer appears to have great potential for aiding in the work of revision and editing. Text on a screen is highly fluid, allowing writers to insert, delete, and move pieces of text around with ease. Experimentation with different words, sentences, and organizations is enhanced. If an idea comes to a writer in the midst of unrelated work, it is possible for him to stop his composing momentarily, write about his new idea, and then continue with his earlier direction knowing that later he will be free to rearrange blocks of his text more appropriately. Furthermore, claims have been made that using a computer for composing and revising gives student writers a greater sense of audience, and a better "feel" for the process of writing. As the

outcomes of various research studies imply, some of the expectations about the computer in revising and editing have been borne out while others have not.

Gerrard (1981) introduced college freshmen to a word processor made available on a mainframe computer to determine whether it would affect their writing quality. She discovered that the students confined themselves to the simplest procedures available and did a great deal more editing than they did revising. In effect, they were using the computer as an electronic typewriter. Gerrard decided that the students, who were not keen about having to learn how to use the word processing system in the first place, needed more time to master all the useful functions. Concentration on the mechanics of the program, which was not originally designed to be utilized as a word processor, might have disrupted the revision process for them. Perhaps they did not make many revisions in content, style, or organization because these necessitated the use of more elaborate procedures on the computer. Gerrard also notes that these students were generally limited to an hour of computer time in a session and that they were charged for it. Since it cost too much to compose on screen, students took a handwritten draft to the computer for editing. Any revisions they might have undertaken would have been completed first. Superficial changes could then be made quickly and easily on the computer. Gerrard's post-experiment interviews revealed that most students felt

the project was a success and that they would use a word processor for other assignments in the future. They also told Gerrard that the computer made them feel more objective about their work.

Collier (1983) conducted a study to test the hypothesis that text editors available on a mainframe computer would significantly increase the number, types, and complexity of revisions performed by college students, thus improving the effectiveness of their revising strategies. He found that although his subjects manipulated words, phrases, clauses, and T-units much more than they had previously, they did less to alter idea clusters and paragraphs than they had without computers. The length of essays increased slightly, but this appeared to be caused by occasional superficial substitutions of a phrase for a word or a clause for a phrase. Fewer surface errors were identified and corrected when the students used computers than when they had not. In general Collier noted that the better writers showed more improvement in most of the areas he examined than did the weaker writers. It seemed apparent to him that the revising strategies of the students were not significantly affected by the use of a word processor, although "they did more of the kinds of revising they normally did and focused a great deal of attention on small-scale substitutions" (1983, p.153). Despite some increase in experimentation and efficiency, Collier did not discover an improvement in the quality of his subjects'

writing.

In a critique of Collier's study, Pufahl (1984) points out that revision is not an innate skill but one which must be taught. Collier assumed fallaciously that the opportunity for easy revision provided by the new technology would make a difference in the revision strategies of students with no experience with word processors and little or no experience in revision. Pufahl also suggests that Collier did not permit his subjects to take the time they needed to type their composed essays with the word processor on one occasion and then on the subsequent occasion to revise that draft. Collier could then have checked for changes from one draft typed on the computer to another. As Pufahl comments, Collier's word processing program was not an easy one to master. Finally, Pufahl raises the question as to whether it is reasonable to expect that all revision be done in class or on the computer. If students are permitted to examine their drafts on printed copies, they can peruse the entire paper, make tentative notes, enter the changes with the processor, and then print the revised draft to check the effect. In a response to this critique, Collier (1984) agrees with most of Pufahl's claims.

Harris' (1985) recent case studies support Collier's findings and Pufahl's point that revision is an acquired skill the computer does not teach. Her college level subjects wrote first drafts of four essays using whatever method they preferred. These drafts were then

scrutinized by peers and by Harris to provide suggestions for revision and editing. The subjects revised their first two papers in class and were then directed to revise the remaining two essays using microcomputers in a lab where they were told they could create as many drafts as they liked. Harris found that the revised drafts of the final two papers did not show more changes to the meaning than did those of the first two essays. Although all of the students had made superficial changes, only four of the six tried to alter their papers for meaning when they used the word processor. These four had made more changes affecting meaning when they were not revising on the computer. In general the subjects made fewer revisions in total using the word processor, a fact that did not seem affected by amount of experience in working on a computer. They tended to edit their printouts for errors in surface features and then implement those changes in their text the next time they worked at the computer. Spelling errors were identified for them by a spelling checker program. They made few alterations to the meaning of their text.

From her observations of the subjects at work and interviews with them, Harris learned that most of them liked to use word processing. She did not, however, find evidence to suggest that it made the students more willing to experiment with their text. Her students used a large number of printouts to revise their essays which led Harris to hypothesize that her subjects might have found it more

difficult to reread their work on the screen. It was easier for them to view a paper as a whole after it had been printed. Harris sees the computer as a valuable means of increasing the efficiency of a writer experienced in revision strategies and in using the word processor as a tool for writing and revising. However, she advises that students be taught revision strategies before going to computers to write (Harris, 1985).

Little research involving the impact of textual analysis programs on student writing exists at this time. Many of these programs have not been field tested or are available only for large, expensive computer systems. Studies by Anandam (1979) and Keifer and Smith (1983) of two such systems reveal that college students responded enthusiastically to the analyses of their text provided by these programs. Both systems designed for use on mainframe computers provide comments about possible weaknesses in students' writing and help in making improvements. Whereas tests run by Anandam revealed no difference in the numbers of editing errors between papers that students had had computer analyzed and those they had not, Keifer and Smith noted a dramatic improvement among their students. On tests of editing abilities, their experimental group, who had used the text analysis program,"Writer's Workbench" to analyze their papers for spelling, diction, and style, outperformed the control group by 64% on items covered by "Workbench" even though both groups had covered the same material in

class. Students continued to respond enthusiastically even two years into the project when novelty was no longer much of a factor. On tests of editing skills, college composition students in treatment groups showed as much as 40-50% more improvement than their counterparts in control groups.

In an effort to examine the ability of children to revise their own writing, Daiute (1984) trained eight nine to twelve year old subjects first to touch type and then to use her self-written program, "Catch". The program offers text analyses and comments based on three criteria: types of changes required to make compositions clear, complete, organized, and correct in use of standard English; questions about process and form that experienced writers tend to pose to themselves; types of analyses the computer can do. The children used "Catch" to stimulate revising after they had said they had improved a composition as much as they could wiithout any help. Daiute compared the children's writing, which had been produced using the word processing function of "Catch", before and after they used the "Catch" prompting with their writing done by hand. The writing produced by hand was done without any prompting assistance.

The results of Daiute's data analysis indicate that, although a child might have made more changes with a computer, the changes were not always as extensive as those made when the child recopied. In the eyes of holistic scorers, the changes made did not impact on the quality of the writing. Daiute's subjects tended to rewrite and add as

they revised, rather than reworking what they had when unguided by a teacher or computer. Some children showed they had benefitted from the computer's revision suggestions when they returned to working with pen and paper. Those who came to regard the computer as a guide knew they were free to choose to accept or reject its suggestions and were therefore not dependent on it when revising. Others indicated that they had learned something about the nature and importance of revision, but had also become dependent on the computer's suggestions.

The conclusion most commonly discussed by researchers who have studied the impact of word processors and text editing programs on students' writing is that these devices will not teach students how to revise. Students must understand the rationale for revision as an integral part of their writing process, rather than regarding it as punishment (M.Schwartz, 1982). Instruction in revision is necessary before students can internalize strategies for presenting logical arguments, and organizing concepts into a variety of sentence and paragraph types. When students have been given sufficient instruction in revision strategies, their short term memory is available to take on the tasks of generating and combining new ideas (Christensen et al., 1983; Daiute, 1983). Other factors contributing to the degree to which computers will prove beneficial in revision include the complexity of the program the students must master and the amount of time they are permitted to use for

revision.

Keifer and Smith's project involving college students implies that a text editor that provides tutorial assistance to accompany its analysis may be beneficial in helping students to become more alert editors. On the other hand, such a program may make students dependent on the computer's advice. The more complicated the analysis provided, the more mature writers must be in order to interpret it and use its suggestions judiciously.

Summary and Conclusions

At this time there is some evidence from research to indicate that instruction in prewriting and editing techniques promotes improvement in the writing quality of students. There is also evidence to suggest that students who use computers for prewriting and editing produce better writing than students who do not. However, this evidence is counterbalanced by studies that have failed to demonstrate a significant difference between computer- assisted and non-computer- assisted groups of subjects. What does appear a certainty, though, is the positive change in student attitude toward writing that accompanies their experiences in writing with computers.

It is apparent from this review of the research that a great deal of further investigation into the use of computers in composition instruction is required. Educators need to know when and how computers can be used to aid

students in improving their writing skills. Research may serve to meet these needs and help to identify essential characteristics of the most effective software available.

In summation, Chapter II has provided the research bases for the present study.

CHAPTER III

DESIGN AND PROCEDURES

The purpose of the present study was to compare the impact of three types of prewriting and editing instruction on the writing of Grade XI students. The study was designed to collect data on the writing fluency, quality and style, and number of errors in the compositions of students given computer-assisted, non computer-assisted, or textbook-based instruction.

From the stated purpose of this study the following research questions were generated:

1. Do students composing with a word processing program produce better quality writing when they use a computer program designed to assist them through their prewriting?

2. Do students composing with a word processing program produce better quality writing when they use a computer-based text editor?

3. Is there a differential effect on the writing of students when they are exposed to word processing and different combinations of prewriting and editing instruction (with or without computers)?

4. Does composing with a word processor combined with either computer-assisted or non computer-assisted instruction in prewriting and editing improve performance more than methods not employing word processing or any sort of computer-assisted instruction?

5. Does any single instructional pattern involving word processing, prewriting, and editing affect perfomance more than the same instruction without word processing?

6. Does any single instructional pattern involving word processing, prewriting, and editing affect performance more than textbook-based instruction?

7. Does systematic instruction in prewriting and editing without computers affect performance more than textbook-based instruction?

Student performance was evaluated on the measures of fluency, quality and style, and error.

The Study

Sample

Eighty Grade XI English 201 students from one of the high schools in a large suburb of Winnipeg served as subjects in this study. The school involved in this study is attended by students from a variety of socio-economic backgrounds. Teachers of the four participating classes described their students as representative of lower, middle, and upper-middle-class areas within the school division. Students within each of two of the classes were randomly assigned to one of two instructional patterns. One of the remaining classes became the control group while the fourth class functioned as a reference group. The distribution of students into cells was as follows:

Group	Boys	Girls	Total
CAI prewriting/CA editing (CPW/CED)	7	5	12
CAI prewriting/non CA editing (CPW/ED)	4	3	7
non CAI prewriting/CA editing (PW/CED)	5	2	7
non CAI prewriting/non CA editing (PW/ED)	5	6	11
Control Group	12	12	24
Reference Group	12	7	19

The study began February 3, 1986 and concluded March 6, 1986. This period consisted of four six-day cycles during which time each group was scheduled for English 240 minutes each cycle. Three school days designated for inservice and administrative time interrupted instruction on different occasions. See Appendix F for an illustration of the amount of time the groups spent on the various activities related to the two assignments given between the pre and post-tests.

Procedures

Pre- and Post-tests

All students wrote a pre-test before instruction was initiated and a post-test after instruction was completed. In the class before each test, students were advised that they would be required to write an in-class character sketch based on a designated character the teacher had selected from the last story or book they had read as a class. They

invited to prepare notes or outlines to bring as aids while they wrote their sketches in the subsequent class period.

Instructional sequence

The sequence of instruction for each group was as follows:

Group	CPW/CED	CPW/ED	PW/CED	PW/ED	Control	Reference
Evaluation I	pretest	pre-test	pre-test	pre-test	pre-test	pre-test
Stage I of Instruction	1.CAI in prewriting	1.CAI in prewriting	1.non CA prewriting	1.non CA prewriting	1.non CA prewriting	textbook-based instruction
	2.word processing for composing	2.word processing for composing	2.word processing for composing	2.word processing for composing	2.composing by hand	
Stage II of Instruction	CA text analysis	non CA text analysis	CA text analysis	non CA text analysis	non CA text analysis	textbook-based instruction
Stage III of Instruction	repeat stages I and II	repeat stages I and II	repeat stages I and II	repeat stages I and II	repeat stages I and II	textbook-based instruction
Evaluation II	post-test	post-test	post-test	post-test	post-test	post-test

The instructional sequence followed by the treatment and control groups was designed to coincide with the stages of the writing process delineated by the researcher - prewriting, composing, revision, editing. Subjects in the reference group followed the sequence of instruction presented within a composition textbook chapter about writing character sketches (See Appendix D). They were not exposed to any special instruction in revision and editing techniques.

Stage I

Prewriting

All subjects in the treatment and control groups were exposed to materials designed to lead them through an analysis of a real or imaginary character each had selected. The objectives of the prewriting were: 1) to aid students in evaluating and selecting detail to use in developing well-rounded descriptions of their characters; 2) to provide students with a framework which would serve as a possible outline for their compositions. While subjects in CPW/CED and CPW/ED groups worked through the MECC tutorial, "Writing a Character Sketch", subjects in PW/CED, PW/ED, and control groups filled in mimeographed copies of an outline identical in organization and content to the one followed by the tutorial (See Appendix E).

Composing

All subjects in treatment groups were taught the basic commands necessary to operate the word processing program, "Apple Writer II". Commands were introduced gradually as subjects needed them while they composed character sketches based on their ideas generated during prewriting. Subjects in the control group composed their sketches by hand using their outlines as guides.

Revision

When nearly all subjects had completed their first drafts, participating teachers gave a lesson focused on making changes to sentences and paragraphs, changes that would affect a writer's meaning, focus, and emphasis. Subjects in the treatment groups received computer printouts of their initial drafts.

All subjects in both the treatment and control groups were directed to examine their drafts and make any improvements they could. They were invited to try any of the techniques the teacher had just demonstrated. Subjects in treatment groups made changes at computers while control group subjects implemented improvements by hand.

Editing

All subjects in the treatment and control groups received copies of a list of twenty-two possible errors

based on the capabilities of the "Analyze Prose" section of "MECC Editor" (See Appendix B). Subjects in the CPW/CED and PW/ED groups examined printouts of their sketches that the researcher had prepared using "MECC Editor". Their printouts were reports of the "Editor's" text analysis. Subjects in the CPW/ED, PW/ED, and control groups worked in pairs proofreading each other's compositions in an effort to identify any of the twenty-two errors. Subjects in all the treatment groups were then allowed to make corrections at computers before printouts of their final drafts were prepared. Control group subjects were directed to prepare a final draft of their compositions by hand making any changes they deemed worthwhile. All final drafts were collected by participating teachers for evaluation.

Stage II

All subjects in the treatment and control groups read an article focused on a real person before they were asked to begin another character sketch, this time about the subject of the article they had just read. Each group, CPW/CED, CPW/ED, PW/CED, PW/ED, and the control, repeated the steps they had taken in writing their previous sketch. This time no instruction was given in revision or editing techniques although the teachers did remind subjects that they might want to make use of some of the strategies they had tried earlier. Once again all final drafts were collected for evaluation.

Prior to the administration of the post-test,

teachers returned to subjects one of the two sketches which had been marked. In this way subjects were given some feedback about their progress before they wrote the post-test.

Dependent Variables

The dependent variables examined and analyzed were:

1. Fluency.
2. Quality and style.
3. Freedom from error.

Dependent Measures

1. GIM score
2. score for each of the seven qualities on the analytic scales
3. number of words
4. number of occurrences of the twenty-two types of errors compiled by the researcher.

Statistical Analyses

In order to determine the level of consistency of measurement between the two markers, interrater reliabilities were calculated for each of the eight quality measures using the Spearman-Brown Prophecy Formula, rtt=2rxy/1+rxy, where rxy=the Pearson Product Moment Correlation (Diederich, 1974).

In order to assess the effect of the different

patterns of instruction on student performance, a number of analyses were performed, all employing analysis of variance with repeated measure, the repeated measure being time (pre-test to post-test) as outlined below:

1. In order to address questions 1, 2, and 3, a 2 x 2 x 2 three-way analysis of variance with two between subjects factors, prewriting instruction (computer-assisted versus non computer-assisted) and editing instruction (computer-assisted versus non computer-assisted), and one between subjects factor, time (pre-test, post-test), was performed on the data of a subset of the subjects: those receiving the word processing treatments. When significant effects were observed in the omnibus analysis for the interaction of the two between subject variables, a subsequent two-way (repeated measures) analysis of variance employing paired contrasts of groups was employed to explore where the significance lay.

2. In order to address question 4, a 2 x 2 completely crossed two-way analysis of variance with one between subjects variable, word processing versus no word processing, and one within subjects variable, time (pre-test, post-test) was performed on all subjects in the study.

3. In order to address question 5, four 2 x 2 completely crossed two-way analyses of variance with one between subjects variable, group (each of the four word processing groups versus the control group), and one within

subjects variable, time (pre-test, post-test), were performed to compare the effect of patterns of computer-assisted instruction and the same instruction without word processing.

4. In order to address question 6, four completely crossed two-way analyses of variance with one between subjects variable, group (each of the four word processing groups versus the reference group), and one within subjects variable, time (pre-test, post-test), were performed to compare the effect of patterns of computer-assisted instruction and textbook-based instruction.

5. In order to address question 7, a 2 x 2 completely crossed two-way analysis of variance with one between subjects variable, group (control versus reference), and one within subjects variable, time (pre-test, post-test), was performed to compare the effect of non computer-assisted instruction in prewriting and editing (which paralleled the instruction for the word processing groups) and textbook-based instruction combined with conventional teacher-designed editing.

Significance levels were set at $p < .05$ (two-tailed) for all tests including post hoc analyses with values of $p < .01$ reported as such.

In Chapter III, the Design and Procedures of this study were presented, and the sample, sources of data and means of data analysis were described.

CHAPTER IV

ANALYSES OF DATA

The purpose of this study was to compare the impact of three types of prewriting and three types of editing instruction on the writing fluency, quality and style, and number of errors counted in the compositions of Grade XI students. The six patterns of instruction examined are as follows:

1. computer-assisted prewriting, word processing, computer-assisted editing (CPW/CED)

2. computer-assisted prewriting, word processing, non computer-assisted editing (CPW/ED)

3. non computer-assisted prewriting, word processing, non computer-assisted editing (PW/CED)

4. non computer-assisted editing, word processing, non computer-assisted editing (PW/ED)

5. non computer-assisted prewriting, no word processing, non computer-assisted editing (Control)

6. textbook-based instruction and conventional teacher-designed editing (Reference)

This chapter includes a description of the analyses of data and a presentation of the level of statistical significance of the analyses, as well as a discussion of the results.

Research Questions

Information was sought concerning the following questions:

1. Do students composing with a word processing program produce better quality writing when they use a computer program designed to assist them through their prewriting?

2. Do students composing with a word processing program produce better quality writing when they use a computer-based text editor?

3. Is there a differential effect on the writing of students when they are exposed to word processing and different combinations of prewriting and editing instruction (with or without computers)?

4. Does composing with a word processor combined with either computer-assisted or non computer-assisted instruction in prewriting and editing improve performance more than methods not employing word processing or any sort of computer-assisted instruction?

5. Does any single instructional pattern involving word processing, prewriting, and editing affect perfomance more than the same instruction without word processing?

6. Does any single instructional pattern involving word processing, prewriting, and editing affect performance more than textbook-based instruction?

7. Does systematic instruction in prewriting and editing without computers affect performance more than textbook-based instruction?

Student performance was evaluated on the measures of fluency, quality and style, and number of errors.

The discussion of the findings has been organized in the following manner:

1. Description of the subjects.

2. Discussion of the methods and procedures used to collect the data.

3. Presentation of the data from the analysis of the pre- and post-tests.

4. Discussion of the seven research questions.

5. Conclusion

The Subjects

Eighty Grade XI students enrolled in the English 201 course and attending a suburban high school in Winnipeg served as subjects in this study. Their teachers described these students as representative of the variety of socio-economic backgrounds composing the population of the school division. Students within each of two of the classes were randomly assigned to one of two instructional patterns presented by their regular teacher. One of the remaining classes became the control group which was instructed by the researcher. The fourth class, taught by their regular teacher, functioned as a reference group. An informal survey determined that all students assigned to computer groups had used computers at home or at school at least once previously. With the exception of three students, all

students in the computer groups had keyboard experience.

While all student participants had written character sketches on other occasions, the researcher learned in the course of informal interviews following the completion of the study that their concepts of expected length differed greatly. The control group's regular teacher had customarily required her students to write longer descriptive sketches about literary figures than had the regular teacher of the other groups. Furthermore, the control group wrote their pre-test character sketch about a character designated from a novel they had just read while the other groups wrote about a character they had encountered in a short story. Thus, the control students had a more detailed knowledge of their subject than did the other groups.

Methods and Procedures

The results shown in this chapter are from analyses of pre- and post-tests written by each of the eighty Grade XI students who participated in the study. For each of the two tests administered, the teacher required students to write a sketch based on a designated character. The researcher then collected all pre- and post-tests and randomized them before distributing them to two independent markers who evaluated each composition. The markers recorded on separate sheets of paper their scores for general impression (GIM) and each of the seven qualities on the analytic scales. The researcher then counted and recorded

the number of words and errors found on each paper. The analyses resulted in ten scores on each of the pre- and post-tests.

In order to determine the level of consistency of measurement between the two markers, interrater reliabilities were calculated for each of the eight quality measures using the Spearman-Brown Prophecy Formula, rtt=2rxy/1+rxy, where rxy=the Pearson Product Moment Correlation (Diederich, 1974).

In order to assess the effect of the different patterns of instruction on student performance, a number of analyses were performed, all employing analysis of variance with repeated measure, the repeated measure being time (pre-test to post-test) as outlined below:

1. In order to address questions 1, 2, and 3, a 2 x 2 x 2 three-way analysis of variance with two between subjects factors, prewriting instruction (computer-assisted versus non computer-assisted) and editing instruction (computer-assisted versus non computer-assisted), and one within subjects factor, time (pre-test, post-test), was performed on the data of a subset of the subjects: those receiving the word processing treatments. When significant effects were observed in the omnibus analysis for the interaction of the two between subject variables, a subsequent two-way (repeated measures) analysis of variance employing paired contrasts of groups was employed to explore where the significance lay.

2. In order to address question 4, a 2 x 2 completely crossed two-way analysis of variance with one between subjects variable, word processing versus no word processing, and one within subjects variable, time (pre-test, post-test) was performed on all subjects in the study.

3. In order to address question 5, four 2 x 2 completely crossed two-way analyses of variance with one between subjects variable, group (each of the four word processing groups versus the control group), and one within subjects variable, time (pre-test, post-test), were performed to compare the effect of patterns of CA instruction and the same instruction without word processing.

4. In order to address question 6, four completely crossed two-way analyses of variance with one between subjects variable, group (each of the four word processing groups versus the reference group), and one within subjects variable, time (pre-test, post-test), were performed to compare the effect of patterns of CA instruction and textbook-based instruction.

5. In order to address question 7, a 2 x 2 completely crossed two-way analysis of variance with one between subjects variable, group (control versus reference), and one within subjects variable, time (pre-test, post-test), was performed to compare the effect of non CA instruction in prewriting and editing (which paralleled the

instruction for the word processing groups) and textbook-based instruction combined with conventional teacher-designed editing.

Significance levels were set at $p < .05$ (two-tailed) for all tests including post hoc analyses with values of $p < .01$ reported as such.

Presentation of the Data

Interrater reliability as calculated with the Spearman-Brown Prophecy Formula averaged .84 on the pre-test and .74 on the post-test. See Appendix G for a report of the reliabilities determined for each measure of quality and style.

Analyses for Questions 1,2, and 3

Mean scores and standard deviations on the pre- and post-tests for all dependent measures for two word processing subsets, one of which received CA prewriting while the other received non CA prewriting instruction, are displayed in Table 4.01. Results of the ANOVA calculations (F-values) are reported for each dependent measure as well. No significant differences were found on the measure of fluency (word count), or on error count. Significant differences favoring the group that had CA prewriting were found on two measures of quality and style: paragraph focus and sentence structure.

Mean scores and standard deviations on the pre- and post-tests for all dependent measures for two word

Table 4.01

Mean Scores and Standard Deviations on Pre- and Post-tests as well as Levels of Significance for Dependent Measures for Two Word Processing Subsets: Computer-assisted Prewriting and Non Computer-assisted Prewriting

Dependent Measures	Total	CA Prewriting	Non CA Prewriting	F-value (df=1,33)	P
(N)	(37)	(19)	(18)		
GIM					
pre-test x	2.38	2.61	2.14	3.46	NS
pre-test sd		0.74	0.85		
post-test x	3.28	3.24	3.33		
post-test sd		0.63	0.87		
ORG and COH					
pre-test x	2.31	2.53	2.08	1.47	NS
pre-test sd		0.77	1.05		
post-test x	3.04	3.08	3.00		
post-test sd		0.73	0.97		
WORDING					
pre-test x	2.36	2.53	2.17	0.68	NS
pre-test sd		0.74	0.92		
post-test x	3.10	3.13	3.06		
post-test sd		0.66	0.87		
STYLE					
pre-test x	2.27	2.50	2.03	3.55	NS
pre-test sd		0.67	0.92		
post-test x	3.08	3.03	3.14		
post-test sd		0.63	0.89		
PAR. FOCUS					
pre-test x	2.16	2.42	1.89	4.89	*
pre-test sd		0.79	0.85		
post-test x	3.00	2.92	3.08		
post-test sd		0.56	0.94		
QUAL. IDEAS					
pre-test x	2.48	2.63	2.33	0.48	NS
pre-test sd		0.57	0.91		
post-test x	3.27	3.34	3.19		
post-test sd		0.76	0.94		
DETAILS and ELAB. IDEAS					
pre-test x	2.30	2.53	2.06	0.93	NS
pre-test sd		0.89	1.10		
post-test x	3.14	3.21	3.06		
post-test sd		0.69	0.97		

Table 4.01 continued

Dependent Measures	Total	CA Prewriting	Non CA Prewriting	F-value (df=1,33)	P
SENT. STRUC.					
pre-test x	2.38	2.68	2.06	6.59	**
pre-test sd		0.75	1.00		
post-test x	3.30	3.21	3.39		
post-test sd		0.73	0.83		
WORD COUNT					
pre-test x	161.73	171.37	151.56	0.11	NS
pre-test sd		71.56	83.64		
post-test x	202.71	207.11	198.06		
post-test sd		68.81	50.02		
ERROR COUNT					
pre-test x	4.35	4.58	4.11	1.85	NS
pre-test sd		3.81	2.47		
post-test x	3.67	3.05	4.33		
post-test sd		2.01	2.54		

processing subsets, one of which received CA editing while the other received non CA editing instruction, are displayed in Table 4.02. Results of the ANOVA calculations (F-values) are reported for each dependent measure as well. No significant differences were found on any measures of fluency, quality and style, or error.

Mean scores and standard deviations on the pre- and post-tests for all dependent measures for all six instructional groups are displayed in Table 4.03.

Analysis for Question 4

Results of the ANOVA calculations with associated significance levels are summarized in Table 4.04. In addition, the table presents the results of post hoc comparisons undertaken between pairs of word processing groups with corresponding levels of significance. On the omnibus analysis of variance, a significant interaction effect between time, prewriting instruction, and editing instruction was found on all measures of quality and style. No such effect was observed for the measures of fluency or error. Since significant interaction effects were observed, post hoc analyses (2 x 2 ANOVA) were carried out to probe the effect among the four word processing groups.

In paired comparisons involving the CA prewriting/CA editing group (CPW/CED) with the CA prewriting/non CA editing group (CPW/ED), and with the non CA prewriting/CA editing group (PW/CED), the groups which received either CA prewriting (CPW/ED) or CA editing

Table 4.02

Mean Scores and Standard Deviations on Pre- and Post-tests as well as Levels of Significance for Dependent Measures for Two Word Processing Subsets: Computer-assisted Editing and Non Computer-assisted Editing

Dependent Measures	Total	CA Editing	Non CA Editing	F-value (df=1,33)	P
(N)	(37)	(19)	(18)		
GIM					
pre-test x	2.38	2.42	2.33	0.07	NS
pre-test sd		0.90	0.75		
post-test x	3.29	3.29	3.28		
post-test sd		0.56	0.93		
ORG and COH					
pre-test x	2.32	2.32	2.31	0.77	NS
pre-test sd		1.10	0.75		
post-test x	3.04	3.13	2.94		
post-test sd		0.64	1.03		
WORDING					
pre-test x	2.36	2.42	2.28	0.00	NS
pre-test sd		1.00	0.65		
post-test x	3.10	3.13	3.06		
post-test sd		0.57	0.94		
STYLE					
pre-test x	2.27	2.32	2.22	0.15	NS
pre-test sd		0.96	0.67		
post-test x	3.08	3.11	3.06		
post-test sd		0.61	0.91		
PAR. FOCUS					
pre-test x	2.16	2.32	2.00	0.01	NS
pre-test sd		1.00	0.64		
post-test x	3.00	3.05	2.94		
post-test sd		0.50	0.98		
QUAL. IDEAS					
pre-test x	2.48	2.50	2.47	1.58	NS
pre-test sd		0.90	0.61		
post-test x	3.27	3.45	3.08		
post-test sd		0.66	0.99		
DETAILS and ELAB. IDEAS					
pre-test x	2.30	2.29	2.31	0.58	NS
pre-test sd		1.17	0.84		
post-test x	3.14	3.21	3.06		
post-test sd		0.63	1.01		

Table 4.02 continued

Dependent Measures	Total	CA Editing	Non CA Editing	F-value (df=1,33)	P
SENT. STRUC.					
pre-test x	2.38	2.50	2.25	0.00	NS
pre-test sd		1.00	0.85		
post-test x	3.30	3.32	3.28		
post-test sd		0.69	0.88		
WORD COUNT					
pre-test x	161.73	165.16	158.11	0.00	NS
pre-test sd		81.43	74.71		
post-test x	202.71	204.05	201.28		
post-test sd		42.83	74.91		
ERROR COUNT					
pre-test x	4.35	4.79	3.89	0.01	NS
pre-test sd		3.91	2.22		
post-test x	3.67	3.95	3.39		
post-test sd		2.53	2.17		

Table 4.03

Mean Scores and Standard Deviations on Pre- and Post-tests for Dependent Measures for All Groups

Dependent Measures	Total	CPW/CED	CPW/ED	PW/CED	PW/ED	Control	Reference
(N)	(80)	(12)	(7)	(7)	(11)	(24)	(19)
GIM							
pre-test x	2.79	2.83	1.71	2.21	2.41	3.65	2.50
pre-test sd		0.58	0.95	0.86	0.70	0.71	0.91
post-test x	3.36	3.13	3.57	3.42	3.18	3.63	3.16
post-test sd		0.53	0.53	0.79	1.03	0.91	0.76
ORG and COH							
pre-test x	2.69	2.75	1.57	2.14	2.41	3.40	2.53
pre-test sd		0.62	1.37	0.90	0.66	0.78	0.96
post-test x	3.10	3.00	3.36	3.21	2.77	3.40	2.84
post-test sd		0.64	0.63	0.91	1.10	0.81	0.82
WORDING							
pre-test x	2.67	2.88	1.64	1.93	2.50	3.31	2.50
pre-test sd		0.53	1.18	0.67	0.55	0.69	0.78
post-test x	3.16	3.04	3.29	3.29	2.91	3.52	2.84
post-test sd		0.54	0.64	0.86	1.00	0.80	0.83
STYLE							
pre-test x	2.65	2.75	1.57	2.07	2.32	3.42	2.42
pre-test sd		0.54	1.10	0.67	0.68	0.78	0.93
post-test x	2.91	2.96	3.36	3.15	3.00	3.52	2.89
post-test sd		0.58	0.63	0.75	1.02	0.85	0.91
PAR. FOCUS							
pre-test x	2.56	2.75	1.57	1.86	2.09	3.29	2.42
pre-test sd		0.62	1.13	0.75	0.58	0.92	0.93
post-test x	3.05	2.92	3.29	2.93	2.95	3.29	2.84
post-test sd		0.51	0.39	0.67	1.17	0.83	0.99
QUAL. IDEAS							
pre-test x	2.85	2.88	1.86	2.21	2.64	3.67	2.50
pre-test sd		0.43	1.14	0.57	0.60	0.86	0.93
post-test x	3.33	3.33	3.64	3.36	2.91	3.62	3.08
post-test sd		0.72	0.56	0.90	1.04	0.80	1.02
DETAILS and ELAB. IDEAS							
pre-test x	2.70	2.75	1.50	2.14	2.41	3.65	2.32
pre-test sd		0.73	1.41	1.07	0.70	0.87	0.96
post-test x	3.21	3.08	3.43	3.43	2.82	3.52	2.95
post-test sd		0.60	0.67	0.84	1.08	0.96	0.94

Table 4.03 continued

Dependent Measures	Total	CPW/CED	CPW/ED	PW/CED	PW/ED	Control	Reference
SENT. STRUC.							
pre-test x	2.80	3.00	1.64	2.14	2.32	3.67	2.50
pre-test sd		0.37	1.18	0.94	0.81	0.73	0.93
post-test x	3.37	3.17	3.57	3.29	3.27	3.58	3.24
post-test sd		0.72	0.61	0.81	0.96	0.84	0.87
WORD COUNT							
pre-test x	227.98	188.00	126.00	142.86	167.82	386.88	156.26
pre-test sd		42.10	117.51	102.99	53.46	167.37	57.59
post-test x	213.54	199.58	211.71	220.00	189.36	245.54	194.21
post-test sd		48.68	32.43	97.74	58.38	94.96	60.36
ERROR COUNT							
pre-test x	3.58	5.41	3.71	3.14	4.36	5.33	3.68
pre-test sd		4.27	3.20	2.48	2.01	3.21	3.13
post-test x	4.31	3.17	5.29	2.86	3.72	5.00	4.68
post-test sd		1.99	2.93	2.19	2.20	3.08	2.94

Table 4.04

Levels of Significance Attained on Post Hoc Tests of Paired Word Processing Groups

Dependent Measures	Prewriting X Editing Interaction	CPW/CED vs CPW/ED	CPW/CED vs PW/CED	CPW/CED vs PW/ED	CPW/ED vs PW/CED	CPW/ED vs PW/ED	PW/CED vs PW/ED
	(df=1,33)	(df=1,17)	(df=1,17)	(df=1,21)	(df=1,12)	(df=1,16)	(df=1,16)
GIM	11.03 **	12.21[a] **	5.05[b] *	2.16[c] NS	1.31 NS	5.94 *	1.20 NS
ORG and COH	10.80 **	8.18 *	5.36 *	0.14 NS	0.95 NS	5.77 *	2.92 NS
WORDING	14.40 **	8.39 *	11.18 **	0.67 NS	0.18 NS	5.27 *	6.30 *
STYLE	9.74 **	9.76 **	4.69 *	2.10 NS	1.37 NS	5.04 *	1.11 NS
PAR. FOCUS	8.39 **	9.68 **	7.34 *	4.61 *	1.27 NS	2.76 NS	0.38 NS
QUAL. IDEAS	11.11 **	6.41 *	2.80 NS	0.25 NS	1.17 NS	8.42 **	4.92 *
DETAILS and ELAB. IDEAS	11.04 **	7.12 *	4.67 *	0.05 NS	0.69 NS	6.29 *	4.10 NS
SENT. STRUC.	10.12 **	14.69 **	5.30 *	7.56 **	1.52 NS	4.83 *	0.22 NS

[a] Significances reported favor CPW/ED.
[b] Significances reported favor PW/CED.
[c] Significances reported favor PW/ED.

* $p<.05$
** $p<.01$

(PW/CED) significantly outperformed the group that received both (CPW/CED) on every measure of quality and style except quality of ideas. In that case, no significant difference was observed between PW/CED and CPW/CED. In comparisons between the group that received both CA prewriting and CA editing (CPW/CED) and the group that received neither (PW/ED), PW/ED outperformed CPW/CED on paragraph focus and sentence structure.

In paired comparisons involving the CA prewriting/non CA editing group (CPW/ED) and the non CA prewriting/ CA editing group (PW/CED), no significant differences were in evidence. When (CPW/ED) was compared with the non CA prewriting/ non CA editing group (PW/ED), CPW/ED proved superior on every measure of quality and style except paragraph focus. Comparisons between the non CA prewriting/CA editing group (PW/CED) and the non CA prewriting/ non CA editing (PW/ED) group indicated significantly greater growth on two measures, wording and quality of ideas on the part of PW/CED.

From the post hoc comparisons of pairs of word processing groups, it can be deduced that greater growth on measures of quality and style was shown by students who used computers for prewriting and composing than by students who used computers for prewriting, composing, and editing. Similarly, students who used computers for prewriting and composing proved superior on every measure of quality and style except one when compared with students who used

computers only to compose. When one group was compared directly with the other, students who used computers for prewriting and composing only did not outperform students who used computers for composing and editing only. However, the first group (CPW/ED) showed greater significant growth on more measures in comparisons with the other two word processing groups than did the second group (PW/CED).

Analysis for Question 5

Mean scores and standard deviations on pre- and post-tests for all dependent measures for word processing and non word processing groups are presented in Table 4.05. On every measure of fluency, quality and style, the word processing group showed significantly more growth than the non-word processing group. F-values and levels of significance are also reported on Table 4.05.

Analysis for Questions 6 and 7

Table 4.06 summarizes the F-values and levels of significance attained in comparisons between each of the word processing groups and the control and reference groups. The CA prewriting/non CA editing group (CPW/ED) consistently outperformed Control on every measure with the exception of error count and Reference on all quality measures. The non CA prewriting/CA editing (PW/CED) group outperformed Control on every measure except error count and Reference on only one measure, wording. All word processing groups proved significantly superior to Control on the word count, but none demonstrated superiority over Reference on error count.

Table 4.05

Mean Scores and Standard Deviations on Pre- and Post-tests as well as Levels of Significance for Dependent Measures for Word Processing and Non Word Processing Groups

Dependent Measures	Total	Word Processing	Non Word Processing	F-value (df=1,78)	P
(N)	(80)	(37)	(43)		
GIM					
pre-test x	2.79	2.38	3.14	7.79	**
pre-test sd		0.82	0.98		
post-test x	3.36	3.28	3.42		
post-test sd		0.75	0.87		
ORG and COH					
pre-test x	2.69	2.31	3.01	5.88	*
pre-test sd		0.93	0.96		
post-test x	3.10	3.04	3.15		
post-test sd		0.84	0.85		
WORDING					
pre-test x	2.76	2.35	2.95	4.50	*
pre-test sd		0.84	0.83		
post-test x	3.16	3.09	3.22		
post-test sd		0.76	0.87		
STYLE					
pre-test x	2.65	2.27	2.98	5.43	*
pre-test sd		0.82	0.98		
post-test x	3.12	3.08	3.24		
post-test sd		0.76	0.92		
PAR. FOCUS					
pre-test x	2.56	2.16	2.91	7.80	**
pre-test sd		0.85	1.01		
post-test x	3.05	3.00	3.09		
post-test sd		0.76	0.92		
QUAL. IDEAS					
pre-test x	2.84	2.49	3.15	5.21	*
pre-test sd		0.76	1.06		
post-test x	3.33	3.28	3.38		
post-test sd		0.85	0.93		
DETAILS and ELAB. IDEAS					*
pre-test x	2.71	2.30	3.06	6.15	
pre-test sd		1.01	1.12		
post-test x	3.21	3.14	3.27		
post-test sd		0.83	0.98		

Table 4.05 continued

Dependent Measures	Total	Word Processing	Non Word Processing	F-value (df=1,78)	P
SENT. STRUC.					
pre-test x	2.95	2.38	3.15	8.10	**
pre-test sd		0.92	1.00		
post-test x	3.37	3.30	3.43		
post-test sd		0.78	0.86		
WORD COUNT					
pre-test x	242.23	161.73	284.98	12.13	**
pre-test sd		77.26	173.75		
post-test x	213.60	202.70	222.86		
post-test sd		59.75	84.65		
ERROR COUNT					
pre-test x	4.48	4.35	4.60	1.15	NS
pre-test sd		3.19	3.25		
post-test x	4.31	3.68	4.86		
post-test sd		2.35	2.99		

Note: All significant differences shown are in favor of the word processing group.

* $p<.05$
** $p<.01$

Table 4.06

Levels of Significance and F-values Attained on Post Hoc Tests of Word Processing Groups Compared to Control and Reference Groups

Dependent Measures	CPW/CED vs C	CPW/ED vs C	PW/CED vs C	PW/ED vs C	C vs R	CPW/CED vs R	CPW/ED vs R	PW/CED vs R	PW/ED vs R
	(df=1,34)	(df=1,29)	(df=1,29)	(df=1,33)	(df=1,44)	(df=1,29)	(df=1,24)	(df=1,24)	(df=1,28)
GIM	0.84	17.27	8.08	5.24	5.68	1.57	9.35	2.31	0.15
	NS	**	**	*	*	NS	**	NS	NS
ORG and COH	0.61	12.24	6.28	1.10	0.97	0.04	6.88	2.66	0.02
	NS	**	*	NS	NS	NS	**	NS	NS
WORDING	0.02	8.78	7.73	0.36	0.22	0.37	7.73	7.49	0.05
	NS	**	**	NS	NS	NS	**	**	NS
STYLE	0.09	11.88	4.87	2.67	1.39	0.61	7.50	2.09	0.39
	NS	**	*	NS	NS	NS	**	NS	NS
PAR. FOCUS	0.21	11.42	5.97	5.37	1.71	0.59	7.19	2.83	1.68
	NS	**	*	*	NS	NS	**	NS	NS
QUAL. IDEAS	1.96	14.23	7.65	0.75	3.89	0.12	6.15	2.43	0.74
	NS	**	**	NS	NS	NS	*	NS	NS
DETAILS and ELAB. IDEAS	1.74	15.29	10.07	2.29	6.37	0.84	6.23	2.16	0.46
	NS	**	**	NS	*	NS	*	NS	NS
SENT. STRUC.	0.72	23.52	9.57	12.73	9.74	3.68	7.78	1.01	0.56
	NS	**	**	**	**	NS	**	NS	NS
WORD COUNT	8.54	9.84	9.85	8.96	18.36	1.80	1.74	1.90	0.71
	**	**	**	**	**	NS	NS	NS	NS
ERROR COUNT	1.95	1.34	0.00	0.06	1.24	4.08	0.09	0.59	1.23
	NS	NS	NS	NS	NS	NS	NS	NS	NS

Note: In comparisons between word processing groups and reference or control groups, significant differences shown favor word processing groups.

In comparisons between control and reference groups, significant differences favor the reference group.

* $p<.05$
** $p<.01$

The word processing group that had used computers for neither prewriting nor editing showed more growth than Control on three measures of quality and style, general impression, paragraph focus, and sentence structure. In a comparison of Control and Reference significant differences on three quality and style measures (general impression, choice of details and elaboration of ideas, and sentence structure) favored Reference.

Discussion of the Results

Interrater reliabilities averaged .84 on the pre-test and .74 on the post-test. Although Diederich (1974) regards .80 reliability as adequate for making assessments of writing quality, he explains that this figure is based on a writing evaluation that includes objective questioning. Since it is much easier for raters to agree on assessments of objective questions, writing evaluations including objective sections are likely to yield higher interrater reliabilities than evaluations of the type used in this study that did not include any objective tasks. Diederich claims that although higher reliabilities may be possible to attain with data collected from several test essays (perhaps as many as eight or more), .67 reliability is far more typical (1974, p.36). Reliability levels in this study on both the pre- and post-tests were well above .67.

Since the purpose of this investigation was to compare three types of composition instruction in an effort

to answer the four research questions posed, the data presented in the previous section of this chapter will now be discussed within the framework of each research question.

Question 1

Do students composing with a word processing program produce better quality writing when they use a computer program designed to assist them through their prewriting?

The researcher found no effect on fluency, number of errors made, or scores on six of the eight quality and style measures in favor of word processing. However, the researcher did detect significantly more improvement in favor of word processing subjects on paragraph focus and sentence structure. These main effects, however, must be interpreted in light of the significant prewriting by editing interaction observed in the analysis. The discussion will, therefore, be delayed until the discussion of the interaction (Question 3).

Question 2

Do students composing with a word processing program produce better quality writing when they use a computer-based text editor?

The results of the first analysis indicated that the computer-based text editor that subjects used did not enhance their writing in any measureable way. In particular,

use of the text editor did not reduce the number of errors subjects made in their papers. The text editor used in this study was selected primarily because of its compatibility with the word processor chosen. At this point in the development of educational software, there are few text editors from which to choose, and a great deal must be done to improve those that are commercially available. Instructors need editors that are compatible with their lessons in revision and editing. This was not the case with the text editor used in this study. The program was designed to focus on word choice, mechanical and usage errors, and sentence and paragraph length. Initially, many of the subjects did not recognize certain formations as weak or erroneous (for example, split infinitives and sentences ending in prepositions). Before using the text editor or asking subjects to exchange papers for peer editing, the teacher had to provide examples of these errors in usage and demonstrate how to make corrections. Thus, these lessons constituted the subjects' introduction to editing for certain kinds of flaws. It is entirely possible that the time was insufficient for subjects to grasp the nature of these errors and methods of correction. They simply had not developed the skill necessary to use the program as it was intended.

Question 3

Is there a differential effect on the writing of

students when they are exposed to word processing and different combinations of prewriting and editing instruction (with or without computers)?

The post hoc analyses of variance undertaken to explore the interaction between prewriting and editing instruction yielded several significant differences in the level of achievement of subjects in these instructional groups. Figure 4.01 is a graphic illustration of the differences between the four word processing groups on general impression. The researcher found these differences to be statistically significant. Despite the fact that subjects who used CA prewriting and a word processor (CPW/ED) scored lower on general impression on the pre-test than any of the other word processing groups, CPW/ED scored higher on general impression on the post-test than the other three groups. The researcher observed that CPW/ED showed significantly more improvement on all quality measures than their counterparts who had computer assistance in prewriting, composing, and editing (CPW/CED) and outperformed PW/ED on all quality measures except paragraph focus. Subjects who used CA editing and a word processor (PW/CED) showed significantly greater improvement on all quality measures except quality of ideas as compared with CPW/CED. When PW/CED was compared with PW/ED, it was noted that the former group outperfomed the latter on wording and quality of ideas.

These results suggested to the researcher that some

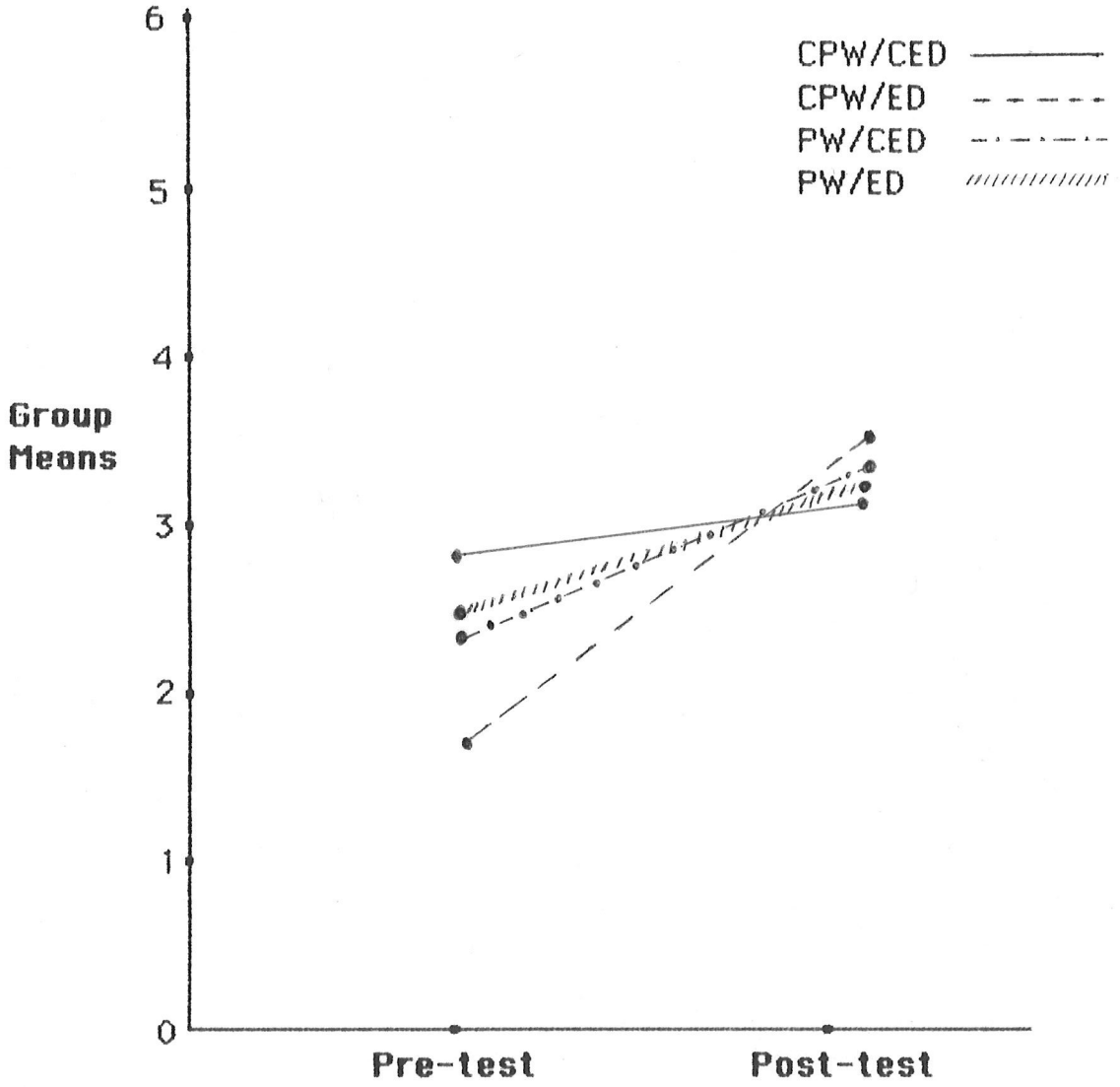

Figure 4.01 Pre- and Post-test Mean Scores on GIM for Four Word Processing Groups

computer-assisted instruction is superior both to instruction given exclusively by computer and to no instruction given by computer. Subjects might have found the task of mastering three computer programs for prewriting, composing, and editing too challenging within the relatively short timeframe of the study. Although the word processing program was a simple one, none of the subjects had ever used it prior to the commencement of the study. Those subjects who used computers for composing only were not overly burdened, but they might not have done as well as the subjects who had some computer assistance because they did not have as much time on the computers as did the two partially CA groups. That additional exposure time that the two partially CA groups needed to use the prewriting or editing programs might have enabled them to gain some extra measure of confidence in their abilities to use computers in their writing process.

Although no significant differences were discovered in comparisons between the CA prewriting group and the CA editing group, it seems that of the two instructional methods, CA prewriting had a more dramatic effect. Table 4.04 indicates that the researcher noted more statistically significant differences between CPW/ED and PW/ED than between PW/CED and PW/ED. Table 4.06 indicates that the differences between CPW/ED and Control were slightly more dramatic than between PW/CED and Control. The differences between CPW/ED and Reference were even more pronounced when

compared with the differences between PW/CED and Reference. This superiority of CPW/ED seems to suggest that the prewriting program was more beneficial to subjects in helping them to produce better quality papers than was the text editor. They might have found that, while they could make immediate use of the suggestions and examples offered within the prewriting program, they were unable to internalize the editing instruction or use the text editor's capabilities to their benefit. The same prewriting instruction presented without computers was not nearly as successful. Perhaps this is explained by the fact that the prewriting instruction based on the computer program was less effective when subjects could not experience the interactive environment of the computer.

Finally, in examining the differential effects various combinations of CA and non CA prewriting and editing had on subjects exposed to word processing, it is interesting to examine the comparison between CPW/CED and PW/ED. As Table 4.04 reports, PW/ED proved superior to CPW/CED on paragraph focus and sentence structure. There were no significant differences between the two groups on any other measures of quality and style. Based on these results, it appears that no computer assistance might be better than computer assistance at every step. At best this must be offered as a tentative conclusion that bears further examination over a longer period of time so that computers are no longer novel to subjects, and they have mastered the

programs they are using to assist them.

Question 4

Does composing with a word processor combined with either computer-assisted or non computer-assisted instruction in prewriting and editing improve performance more than methods not employing word processing or any sort of computer-assisted instruction?

On every measure with the exception of error count, performance was significantly better when subjects were allowed to use a word processor and given some form of instruction in prewriting and editing. This finding supports teachers and experts who have claimed that composing with a word processor helps student writers improve their work. It is difficult to assess exactly why subjects using a word processor achieved greater improvements than those that did not. Instructors involved in the study felt that subjects appeared to enjoy learning and using word processing, an observation that agrees with the findings of other teachers (Rodrigues, 1984; Brisk, 1985; Daiute, 1985) and researchers (Bridwell and Ross, 1984; Phenix and Hannan, 1984). Word processing subjects stayed longer with their drafts, perhaps because composing on computers was a novelty, perhaps because they were still learning how to use the system. However, they might have been taking extra time to make changes that raised the quality of their papers. If the subjects enjoyed using the word processor, they might have

had greater motivation to remain with a draft refining it. This notion has been discussed by several writers previously (Kane, 1983; Jacoby, 1984; Kurth and Stromberg, 1984; Phenix and Hannan, 1984; Womble, 1984).

Although word processing subjects decreased their errors more than non word processing subjects, there was no significant difference in the statistics on error count between the two groups. This result is not conclusive enough to refute the argument that word processing helps student writers improve their skills because of the ease with which they are able to make changes on a word processor. It is possible that word processing subjects were adversely affected by the burden of having to learn how to identify and correct errors with which they had been unfamiliar. Those subjects who had CA editing had to learn to discriminate between real errors and acceptable forms that the computer treated as possible errors because of its programming. Thus, the demands on word processing subjects were compounded by the extra challenge involved in having to cope with new editing techniques.

Question 5

Does any single instructional pattern involving word processing, prewriting, and editing affect perfomance more than the same instruction without word processing?

As is graphically illustrated in Figure 4.02 and Appendix H, CPW/ED consistently demonstrated more growth on

every measure with the exception of error count than Control who had experienced the same instruction without computers for prewriting, composing, or editing. PW/CED also outperformed Control on every measure except error count as is shown in Figure 4.03 and Appendix I. CPW/CED proved superior to Control on word count only, while PW/ED surpassed Control on general impression, paragraph focus, sentence structure, and word count (See Figure 4.04 and Appendix J.).

These findings suggest that it was not merely the instruction itself that made the difference, but that manner of presentation played an influential role as well. Perhaps some instruction, for example, the prewriting sequence, was more effective when presented on computer. PW/ED had neither the benefit of CA prewriting or editing, but they did use a word processor which enabled them to surpass the achievement of Control, even though they had shown less capability on the pre-test. This result supports the contention of several educators that word processors provide a useful tool for student writers. The fact that no word processing group proved superior to Control on error count indicates that the presence of a word processor with its alleged ease of revision was not enough to help subjects in reducing their errors noticeably. It seems that neither the CA editing or the non CA editing groups (which included Control) benefitted from their editing instruction to any significant degree.

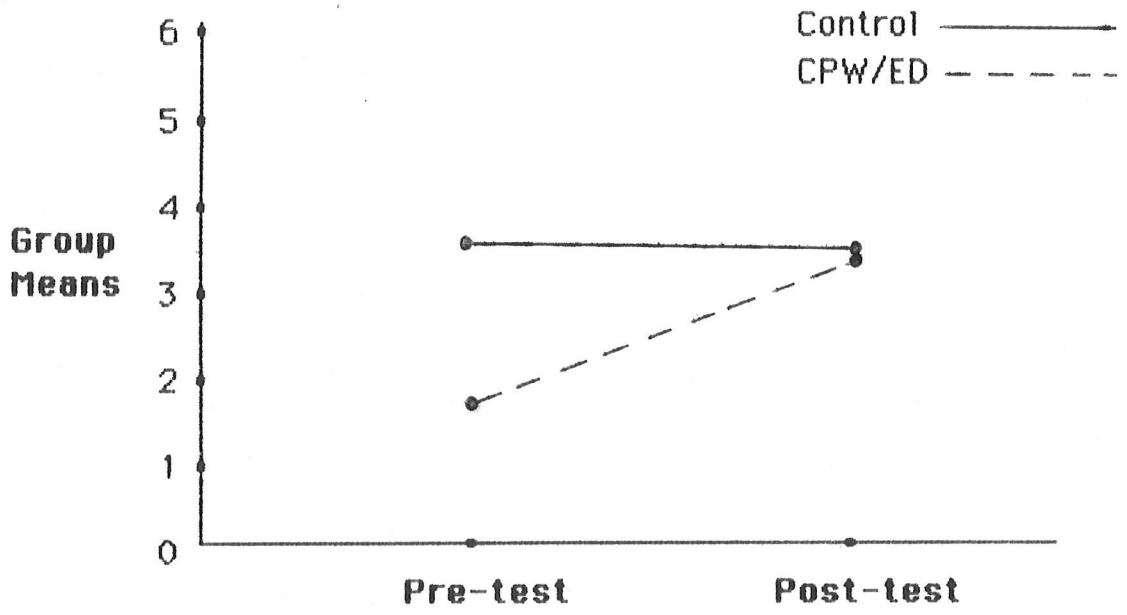

Figure 4.02 Pre- and Post-test Mean Scores for Control and CPW/ED on GIM

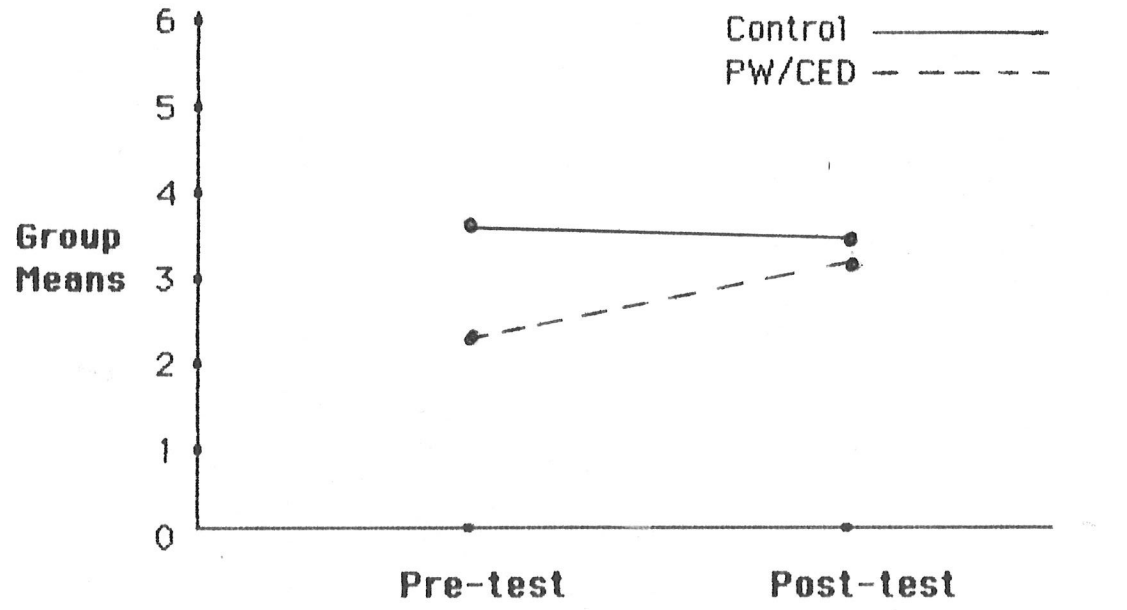

Figure 4.03 Pre- and Post-test Mean Scores for Control and PW/CED on GIM

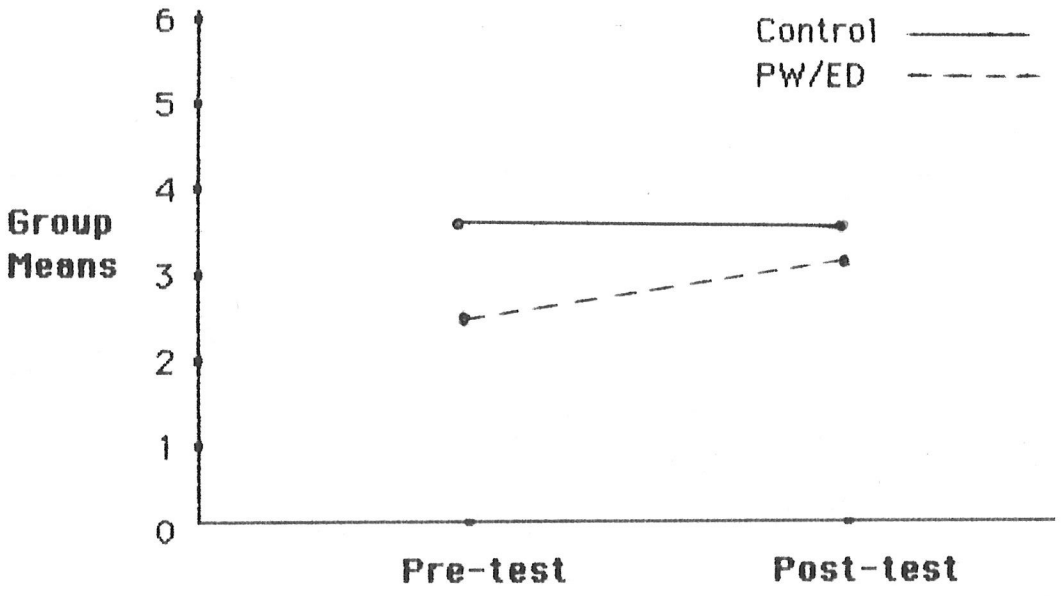

Figure 4.04 Pre- and Post-test Mean Scores for Control and PW/ED on GIM

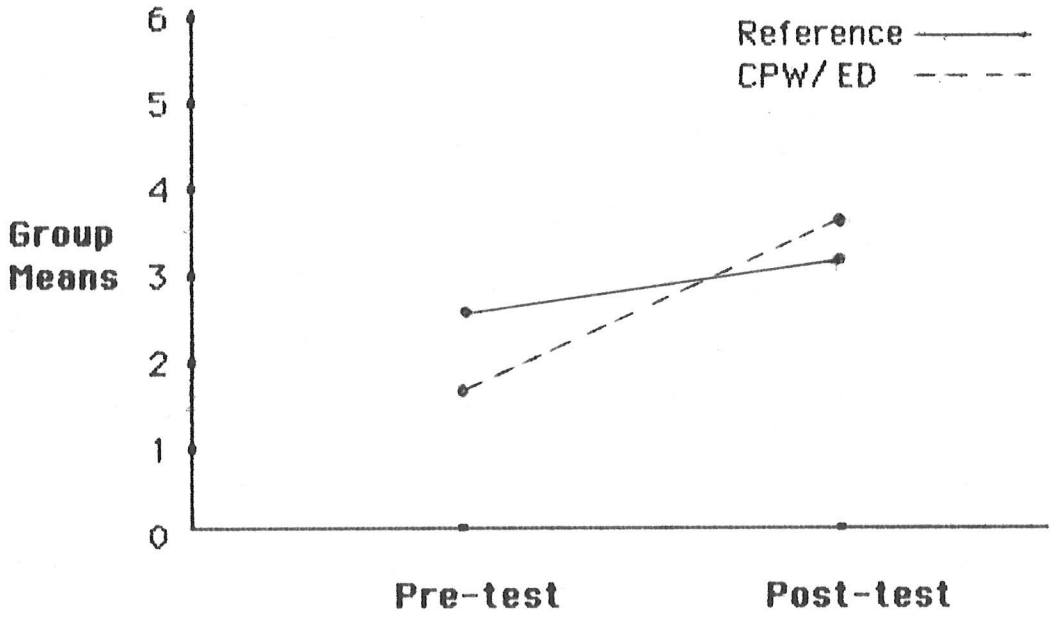

Figure 4.05 Pre- and Post-test Mean Scores for Reference and CPW/ED on GIM

It might be fallacious to assume from the statistics that word processing results in greater fluency. Every word processing group demonstrated significantly greater growth on word count than Control, which, in fact, decreased its mean score from pre- to post-test. However, although Control's assignment for the pre-test was identical to that of the other participants, Control wrote about a character designated from a novel while the other groups wrote about a character designated from a short story. Thus, Control subjects had a more detailed knowledge of their topic than did the other groups. Additionally, Control subjects were likely influenced by their previous writing experiences which caused them to write longer pre-test compositions than did the other groups. In fact, Control subjects continued to write the longest papers throughout the course of the study; yet every other group exceeded them in fluency growth.

Question 6

Does any single instructional pattern involving word processing, prewriting, and editing affect performance more than textbook-based instruction?

On all quality and style measures the word processing group who had computer assistance for prewriting only (CPW/ED) consistently outperformed the reference group who had textbook-based instruction (See Figure 4.05 and Appendix K). No significant differences were observed between these groups on word or error count. The prewriting

program is designed to help students to collect ideas and details, organize their work, and choose appropriate words and phrases. Their success in completing such tasks is precisely what the measures of quality and style were designed to assess. Although it cannot be denied that novelty could have operated as a factor stimulating the CA prewriting subjects, as the researcher determined by survey, all of those subjects had used computers before. Furthermore, while those subjects used computers for their two practice compositions, they did not have computer assistance on their pre- or post-tests. It is interesting to note that, although both CPW/ED and Reference improved in fluency, the researcher did not find that one was not significantly more successful than the other, despite the great gaps between them on all the quality and style measures. The equality exhibited between the two groups on error count shows that teacher-designed editing was as helpful to subjects as was non CA editing.

The word processing group that had CA editing (PW/CED) surpassed Reference on only a single measure, wording (See Appendix L.). This result lends strength to the argument that subjects found the prewriting computer program more stimulating and helpful than the textbook chapter. The success of PW/CED on wording might have been a result of the exposure these individuals had to the word processor which enabled them to reconsider selected words and make changes more readily than they could without a computer. The lack of

difference between PW/CED and Reference on error count suggests that CA editing was no more helpful to subjects than was teacher-designed editing.

The two other word processing groups, one of which used computers at every stage of instruction while the other used computers only for word processing, failed to prove any superiority over Reference on any measure. In the case of CPW/CED, it might be argued once again that these subjects were simply overloaded in trying to use three new computer programs, and that this problem was reflected in their work. PW/ED did not have the benefit of CA prewriting, and this, combined with the relatively short time they spent in the computer lab, apparently left them with no advantage over those subjects who had text-based instruction.

Question 7

Does systematic instruction in prewriting and editing without computers affect performance more than textbook-based instruction?

The results of a comparison between the control group that had systematic instruction in prewriting and editing without computers and the reference group that had textbook-based instruction does not suggest that the systematic instruction without computers was more effective than instruction from a text. As Table 4.06 indicates, Reference demonstrated more growth than Control on general impression, choice of details and elaboration of ideas,

sentence structure, and word count (See Figure 4.06 and Appendix M.). Control, the group that received the same instruction as computer-assisted groups for prewriting and editing but without the computers, scored above every other group including Reference on the pre-test on all measures except error count. Their post-test scores represent imperceptible changes on every measure except word count, an exception which is understandable in light of Control's previous writing experiences. Reference's superiority on general impression, choice of details and elaboration of ideas, sentence structure, and error count suggest that Reference benefitted more from their textbook-based instruction than Control did from their instruction without computers.

Conclusions

The results of data analyses in this study suggest that some instruction involving computers did help subjects to produce better writing. Word processing groups exceeded non word processing groups on every meaure except error count. Both CPW/ED and PW/CED surpassed Control on all measures except error count, but while PW/CED surpassed Reference only on wording, CPW/ED surpassed Reference on all quality and style measures. While PW/CED proved slightly more successful than PW/ED, CPW/ED proved much more successful as compared to PW/ED. These comparisons indicate that some computer-assisted instruction is better than none

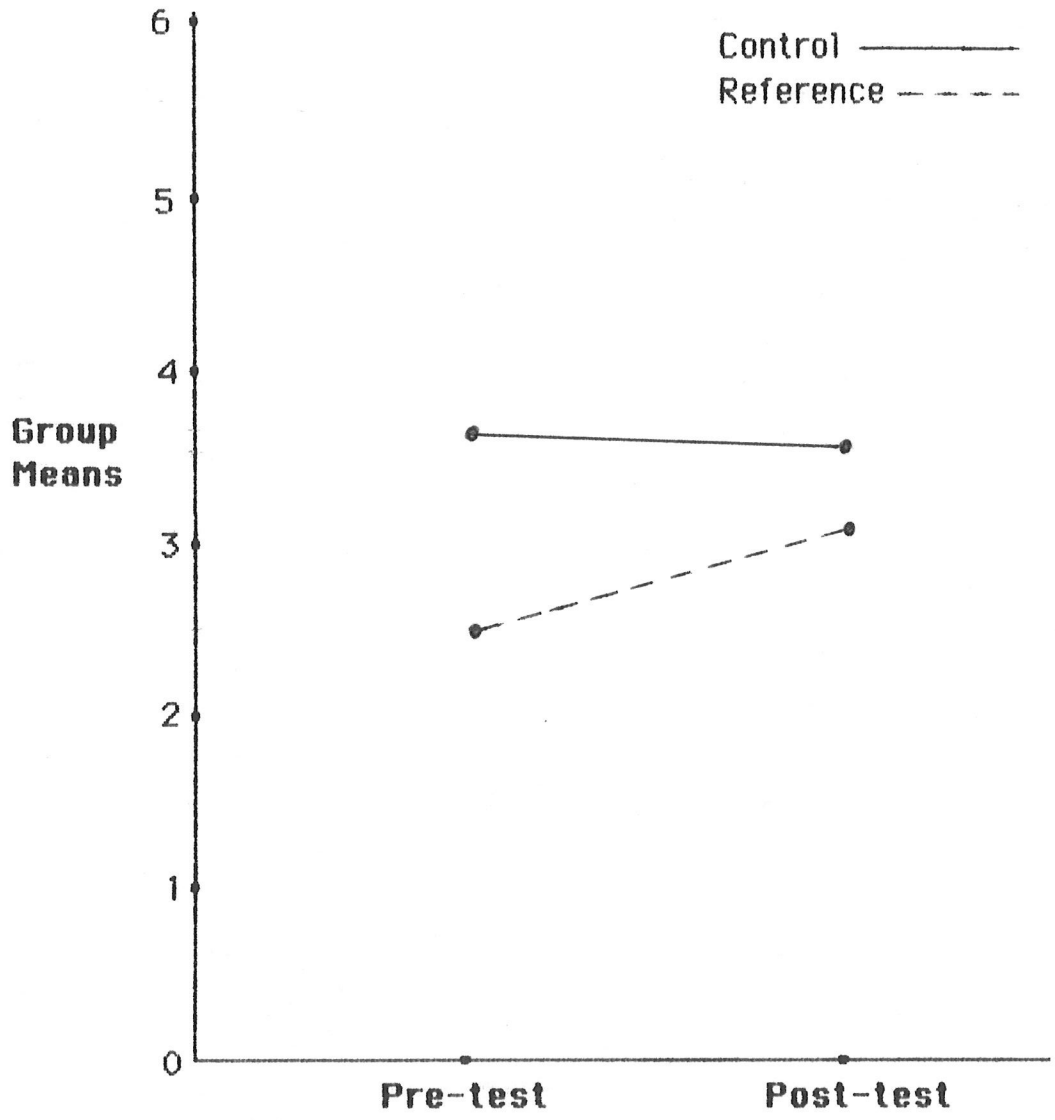

Figure 4.06 Pre- and Post-test Mean Scores for Reference and Control on GIM

and that CA prewriting was a more successful instructional technique than CA editing. The fact that PW/ED outperformed Control on general impression, paragraph focus, sentence structure, and word count implies that it was their exposure to a word processor that led to greater growth than Control achieved. Although neither PW/ED or CPW/CED proved superior to Reference, there are indications that no computer-assisted instruction is better than computer-assisted instruction at every step. CPW/CED demonstrated more growth than Control on one measure only, word count. In direct comparisons between CPW/CED and PW/ED, PW/ED surpassed CPW/CED on paragraph focus and sentence structure.

Why were neither PW/ED or CPW/CED able to exhibit greater improvements than Reference? It seems that word processing alone was not enough to allow PW/ED subjects to surpass Reference subjects. Word processing had to be coupled with either CA prewriting or CA editing in order for a word processing group to surpass Reference. The lack of success of CPW/CED in surpassing Reference is likely best explained once again as a result of CPW/CED's difficulty in handling three new computer programs.

Chapter IV presented the analysis and findings of the study. Chapter V will summarize the study and its conclusions, discuss the educational implications and propose future research.

CHAPTER V

SUMMARY AND CONCLUSIONS

Computers in schools are a relatively recent innovation, particularly in humanities courses which were slower to adopt the new technology than were mathematics and sciences. Many English teachers have heard or read claims that computers provide a tool that can result in marked success among student writers to whom they are introduced. Some teachers are eager to experiment with the new technology in their classrooms but are hesitant because the claims about computer assistance are not always substantiated with enough research. Experienced teachers, who have seen methodological fads come and go over the years, are not easily convinced that the same fate will not befall computers. English teachers might be interested in the claim that computers offer writers an individualized interactive environment that seems to result in an improved attitude toward the task of writing. They might be intrigued by demonstrations of word processors that supposedly make revision much easier than when it must be done by hand. The concept of prewriting programs designed to help students discover their ideas, details, and organization, or computer editors, that first analyze writing for errors and weakness and then allow changes to be made, is tantalizing for teachers engaged in the struggle to help their students improve their writing. However, cautious educators will

refuse to adopt the technology in writing instruction until a great deal more research has determined whether it results in measurable improvement in student writing.

In general, the purpose of this study was to add to the body of research on how and when computers can be used effectively in writing instruction. Specifically, the aim was to compare the impact of three types of prewriting and editing instruction on the writing fluency, quality and style, and number of errors counted in the compositions of Grade XI students. The three types of instruction are: computer-assisted, non computer-assisted, and textbook-based.

From the stated purpose of this study, the following research questions were generated:

1. Do students composing with a word processing program produce better quality writing when they use a computer program designed to assist them through their prewriting?

2. Do students composing with a word processing program produce better quality writing when they use a computer-based text editor?

3. Is there a differential effect on the writing of students when they are exposed to word processing and different combinations of prewriting and editing instruction (with or without computers)?

4. Does composing with a word processor combined with either computer-assisted or non computer-assisted

instruction in prewriting and editing improve performance more than methods not employing word processing or any sort of computer-assisted instruction?

5. Does any single instructional pattern involving word processing, prewriting, and editing affect perfomance more than the same instruction without word processing?

6. Does any single instructional pattern involving word processing, prewriting, and editing affect performance more than textbook-based instruction?

7. Does systematic instruction in prewriting and editing without computers affect performance more than textbook-based instruction?

Method

Eighty Grade XI English 201 students, all in attendance at one suburban high school in Winnipeg, served as the subjects in this study. The students were asked to write an in-class composition as a pre-test before their classes were assigned to particular instructional patterns. Students within each of two of the classes were randomly assigned to one of two instructional patterns. Each pattern involved the use of computers at a minimum of one point within the instructional sequence. All students in a third class were exposed to the same systematic instruction, the sole difference being that it was presented without computers at any point. All students in a fourth class were exposed to textbook-based instruction. Following completion

of the various instructional sequences, all students were required to write an in-class composition as a post-test. Student performances on both pre-test and post-test were recorded and analyzed in an attempt to answer the research questions posed.

In order to determine the level of consistency of measurement between the two markers of the pre- and post-tests, interrater reliabilities were calculated for each of the eight quality measures using the Spearman-Brown Prophecy Formula, rtt=2rxy/1+rxy, where rxy=the Pearson Product Moment Correlation (Diederich, 1974).

In order to assess the effect of the different patterns of instruction on student performance, a number of analyses were performed, all employing analysis of variance with repeated measure, the repeated measure being time (pre-test to post-test) as outlined below:

1. In order to address questions 1, 2, and 3, a 2 x 2 x 2 three-way analysis of variance with two between subjects factors, prewriting instruction (computer-assisted versus non computer-assisted) and editing instruction (computer-assisted versus non computer-assisted), and one within subjects factor, time (pre-test, post-test), was performed on the data of a subset of the subjects: those receiving the word processing treatments. When significant effects were observed in the omnibus analysis for the interaction of the two between subject variables, a subsequent two-way (repeated measures) analysis of variance

employing paired contrasts of groups was employed to explore where the significance lay.

2. In order to address question 4, a 2 x 2 completely crossed two-way analysis of variance with one between subjects variable, word processing versus no word processing, and one within subjects variable, time (pre-test, post-test) was performed on all subjects in the study.

3. In order to address question 5, four 2 x 2 completely crossed two-way analyses of variance with one between subjects variable, group (each of the four word processing groups versus the control group), and one within subjects variable, time (pre-test, post-test), were performed to compare the effect of patterns of CA instruction and the same instruction without word processing.

4. In order to address question 6, four completely crossed two-way analyses of variance with one between subjects variable, group (each of the four word processing groups versus the reference group), and one within subjects variable, time (pre-test, post-test), were performed to compare the effect of patterns of CA instruction and textbook-based instruction.

5. In order to address question 7, a 2 x 2 completely crossed two-way analysis of variance with one between subjects variable, group (control versus reference), and one within subjects variable, time (pre-test,

post-test), was performed to compare the effect of non CA instruction in prewriting and editing (which paralleled the instruction for the word processing groups) and textbook-based instruction combined with conventional teacher-designed editing.

Summary of Findings

The following is a summary of findings of the study for each research question posed:

1. Subjects using computers for prewriting and composing did not improve their fluency more, make fewer errors, or score higher on six of the eight quality and style measures than subjects who used computers for composing only. There was a significant difference noted on the measures, paragraph focus and sentence structure, in favor of the CA prewriting group.
2. The computer-based text editor used by some subjects did not decrease the number of errors they made or enhance their writing in any other measurable way.
3. The two word processing groups that had computer assistance with either prewriting or editing showed significantly more improvement on quality and style measures than the other two word processing groups, one of which was exposed to CA instruction throughout the process while the other received no CA instruction. No significant differences were observed between the CA prewriting group and the CA editing group, but CA prewriting had the more dramatic

effect. This finding suggests that the prewriting program was more effective than the editing program in improving the quality and style of students' writing.

The fact that on two measures the word processing group who had received no CA instruction outperformed the word processing group who had received instruction exclusively by computer suggests the possibility that no CA instruction is better than CA instruction at every step.

4. The researcher found that subjects who were exposed to word processing and CA or non CA instruction in prewriting and editing were significantly superior on every measure except error count to subjects who did not compose with the word processor. Clearly, word processing combined with some instruction had made a difference, but it was not effective in reducing the number of errors students made.

5. Every word processing group surpassed the control group on at least one measure. Two word processing groups, the one that had CA prewriting and the one that had CA editing, outperformed the control subjects on all measures except error count. The word processing group that had computer assistance for prewriting, composing, and editing proved superior on word count only. The group that had used computers for word processing only surpassed the control group on general impression, paragraph focus, sentence structure, and word count. These findings indicate that some CA instruction is better than no exposure to computers at all, and that using computers for composing only is more

beneficial than using them throughout the writing process. Furthermore, word processing combined with either CA or non CA editing did not help the subjects to decrease the number of errors they made on their papers any more than the control group.

6. On all quality and style measures, the word processing group that had CA prewriting scored significantly above the reference group who had textbook instruction. No significant differences were observed between the two groups on word or error count. The word processing group who had CA editing proved superior to the reference group on wording only. Neither of the other two word processing groups demonstrated significantly greater improvements as compared to the reference group.

7. The researcher observed significantly more growth on the part of the group that had textbook instruction as compared to the control group on genereal impression, choice of details and elaboration of ideas, sentence structure, and word count. The control group had the same instruction as the word processing groups for prewriting and editing but without computers. The impact of this instruction on the control group seems to have been slight since the pre- and post-test scores are nearly identical on all measures with the exception of word count.

Implications for the Classroom

Based on the findings from the present study, the

researcher has drawn the following implications for classroom practice:

1. Teachers should recognize that it will take students some time to adapt to using computers in their writing. The approach most likely to attain success is one in which students are introduced gradually to different programs designed to assist them with their writing tasks.

2. Teachers must assess carefully the needs of their students and their own instructional objectives before determining which of the available prewriting programs are likely to be most beneficial. A particular program might be suitable for a certain age group, but it might be designed for specialized application for specific types of writing assignments only.

3. Teachers introducing students to word processing should select a simple, easily-learned program and introduce the necessary functions gradually as students are composing. Inexperienced students are overburdened when they must complete an assignment and learn several word processing commands simultaneously. Teachers should allow students a reasonable time period during which they can familiarize themselves with the word processor unhampered by the fear that every piece they write will be evaluated.

4. Teachers electing to introduce students to editing programs should be sure that the programs they have selected can be integrated with the editing instruction they are offering in their classes. Programs might contain

terminology with which students are unfamiliar. The researcher suggests interested teachers look for editing programs that enable users to opt for various types of analyses. This program design would allow a teacher to introduce the various types of analyses as students indicate readiness to use them properly.

5. Designers of programs for writing instruction should try to develop software that is simple to master since it is often being used by novices. Program designers should appreciate that, for the majority of students, writing itself is not an easy task. It seems reasonable to expect more success from students who are using programs that were easy to master than from students who are burdened with the task of operating complicated software.

6. Software is needed that is based on the concept that writing is a process involving a back and forth movement from one stage to another. For this reason program designers should attempt to develop software that includes prewriting assistance, word processing, and editing analyses all within the same package. This would enable users to experience a writing environment in which movement between the various stages is facilitated.

Implications for Further Research

The results of the present study provide the basis for the following suggestions for further research:

1. In order to confirm the results of this study, it should

be replicated with other populations.

2. Studies examining the impact of other computer programs for prewriting, word processing, and editing should be undertaken in an effort to determine the characteristics of effective software.

3. Word processing is beneficial in helping student writers improve their fluency, quality and style. Further research on the use of word processors in composition instruction might provide educators with more information as to why this is so. Previously, educators and researchers have speculated about the reasons for the success of word processors, but no definitive answers have been discovered.

4. Studies that take place over a longer period of time would be beneficial in counteracting the novelty effect of new instruction introduced within a relatively short time frame. Research might find that, given more time to work with writing programs and different combinations of writing programs, students integrate computer assistance into their writing process, thus becoming better able to use it successfully.

Conclusions

Based on the findings of this study the following conclusions can be made:

1. At least over the short term, students who are introduced to computer-assisted instruction and/or word processing do seem to undergo a definite improvement in

attitude toward their writing assignments. They appear to enjoy learning how to use the technology in their writing, and their positive attitude is reflected in increased fluency and better quality writing.

2. A computer program designed to assist students with prewriting combined with a word processor presents effective instruction if students are not further burdened with the task of having to learn how to use a computer-based text editor as well. The combination of CA editing and word processing is effective but not to the same degree that is CA prewriting combined with word processing. The comparisons undertaken in the present study indicate that some computer assistance is much more effective than computer assistance given throughout the writing process.

3. Computer assistance for prewriting or editing combined with word processing yields better results than the same instruction given without computers for prewriting, composing, or editing. In fact, the use of word processing combined with non CA instruction in prewriting and editing is more beneficial than the same instruction without the use of the word processor.

4. The most effective instructional pattern involving computers as compared with textbook-based instruction is CA prewriting combined with word processing which produced writing superior in quality and style but not in fluency or error count.

5. The number errors students make in their papers is

relatively unaffected by CA editing, non CA editing, or conventional teacher-designed editing.

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APPENDIX A

Analytic Scales

After the writing samples have been read and scored for the GIM, they will then be reread and marked on the following seven major qualities:

1. Organization and Coherence
2. Wording
3. Style
4. Paragraph Focus
5. Quality of Ideas
6. Choice of Details and Elaboration of Ideas
7. Sentence Structure

A score of 1 to 6 should be assigned each piece of writing for each of the above categories. At times, when a paper tends to be lengthy, it may need to be read twice in order to assign a score in each category.

1. Organization and Coherence

Writers of character sketches may choose to provide details describing the appearance and behavior of an individual and work toward developing a general impression. Alternatively, writers may elect to provide a general impression of a character supporting it with details describing his appearance and behavior. Either organizational pattern, specific to general or general to specific, can be effective when it is applied consistently throughout the paper. Regardless of which pattern the writer chooses, his paper should introduce the character

immediately and effectively and build upon that introduction. The writer should use appropriate transitions to link together details and ideas presented. The conclusion should represent the writer's effort to leave readers with his dominant impression of the character.

High (5 or 6) : The writer has an effective opening that catches the interest of the reader. The organization clearly follows a specific to general or general to specific pattern consistently. Effective transitions from one detail to another are used to cue the movement of the paper for the reader The closing is effective in that it leads the reader to feel that he has been left with a dominant impression of the character to whom he has been introduced.

Middle (3 or 4) : The writer introduces the character but does not catch the interest of the reader or provide necessary background information. Generally, the details are appropriately chosen, but the writer may not have applied an organizational pattern consistently throughout the paper, or used transitions to aid the reader in following his description. The paper may have a weak ending or may leave the reader with little or no sense of closure.

Low (1 or 2) : The writer has not attempted to catch the interest of the reader in the opening. Necessary

background information may be lacking in the paper. The sequence in which details have been presented in the paper may confusing, left out, or ordered so inappropriately that the reader cannot make sense of the writer's description. Transition phrases are not used to aid the reader, and he is left with little or no feeling of closure or completeness at the end of the paper. The entire paper may leave the reader confused about the writer's impression of the character.

2. Wording

Wording refers to the choice of vocabulary the writer makes in writing the paper. Word choice should reflect both precision and maturity, as well as appropriateness to the audience being addressed.

High (5 or 6) : The words chosen by the author reflect sensitivity to the audience being addressed. The words are precise and exact, with clear reference. Vivid, original words and phrases are employed. The words help the reader to "see" clearly and to understand the writer's impression of the character he has described. Slang, aside from possible applications in dialogue, is avoided in favour of standard language usage.

Middle (3 or 4) : The words chosen by the writer may have appropriate referents, but they do not reflect a sensitivity to the reader/audience. At times words represent

exaggerations, are vague in meaning, or are over-used. There may be inappropriate usages of nonstandard language.

Low (1 or 2) : The writer seems to have no sense of audience whatsoever. Words and phrases are often vague, colorless, and unoriginal. Words or phrases chosen may not aid the reader in understanding the writer's impression of the character and may interfere with comprehension.

3. Style

Style refers to how the writer strings words together into phrases, sentences, or longer thought units. The ways in which words are strung together should be clearly understandable.

High (5 or 6) : The style is interesting, sentences are varied as to length and structure when appropriate, and the structures are clear and easy to read and understand. The style is concise and engaging.

Middle (3 or 4) : The style is wordy and repetitive to the point of being noticeable, or inappropriately long or short sentences interfere, at times, with the ease of reading.

Low (1 or 2) : The style is nonengaging and difficult to read. Phrases are wordy and/or may not aid the

reader in understanding the writer's impression of the character and may interfere with comprehension. Sentences are either too long to be read with ease, or too short to create a flow.

4. Paragraph Focus

The writer chooses details, incidents, and examples because they relate to the purpose of writing. He seems to have a central focus and maintains that throughout a paragraph.

High (5 or 6) : The writer clearly has a central focus for each paragraph and develops each of the elements within the paragraph so that it directly relates to that central focus. The purpose of the paragraph is clearly discernible. The writer does not present information, opinions, or details that do not relate to the central purpose of the paragraph.

Middle (3 or 4) : The writer has a central focus for each paragraph, but the relationship of each of the elements within the paragraph is not clearly related to the focus. The purpose of each paragraph is not always clearly identifiable, and at times, the writer interjects information, opinions, or details that do not relate to the central focus. These intrusions, however, do not seriously interfere with the thrust or movement.

Low (1 or 2) : Each paragraph does not seem to have a central focus or development. Elements within the paragraph seem unrelated to any central purpose. Information, opinions, and details seem to be added with little concern as to how they related to the topic or subtopic under discussion.

5. Ideas

The ideas presented in a paper reflect the quality, uniqueness, and creativity of the thinking involved in the development of the paper. The writer chooses and presents details to develop his sketch of a character.

High (5 or 6) : The author has selected appropriate and meaningful ideas to discuss and describe his character and may have dealt with the topic in a unique, creative fashion. Humour, interesting figures of speech, comparisons and contrasts, or the like, may be used or attempted in describing the character.

Middle (3 or 4) : Though the ideas presented in the paper are generally sound, they do not reflect a unique or creative point of view in dealing with the topic. No attempt has been made to employ humour, interesting figures of speech, comparisons, contrasts, or the like in order to make the paper more interesting or lively.

Low (1 or 2) : The ideas presented do not reflect sound or creative thinking. Not only is the paper lifeless, but the ideas do not congeal as a whole and seem to reflect mental wandering rather than logical or creative thinking.

6. Choice of Detail and Elaboration

The details chosen by an author, how particular ideas within a paper have been elaborated, and how real and vivid the writing is can make the difference between a listless, lifeless paper, and an exciting, engaging paper. In a character sketch, the author must provide enough detail to support his perception of the character.

High (5 or 6) : The details chosen by the author are appropriate to the development of the description of his character and are sufficiently elaborated as to be interesting to the reader without getting carried away. The words, phrases, figures of speech, comparisons, contrasts, etc. seem to have been selected and presented in such a manner as to make the character alive and real to the reader. The writer has supported his perception of the character.

Middle (3 or 4) : The details chosen seem appropriate to the description, but at times the writing seems to lack life. Insufficient elaboration may not allow

the reader to visualize the character adequately or to understand fully the writer's perception of the character.

Low (1 or 2) : The details chosen by the author do not seem appropriate to the purpose of the paper or to his audience. The author has not appropriately elaborated the description, and the writing is lifeless. The expression used by the author not only is not vivid, but may be boring and unreal.

7. Sentence Structure

No hard and fast rules can be set down for sentence structure. At times, a variety of sentence structures is appropriate to create and maintain reader interest. Sometimes repetitive patterns can create a desired effect. Sometimes, short, choppy sentences are appropriate to the topic and discourse; at other times, long, elegant structures are appropriate.

High (5 or 6) : A positive effect is created by the author in the use of sentence structures. The writer seems to have control of a variety of structures and employs them effectively in communicating.

Middle (3 or 4) : Although the writer seems to have control of a number of sentence structures, at times the structures are ambiguous or clumsy, or the writer may not

have taken advantage of opportunities to create a positive effect in varying or repeating sentence structures.

Low (1 or 2) : The sentence structures are little more than simple sentences; a small number of structures are repeated throughout the paper so that the paper becomes boring or predictable. The author seems to have serious difficulties in presenting effectively constructed sentences.

APPENDIX B

Error Codes in "Analyze Prose"

When "Analyze Prose" checks your text file, it is looking for certain things that someone might question about your writing. If it finds any of them, it will mark the printed copy of your text with an Error Code number. The following list explains what each number means in "Analyze Prose".

#1 Error Code: Series Comma

Remember to use a comma before each item in a series.

For example:

chocolate, strawberry, and vanilla

Also use a comma between clauses that have their own subjects and verbs.

For example:

The first half of the movie was boring, but the second half was even worse.

#2 Error Code: Initial Word

Avoid "and" or "but" to begin a sentence, except in unusual cases.

Using either word may leave the reader with the impression that the first part of the sentence is incomplete.

#3 Error Code: Split Infinitive

A word placed between the two elements of an infinitive is said to "split" the infinitive.

For example:

to hide = an infinitive

to quickly hide = a split infinitive

#4 Error Code: Ending Preposition

It is sometimes acceptable to end a sentence with a preposition to avoid awkward wording. In most cases, however, a sentence ending in a preposition can be rewritten to produce a smoother writing style. For example, "Why is he here?" sounds smoother than "What is he here for?"

#5 Error Code: "To Be" Verb - First Check (a form of the verb: "to be" followed by a word that ends in "-ed" or "-en")

Avoid overusing the verb "To be." Try to put descriptive words in front of the nouns in your sentences. For example, a sentence such as "These apples are green and make my mouth pucker" is more effective when changed to "These green apples make my mouth pucker." The revised sentence places the descriptive adjective "green" before the noun "apples."

#6 Error Code: Passive Voice - Irregular Verb (a form of the verb "to be" used with another verb that forms the past tense in an unusual way)

Passive sentences are less direct and less forceful than active sentences.

For example, you can write:

The bell was rung by the teacher. (passive)

The teacher rang the bell. (active)

However, if it is unimportant who rang the bell, you might use the passive:

"The bell was rung."

#7 Error Code: Passive Voice - Regular Verb (a form of the verb "to be" used with a verb that forms the past tense by adding "-ed" or "-en")

Use active verbs instead of passive verbs whenever possible.

For example, the sentence "A letter was written by the principal to all parents" would be more direct and less formal if written in the active voice:

"The principal wrote a letter to all parents."

#8 Error Code: "To Be" Verb - Second Check (a form of the verb "to be" followed by other modifiers or descriptive words)

Forms of the verb "to be" are often overused.

For example:

These shoes are new and pinch my toes.

The verb "are" is not needed. It is better to focus on the more descriptive verb "pinch" and to revise the sentence:

These new shoes pinch my toes.

#9 Error Code: Vague Word

Try not to use vague words or expressions. Good writing is precise. Experiment with vivid words

and original phrases.

Vague Words	Precise Words
thing	chewed pencil, crumpled paper (i.e., name the object)
some, many, or most	four out of twelve, more than fifty (i.e., cite a specific number)
etc.	(try not to use)

#10 Error Code: Overused Word

Try to make your writing sparkle. The following are examples of alternative words:

Overused Words	Less Frequently Used Words
a lot	plentiful, bountiful, numerous
happy	delighted, elated, jubilant, ecstatic

#11 Error Code: Slang Usage

Try not to use slang words or expression, unless you're writing dialogue or creating a certain mood.

Slang Usage	Standard Usage
could of, must of	could have, must have
hassle	difficulty, obstacle, trouble (nouns) harass, trouble (verbs)
ain't, aint	aren't are not

#12 Error Code: Wordy Phrase

Try not to use wordy expressions. Keep your writing concise, as in these examples:

Wordy Phrases	Concise Words
without further delay	immediately
at this time	now
due to the fact that	because

#13 Error Code: Redundant Expression

Try not to use redundant expressions. Redundancy occurs when we repeat ourselves unnecessarily. Here are some examples:

Redundant Phrases	Precise Words
hardly ever	rarely
very unique	unique
join together	join
seldom ever	seldom
consensus of opinion	consensus

#14 Error Code: Exaggeration

Try not to exaggerate in factual writing. Exaggeration damages credibility, causing readers to question what you have to say.

#15 Error Code: Another Reminder (a word or phrase that your teacher has added)

Try to think of another way to say this:. . .

"This character sketch is about..."

"I am going to tell you about..."

#16 Error Code: Inside Punctuation

Commas and periods should be written inside quotation marks.

#17 Error Code: Outside Punctuation

Semicolons and colons should be written outside quotation marks.

#18 Error Code: Closed Punctuation

Parentheses, quotation marks, and brackets or braces generally should be used in pairs.

#19 Error Code: Initial Capitalization

The first word of every sentence should be capitalized.

#20 Error Code: Initial number

Whenever a sentence begins with a number, it should be spelled out rather than written as a numeral.

For example, don't write:

12 of the entries in the contest were under 21.

Instead, write:

Twelve of the entries in the dance contest were under 21.

#21 Error Code: Pronoun "I" Capitalization

The letter "i" should be capitalized whenever it's used as the personal pronoun "I"

#22 Error Code: Abbreviations

Abbreviated titles, such as Mr. or Ms., should always be capitalized.

Many other abbreviations, such as St. (for street) and Ave. (for avenue) customarily are capitalized.

Short Average Paragraph Length

The average length of your paragraphs is less than three sentences. An average paragraph has from three to ten sentences. While effective paragraphs may be any length, very short paragraphs may not develop main ideas adequately.

Perhaps you have not thought enough about your main ideas, or perhaps your paragraphs could be combined.

Long Average Paragraph Length

The average length of your paragraph is more than 200 words. An average paragraph has 150 to 200 words. While effective paragraphs may be any length, long paragraphs may contain unnecessary words or more than one topic.

Perhaps you could replace long phrases with one or two words.

APPENDIX C

General Impression Marking Scale (GIM)

General Impression Marking is a judgement about the overall quality of a student's writing given the purpose of the writing and the audience to which the writing is addressed (the audience in every case is a student's classmates). The writing should be read quickly for a general reaction. No marks should be put on the paper at this time. After a group of papers have been read quickly, they should be ordered generally from the best paper to the poorest paper and scores should then be assigned (6 - high, to 1 - low). Descriptions for the general impression are given below. The teacher should keep in mind that the evaluation is general - that is, no one quality of the paper such as organization or sentence structure should constitute the whole score. Judgments about those qualities are covered in the analytic scales.

It is often a good idea to ask a colleague to read over (quickly) the set of papers and mark them independently (without being aware of the first marker's scores). Then the scores should be compared.

The GIM is a quick, impressionistic score. Evaluation of specific attributes of the writing should be left to the analytic marking scales.

General qualities and suggested scores are listed below:

5 or 6 High

3 or 4	Middle
1 or 2	Low
XX	Insufficient Information

The GIM scale attempts to rate compositions in a general, global manner. Areas covered include the quality of thought evidenced in the paper, the effectiveness of the overall organization, the effectiveness of the overall presentation, and the effectiveness of style and word choice.

High (5 or 6) : The paper evidences thinking on the part of the writer that is above what would normally be expected at this grade level. The quality of thought reflects a developmentally mature point of view. It takes into account the appearance and major qualities of the character under discussion, describing both in sufficient detail to yield a comprehensive portrait of the subject. The organization of the paper indicates careful planning with one idea following logically from the preceding one. It is an effective organization affording the reader no difficulty in following the development of the description involved.

Middle (3 or 4) : The paper evidences thinking on the part of the writer that is appropriate to the grade level of the student. It includes some aspects of the character's appearance and personality, but not necessarily

major ones. The paper is obviously planned, though at times the writer may wander from the central thrust or movement of his description. The ideas and details are generally organized in a meaningful fashion in that one point flows smoothly to the next. The style is, for the most part, clear, and word choice and use reflect a grasp of language that would be expected at this grade level. The level of the paper may not, for the most part, take into account the audience being addressed, but, in general, it fulfills the purpose of the assignment.

Low (1 or 2) : The paper evidences thinking on the part of the writer that is obviously immature. The quality of thought reflects a point of view substantially below what would be expected at this grade level. The writer has failed to deal with enough aspects of the character's appearance and personality to produce a well-rounded picture. The organization of the paper is difficult to follow and does not reflect any careful planning. Ideas and details do not follow each other smoothly and logically. The movement of the paper is interrupted by wandering thoughts, unnecessary asides, or inappropriate information. The style is inconsistent and immature, and repetitive or uninteresting structures are often used. Word choice is unclear, inappropriate, and distracting. The writer seems to have no awareness for the audience or reader and no purpose in writing the paper.

APPENDIX D

Chapter 12

The Character Sketch

> The artists tell us what they think we are. They help us to hear our own voice, recognize our own shape, laugh at our own follies, rejoice in our powers. Accepting or rejecting the artist's views, we become more thoroughly ourselves.
>
> - Elizabeth Waterston

When the editor of a small country newspaper was able to double the circulation of his publication after several previous editors had failed, he was asked to explain the secret of his success.

"It's easy," he said." All I have to do is mention the name of every single person in town at least once each month. They all want to see their own names in print, and besides that, they're curious about everybody else."

Successful newspaper and magazine editors have all learned this rule for building readership: Names are news.

Perhaps you've thought of the character sketch as a classroom exercise-something that teachers assign, but that doesn't exist outside of school. Well , think again! Almost every magazine, journal, and newspaper runs character sketches of one kind or another. Is it a magazine catering to hotel managers? Then the readers are interested in outstanding, successful, and colourful people in the hotel business. Is it a magazine emphazing science? Then the editor will present a character sketch of an outstanding

scientist. Whatever the publication, it will publish character sketches of men and women who will be interesting to its particular audience. Some successful magazines consist entirely of brief character sketches of well-known people.

There are three things to consider in writing a character sketch: the subject, the point of view, and the method you will use to present your subject. The subject must be worth writing about for some reason. That reason will be the focus of your sketch. Do not attempt to describe every aspect of the character's life. Instead, select the traits that will make the character "live" on the page. Another pitfall to avoid is the use of stereotypes, stock characters, which lack both individuality and realism. As you write your character sketch, select the details that make your subject unique among all others. The best way to avoid stereotypes is to become more sensitive to people around you, noticing the qualities that make each person distinct and individual.

As you read the character sketches that follow, keep in mind the differences between individualized characters and stereotypes.

I

She met us at the train yesterday, officially, and took us home with her for dinner. There's one at least in every town, austere, beyond reproach, a little prim with the

responsibilities of self-assumed leadership- inevitable as broken sidewalks and rickety false fronts. She's an alert, thin-voiced, thin-featured little woman, up to her eyes in the task of managing the town and making it over in her own image. I'm afraid it may mean some changes for Philip and me too, for there's a crusading steel in her eye to warn she brooks no halfway measures. The deportment and mien of her own family bear witness to a potter's hand that never falters. Her husband, for instance, is an appropriately meek little man, but you can't help feeling what an achievement is his meekness. It's like a tight wire cage drawn over him, and words and gestures, indicative of a more expansive past, keep squeezing through it the same way that parts of the portly Mrs. Wenderby this afternoon kept squeezing through the back and sides of Philip's study armchair. And her twelve-year-old twins, George and Stanley, when they recited grace in unison their voices tolled with such sonority that Philip in his scripture reading after dinner sounded like a droney auctioneer. Philip at the table, I noticed, kept watching them, his eyes critical and moody. He likes boys- often, I think, plans the bringing-up and education of his boy. A fine, well-tempered lad by now, strung just a little on the fine side, responsive to too many overtones. For I know Philip, and he has a way of building in his own image, too.

-Sinclair Ross

II

Becker, the first time you see him, is at the mainland terminus waving your car down the ramp onto the government ferry and singing to your headlight and to the long line of traffic behind you that he'd rather be a sparrow than a snail. Yes he would if he could, he loudly sings, he surely would. In his orange life-jacket and fluorescent gloves, he waves his arms to direct traffic down that ramp the way someone else might conduct a great important orchestra- a round little man with a sloppy wool cap riding his head and a huge bushy beard hiding all of his face except the long turned-down weather-reddened nose. He'd rather be a forest, he sings, than a street.

Follow him home.

Ride the ferry with him on his two-hour trip across the Strait of Georgia, while the long backbone ridge of the island's mountains sharpens into blue and ragged shades of green, and the coastline shadows shape themselves into rocky cliffs and driftwood-cluttered bays; then follow him up the ramp,the end of his shift, as he sets out through the waiting lines of traffic and gusts of rushing passengers on foot. No longer the serenading conductor, he is a short stump of a man walking the full length of the waterfront parking lot and then up the long slow hill towards the town, his black overcoat hanging down past the top of his rubber boots suggesting the shape of a squat crockery jug. He stops to explore the rain water running through the limp grass in

the ditch, and to talk for a while with someone leaning over a frontporch ledge, and to buy a pocketful of candy in a corner store. But eventually he gets into his old fenderless green Hillman parked in one corner of the shopping-centre lot, and drives down the long slope to the beach again, and along past the bay, and north beyond town altogether on a road that twists around rock bluffs and dips through farm valleys, and hemps through secondgrowth timber until he turns off suddenly and rattles downhill on a gravel lane to his log cabin where it stands with others near the water's edge.

-Jack Hodgins

Student Composition 12A

GRANDDAD

I woke to the clanking and rumbling of my antiquated radiator as the frantic steam gushed from the heater through the rusty pipes. I burrowed deeper into the warm blankets and lay quietly, listening contentedly to the sounds of the winter dawn. From the hall bathroom came the gurgling of hot water as it filled the chipped, narrow basin, and I could hear a muffled voice humming like a giant bumblebee. Granddad was up already and was preparing to shave. I smiled and resisted the impulse to go and watch him. I loved to watch his leathery hands, his methodical strokes, and his steady patience, and I couldn't remember ever seeing him

shave differently. And as I let my mind wander back to my childhood, I realized that Granddad's habits and moods changed little over the years.

"Aye, lassie," Granddad said to me once, "I like things the way they are, and I canna' be changed now." Granddad was a cooper in the local brewery when the whole family lived in the Scottish village of Coldstream. He took pride in the neat, sturdy wooden ale kegs he created. His job demanded that he be up at sunrise and ready for a long day. I can still remember Granddad singing in a lusty tenor as he washed and shaved while I lay in my cot waiting for the breakfast pooridge to be cooked. He would leave for work, dressed in coarse overalls and leather cap, just as I came down to the parlour, and his greeting was the same nearly every day. "Good mornin' to you wee'un," he would call, "it's a fair sight to behold at the morn, you are!"

One midday Granddad came home with a frown creasing his brown face. "Mary," he said to my grandmother, "I'll tell you directly. The other coopers have been listening to the union men from Edinburgh, and now the lads themselves want a union. It would mean better pay and less work. It would mean pay benefits during sickness." He stopped abruptly and looked from Grandmother's face to the rough flagstone floor. Then he said slowly, "And it would mean team construction on the kegs, an end to the individual's work." He looked up again into my grandmother's startled eyes and spoke, defiance crackling in his voice. "And I'll

tell you, Mary, I'll never let that happen. I'll work for my day's earnings and care for mysel' when I'm sick. And for sure I'll build the kegs alone without anyone else's advice!"

Granddad didn't even stay for his dinner that day, but returned to his work. But despite his warnings and protests, the unions did come to the Coldstream brewery. Granddad refused to join. Many times he threatened to leave altogether and move the family to Islay where the larger breweries were located, but time and again he was persuaded to stay. Soon he was the only cooper who worked alone, bending the taut fresh slats of wood into barrels and fastening them with black iron rings and seals. He remained the only cooper to brand his initials, as was tradition, onto the bottoms of the kegs.

Granddad resisted unions, but he could not stand against the waves of progress that flooded even the smallest breweries. Aluminum kegs were being cast in large Edinburgh factories for the transportation and storage of ale. The coopers no longer had a job. Gradually the Coldstream coopers left the brewery to accept jobs elsewhere. But Granddad was adamant. "Even the best stout will rot in those silver caskets." He encouraged his mates not to leave town. "These manufacturing fools will soon realize their mistakes. I, for one, will not go near the damned things. I canna' change my mind about quality, progress or no progress." Granddad never did go near the "damned things," for he

retired from the brewery as other coopers were fired.

Despite the fact that the Coldstream village no longer held the promise of work for Granddad, he stubbornly refused to leave his home when my father suggested a move to Canada.

"I canna' change this old body to fit a new place. You don't seal new iron rings to the wood with worn and rusted clasps. So leave me here in my own home." But eventually Granddad did leave for Canada with us, and although he adapted to the new environment, he never really changed.

Granddad finished shaving by now, I could no longer hear water splashing or a Lowland country song being hummed. I smiled and climbed out of bed to get my breakfast, thinking of Granddad's lastest problem.

The doctor had forbidden him to smoke cigarettes and to eat starchy foods. The young doctor had also warned Granddad about getting rest and dressing wisely for winter. I passed Granddad's door on the way downstairs. Everything was in order: the Bugler cigarettes, which Granddad rolled himself, were stacked neatly in a biscuit tin on the night stand; the remains of three slices of toast and jelly lay on a sticky plate atop the alarm clock.

Chuckling softly, I ran down the stairs to the kitchen. There was Granddad, stitting sweaterless in the drafty room, cheerfully reading the sports page.

"Good morning, Granda."

"Mornin' to you, wee'un." He smiled. "You're a fair sight in the mornin', lassie."

-Robin Wilkening

Questions

1. How does the writer tie the beginning and end of this paper together? What do they have in common?
2. What sensory images does the writer provide in her opening paragraph?
3. How does the writer communicate her emotional relationship with her subject?
4. What do Granddad's actual words add? Why is their flavour particularly strong and effective?
5. What natural connections does the writer make between life in Canada and life in Scotland? How do these connections help shape the paper?
6. What does the use of the word porridge add to the picture of Scottish life?
7. How does the writer get tension and suspense into her paper? What is the conflict about whose outcome you are uncertain?
8. Why does the writer put Granddad's absolute position on the side of individual work at the end of the paragraph, rather than earlier in it?
9. What adjective would you use to describe the writer's attitude toward her grandfather's lone labour?
10. In what ways has the writer increased the pressures on

Granddad and the suspense of the reader?

11. How do Granddad's words and images reinforce his personality and character? What connections have they with his work?

12. How does the ending echo the opening paragraph?

13. In what way are Granddad's actions symbolic of his character? What does his disregard of the doctor's orders indicate?

14. How does the repetition of Granddad's words affect the reader? Why do they make an effective ending? What do they tell you about his adjustment to Canadian life?

Student Composition 12B

MR. BRICCETTI

Mr. Briccetti raised his baton and collapsed in laughter. "I've just gotta tell you this joke about Stravinsky," he gasped. He lowered his baton and proceeded to tell the almost pointless anecdote with generous Italian gestures. The story wasn't particularly funny, but Mr. Briccetti could make anything seem hilarious.

Maestro Thomas Briccetti is short and thin, but wiry. His longish hair is coarse, straight, and black. Beneath his thick, expressive brows, his big black eyes constantly crinkle with amusement. And even though his complexion is too sallow and his nose is a bit too large, his appearance is dashing.

His flamboyance carries over into his style of

conducting. He dances across the podium, stooping and leaping, his face frowning, then smiling. But his showmanship is supported by a deep knowledge and understanding and love of music. Briccetti demanded a great deal from all of us in the Youth Symphony, and we worked as hard as we could for him. Frequently he called extra rehearsals for each instrument- I played cello- so he could explain the music and help us struggle through the more torturously constructed passages. These trials were punctuated by jokes, admonishments, reassurances, and individual workouts.

Mr. Briccetti tried to make each person feel important. He could focus all of his vast supply of charm on an individual to make even the least gifted person feel like a virtuoso. Every player had a vital part in the overall sound of the Symphony; each person had to feel necessary.

Mr. Briccetti was too wonderful to last. He lost his job with the Symphony Orchestra when a bigwig conductor was flown in. Many of us in the Youth Symphony quit when he left town. I don't even play the cello anymore, but I still have vivid memories of Mr. Briccetti. He was a surging, innovative, tolerant, colourful personality, and he was fantastic with young people. While so many other adults were impatient and condescending, Mr. Briccetti stressed our uniqueness and individual importance.

-Susan Hicks

Questions

1. In what ways is the texture of this opening thinner and less interesting than the opening of the preceding composition? Do you think this character would use "I've just gotta..."
2. What order does the writer use in describing Mr. Briccetti? What additional details would you like to have?
3. Have you felt a need to know who Mr. Briccetti is and why he is worth writing about? How might this information have been presented earlier?
4. What is another form of the word "admonishments?"
5. How might the writer have ended her paper if Mr. Briccetti had not left town? How do you feel- how does the writer feel- about her not playing the cello anymore? Is Mr. Briccetti responsible for her quitting? Why?

Elements of a Character Sketch

As was mentioned earlier, three things to consider in writing character sketches are: the subject, the point of view, and the method.

1. <u>The subject</u> . Who will the subject be? The subject of a character sketch may be real or imaginary. There should be some outstanding quality, feature, accomplishment, or trait that will make the subject interesting to the reader.
2. <u>The point of view</u> . If the subject of your character

sketch is a real person, you will probably write from your own point of view. You may, however, decide that your sketch could be more forceful or more effective if you wrote from another point of view- that of a close friend, a son or daughter, even a pet dog. In such a case, even though your subject is a real person, your viewpoint is fictional.

If the subject of your character is imaginary, you may write from a third-person point of view or you may assume the point of view of a "persona," a voice other than your own. There is no limit to the possible points of view you may assume in writing a character sketch.

3. The method . There are a number of methods a writer can use to reveal character. Some of them parallel quite closely the ways we build up impressions of the people we meet in everyday life. Others are techniques that belong only to writing. The subject you have decided upon and the point of view you have chosen will help you to determine what method or combination of methods you will use.

Evaluating the Character Sketches

With the three elements of a character sketch in mind, reread the professional models and the student compositions. Evaluate the choice of subject, determine the point of view, and notice the way the writer presents the character in each case. Discuss and evaluate each sketch in the light of these questions:

1. Is the subject real, interesting, and worth writing about?

2. What details selected by the writer focus the reader's attention on an important quality of the subject?

3. What method has the writer chosen to reveal or develop the character? What other method could have been used?

4. One of the methods of revealing character is the use of words, that is, dialogue (conversation) or monologue. Two people speaking to each other may shed light on a third character, or they may tell the reader something about themselves. A monologue is a convenient device for revealing character. It lets you "read the mind" and learn the inner thoughts of the character. Does the writer use dialogue or inner monologue effectively?

5. How does the setting affect your perception of the character?

6. What incidents, actions, or reactions reveal traits of the character?

7. What use is made by the author of imagery (figures of speech, vivid language) or symbolism?

As you work on the activities and as you do your regular literature assignments, be thinking of a subject for a character sketch. Students usually find it easier to write about people they have known, rather than about characters from fiction or drama. You may enjoy researching a currently popular figure, collecting information from several sources,

and then writing a vivid character sketch based on the information. If you decide to write about a real person, try to choose someone who has been influential in your life or who has made a great impression upon you.

Selecting a Subject for a Character Sketch

The first thing you must do is to choose a subject-someone interesting enough to be worth your time and your readers' time. Following are several character sketches taken from various sources. Discuss the kinds of people chosen and possible reasons the writers selected them. Then begin making up lists of people about whom you might write.

I

He lay in his bed at Georgetown University Hospital, looking so drawn and tired, the intravenous needles feeding his right arm and hand. He motioned for me to come up on the left side of his bed. I went up to him and squeezed his hand, trying to say without words all the things I wanted to say, how much I had learned from him, how grateful I was, how much I loved him.

"Ouch," he said, "Don't break my hand."

And Vince Lombardi grinned, that grin that could lift you or warm you or dazzle you, that grin I had seen so many times in locker rooms and on sidelines, in meeting rooms and at banquets. That grin didn't belong in a hospital room. He didn't belong in a hospital room. If anyone had

ever suggested to me that there was one indestructible man in this world, I would have thought it was Vince Lombardi.

-Jerry Kramer

II

He gave us a dream as big as our country.

Now this man- 22 years old, maybe 150 pounds (68kilograms), with the map of Canada on his T-shirt- was trying not to cry because, he said, he owed us that much.

The doctors at Port Arthur General Hospital read the shadows on the x-rays Tuesday and told Terry Fox what he already knew: The cancer was back, this time in his lung, and the Marathon of Hope must end.

He asked when he might run again, and then he tried to walk across the street and he knew. It was time to go home. His wide, wonderful world shrank to the metal walls of a Thunder Bay ambulance.

His mother, Betty, sat at the front, eyes staring, streaming. Behind her was Bill Vigars, loveable, wise-cracking Bill, the unofficious official from the Canadian Cancer Society, suddenly quiet and perfectly still. Alongside Terry, clutching tight a paper bag of food and with the tears just a breath away, was his father, Rolly.

Terry was on the stretcher, wrapped in a soft blue blanket.

He looked very small. His face was deeply tanned, broken only by a red, raw patch of sunburn on the left

cheek. His hair was the colour of dark honey, his lashes and brows bleached white.

He was having trouble breathing. Every once in a while, when it hurt very much, he put a hand to his chest and coughed, a tiny sad cough.

A big Northern Ontario fly buzzed in his face.

He flailed at it a few times, brushing it away, and then he left it alone, and it walked on his upper lip, just below the beads of sweat, and he closed his eyes.

He forgot about the fly, the run the day before was so important, the best parents ever, the funny, stocky official who had become his friend- forgot about anything that would diminish the single-minded iron will that carried him more than 5300 kilometres.

Alone with the cancer, Terry Fox geared up for battle.

-Christie Blatchford

III

Steve brought home a dog today. A big, rawboned, houndish brute, with sad running eyes and a ratty tail. He's black except for a little fleck of white round his face and chin that gives him an ancient, monkey-look of grief and wisdom; but even though his back comes up to Phillip's knee there's a gangling awkwardness about the way he brings his big feet down to show him up as an overgrown and still self-conscious pup.

He limps, and smells, and has fleas. While Steve and I held him Philip examined his foot, and finally cut out a pebble imbedded between the toes. Then we bathed his eyes with boracic acid, spent eighty cents on a bottle of mange cure, and topped it off with a thorough scouring in the washtub.

He was too frightened to struggle, and when it was over and he stood dripping and bony and drowned-looking Philip named him. El Greco- because El Greco was an artist who had a way of painting people long and lean as if they'd all been put on the rack and stretched considerably, and if he had ever painted a dog, Philip says, it would have been just a one as ours.

-Sinclair Ross

IV

Something in the general drift now has John Kauffmann on his feet and off to the river. He assembles his trout rod, threads its eyes. Six feet three, (191 cm) spare, he walks in his determination, tilted forward, ten degrees from vertical, jaws clamped. He seems to be seeking reassurance from the river. He seems not so much to want to catch what may become the last grayling in Arctic Alaska as to certify that it is there. With his bamboo rod, his lofted line, he now describes long drape folds in the air above the river. His shirt is old and red. There are holes in his felt hat and strips of spare rawhide around its crown. He

agitates the settled fly. Nothing. Again he waves the line. He crops its passenger on the edge of fast water at the far side of the pool. There is a vacuum-implosive sound, a touch of violence at the surface of the river. We cheer. For two minutes, we wait it out while Kauffmann plays his fish. Adroitly, gingerly, he brings it in. With care, he picks it up. He then looks at us as if he is about to throw his tin star in the dust at our feet. Shame- for our triple-hooked lures, our nylon hawsers, our consequent stories of fished-out streams. He looks at his grayling. It is a twenty-five ounce (709 g) midget, but it will grow. He seems to feel reassured. He removes the fly, which has scarcely nicked the fish's lips. He slips the grayling back to the stream.

-John McPhee

V

John Reed was a schoolboy of fourteen years old; four years older than I, for I was but ten; large and stout for his age, with a dingy and unwholesome skin; thick lineaments in a spacious visage, heavy limbs and large extremities. He gorged himself habitually at table, which made him bilious and gave him a dim and bleared eye and flabby cheeks. He ought now to have been at school; but his mama had taken him home for a month or two, "on account of his delicate health." Mr. Miles, the master, affirmed that he would do very well if he had fewer cakes and sweetmeats

sent him from home; but the mother's heart turned from an opinion so harsh, and inclined rather to the more refined ideas that John's sallowness was owing to overapplication and, perhaps, to pining after home.

John had not much affection for his mother and sisters, and an antipathy to me. He bullied and punished me; not two or three times in week, nor once or twice in the day, but continually: every nerve I had feared him, and every morsel of flesh in my bones shrank when he came near. There were moments when I was bewildered by the terror he inspired, because I had no appeal whatever against either his menaces or his inflictions; the servants did not like to offend their young master by taking my part against him, and Mrs. Reed was blind and deaf on the subject: she never saw him strike or heard him abuse me, though he did both now and then in her very presence; more frequently, however, behind her back.

Habitually obedient to John, I came up to his chair: he spent some three minutes in thrusting out his tongue at me as far as he could without damaging the roots: I knew he would soon strike, and while dreading the blow, I mused on the disgusting and ugly appearance of him who would presently deal it. I wonder if he read that notion in my face; for, all at once, without speaking, he struck suddenly and strongly. I tottered, and on regaining my equilibrium retired back a step or two from his chair.

"That is for your impudence in answering mama awhile

since," said he, "and for your sneaking way of getting behind curtains, and for the look you had in your eyes two minutes since, you rat!"

-Charlotte Bronte

Activity 12A

Choosing Character Sketch Subjects

1. Put these headings either on the blackboard or on your paper: Real People I know, Real People the Class Knows, Fictional People from Literature, Celebrities. In a group. prepare a list of five or six people for each of the last three headings, and then, by yourself, prepare a list of five or six for the first heading. Don't forget the possibilities within your own family and circle of friends.
2. After you have prepared your list of people, select five whom you find most interesting. Next to each of these five characters, jot down the reason for your interest and, in a few words, the outstanding aspect of the character.

Selecting a Dominant Impression

At every moment of every day, thousands of sense stimuli bombard your nervous system. If you perceived all of these and gave them equal consideration, you would be unable to "make sense" out of the world. From long experience you have learned to ignore thousands of these stimuli, to group others into meaningful patterns, and to concentrate on a few significant impressions.

As you describe a character, you must do the same thing. Even if you could perceive and write down every single thing about a character, your reader would expect you to single out and focus on the important, meaningful and striking aspects.

Activity 12B

Restating the Dominant Impression

Review your list of five characters and the aspect you singled out for each one in Activity 12A. Now, rewrite that characteristic in a more subtle manner as it might appear somewhere in the introduction or conclusion. The following is an example of how this is done.

Blunt Statement

The most outstanding aspect of Milton Foster's personality is his stinginess.

More Subtle Statement

Milton Foster smiled happily as he realized that the homeroom teacher was not going to ask him for contribution to the class Christmas fund after all. He felt the change in his pocket and thought how pleasant it was not to have to part with a penny.

Be prepared to discuss your rewrites in class.

Experimenting with Point of View

The next thing to consider in writing a character sketch is point of view. Character sketches may be written

from a kind of neutral, distant, third-person point of view; from the writer's own point of view; or from an imaginary point of view. If you move from nonfiction to fiction by assuming the point of view of a persona or character or voice other than your own, you must make up insights, events, conversations, and relationships which exist only in your imagination.

If you choose to write your character sketch from a fictional point of view, you should make full use of the special advantages such a point of view offers:

1. It enables you to report details which an outside observer could not know. For example, a politician might make comments in front of her cat that she would never make in public! An actor who is courteous and charming in public might act and speak before his family in ways no outside reporter could imagine.

2. It enables you to include judgments, explanations, emotions, attitudes, and reactions to the character. These should all be consistent and clearly recognizable as fiction, coming from your assumed persona, or voice. Such comments can be humourous, ironic, surprising, or awe-filled.

3. It enables you to experiment with a style completely different from you own. If you wrote from the point of view of the politician's cat, you are faced with the question, "How would a cat express itself?" Could you write from the point of view of a Martian? Or a doting mother? Assuming a

persona, or voice, can be fun for the writer.

Activity 12C

Experimenting with Point of View in a Character Sketch

Working as your teacher directs, think of three or four different points of view you might assume if you were writing about each of three different characters. Prepare to tell a group of other students how you would make use of the three special advantages described above.

Multiple Ways of Showing Character

When you have chosen your subject and decided on your point of view, you will then consider the best way of revealing the character to your reader. Writers create character by:

1. Letting the character reveal themselves.

    a. Their own actions, words, and thoughts may reveal the kind of persons they are. (A skillful writer may heighten interest by having a character's actions contradict his or her words.)

    b. The reader may be told quite specifically what minor characters are like. Then the writer describes the main character's reaction to other characters, and thus reveals much about the main character.

2. Letting other characters shed light on the main character.

a. They give the reader an idea of what the character is like by what they say to and about the main character as well as what they think about and how they react to the main character.

3. Showing the way the writers themselves perceive the characters.

a. They may describe the appearance of the character.

b. They may make interpretive comments about the thoughts, words, actions, and reactions of the character (explanations, analyses, hypotheses).

4. Using miscellaneous techniques.

a. They may describe (in a way that sheds light on the characters) a setting in which the character appears.

b. They may give the character a name that reveals something to the reader (Scrooge, Becky Sharp, Apeneck Sweeney, Casper Milquetoast).

c. They may relate the character to a symbolic object or action.

d. They may present a series of scenes that reveals some change in the character.

Activity 12D

Recognizing Character Technique

Which of the techniques described above have been used to reveal character in the following examples? Read each one carefully, and decide what the author has done to help you get a picture of the main character.

1. Every day after he got home from work, Mr Tibbles spent most of the evening watching television on the little set in his bedroom. As grainy pictures flickered across the screen, grey light from the set lit up the room, picking up the faded green chenille bedspread, the sagging maroon plush armchair, and the TV tray holding an empty glass and the remnants of a defrosted lasagna dinner. In the dimness, Mr. Tibbles himself looked a little like a large mushroom sprouting before the television set.

2. "Wouldn't you know it," Mrs. Blake thought, and her mouth tightened as she watched Donald struggling to pick up the books he had just dropped. "Never mind," she said aloud, "I'll pick them up. I suppose you did the best you could." She snatched the books away and pushed the little boy aside.

3. "Just look at her," Marg whispered to Emily, and they both stared across the room at Lisa. Lisa reached up to flick back a strand of her smooth blonde hair as she smiled at the two sales representatives who had stopped beside her reception desk. "From the way she acts," Marg went on, "you'd think she was the only one around here who knew anything. She took all the credit for that report we wrote together last month, but yesterday when Accounting discovered a mistake in the budget, she certainly kept quiet."

4. Pleased with what the mirror revealed, Lorna studied the effect of her clinging sweater and red velvet skirt. She tugged the sweater lower over her heavy hips and swung this

way and that before the mirror, poised on stubby feet strapped tightly into high heeled shoes. In the dim light her swinging earrings looked almost like gold, and her carefully made-up face might have passed for forty again.

Activity 12E

Analyzing Professional Techniques

Choose one character from a short story and examine all the passages in which the author develops that character's personality. Make a list of phrases that describe the character, list under each phrase the words or events that support that phrase, and then determine which of the techniques listed in the preceding section your author has used. Come to class prepared to discuss the different techniques and their relative effectiveness.

Using Action to Reveal Character

As you prepare to write your character sketch, you should observe your subject closely or else do some research to gather information. If your subject is a real person, find some actual situations in which behaviour communicates a dominant impression about the nature of your subject. Notice how the writer of the following selection accomplishes this.

Gordon Lightfoot will be 40 this year, and he has spent more than 20 of those years in the music business. He has won every award available to a popular singer, from a clutch of Junos for being an outstanding Canadian recording

artist to a Vanier Award for being an "outstanding Canadian." He's a millionaire many times over and lives in a spacious 100-year-old home in Toronto's old-line money section of Rosedale.

It's a house that might pass for a men's club; woody, comfortable, masculine and very, very private. It's a house that hides secrets and, for this very reason, a house you might expect to find Gordon Lightfoot living in. For, despite the millions of words written about him over the years, despite the several hundreds of songs he's written and recorded, despite, in short, his constant presence in our lives- he remains a remote individual. He'll let you see the craggy surface of his life, but beyond that- nothing. He is alone.

And this is not the kind of aloneness that is the prerogative of any public figure who wishes to keep separate his public and private lives. With Lightfoot, you sense it goes much deeper: that it's not just a product of his life but a requirement of his survival. This, of course, is something he never talks about.

When he celebrated his 20th year in show business last year, I asked him what he felt he'd achieved. He growled a bit, embarrassed by the question and mumbled something about "a bunch of songs, pretty good ones I think." A little later, though, remembering the sheer breadth and consistent quality of this "bunch of good songs," I realized just what his achievement was- that, like

a good craftsman, he has never wavered from what he has set out to do: to write popular music with good singable melodies. It's music that never strays too far from the popular sound of any particular period, but it remains unalterably his own creation.

There is greatness in his achievement, not just through what he has written but through the loneliness it has cost him to write it. It's a unique kind of greatness, too, for a celebrity dealing with our hyperactive media.

Hence, his reliance on his craft and why some of his finest songs, such as "The Wreck of the Edmund Ftizgerald", deal with events, people or even ideas that don't touch him directly. And hence, too, his need to work so hard- he has just come back from Hawaii where he enjoyed his first vacation in 20 years. And also, for the first time in nearly 20 years, he has no definite plans for this spring and summer, aside from his annual stint in Toronto's Massey Hall, where he'll be appearing March 17 to 25, and work on a new album, his 14th.

This is not to suggest he avoids dealing with his own feelings. On the contrary, I suspect he deals with them so often and with such agonizing introspection that a retreat into his craft or into hard work are his escapes. Watching him when he's not on guard, you suddenly come to understand what T.S. Eliot meant when he wrote, "I am moved by fancies that are curled / Around these images, and cling:/ The notion of some infinitely gentle / Infinitely

suffering thing."

Years ago, CBC-TV did a documentary on Lightfoot, and at one point during the show, the camera followed him into the small room in which he wrote, and watched him outline a song on the old fragile desk he used. He was, I remember, in his bathrobe. The show had been breezy enough up to that point, but the moment he sat down to write, everything became silent. It was as if just being at that desk had removed him from everything else around him. And he was isolated, out of necessity.

-Peter Goddard

Writing imaginary incidents. In some instances, over a long period of time you may have formed a dominant impression of a person, but you may not have observed any single specific action that you can use to present your dominant impression in a dramatic and effective way. Is it acceptable, then, to make up an imaginary incident that communicates this impression of your character? You can, if you wish, make up an incident to support your dominant impression, but in doing so you change from writing fact to writing fiction. For your character sketch, you may write either fact or fiction, but don't err by claiming fiction to be fact.

Activity 12F

Suggesting an Incident to Reveal Character

1. Working with a partner whom you know well and with whom you may have many acquaintances in common, make a list of several of the people you know and try to agree on a dominant impression for each. Consider such character-revealing adjectives as friendly, courageous, intelligent, altruistic, selfish, domineering,generous, confident, foolish, and helpful. Try to recall an incident you have observed in which the individual did something to reveal such a nature. Write a brief description of the incident to share with the class.
2. For any person for whom you could not provide an actual incident to support your dominant impression, create an incident that might have revealed the characteristic you listed for that person. Note clearly at the bottom of your page which items are fictional.

Using Conversation to Reveal Character

Almost everthing people say reveals something about their characters. In the following passage, a mother and daughter are discussing the daughter's plans. Notice how their words reveal something about the character of each.

I

The first time I ever went to a movie with a boy, I was fifteen. The adult price wasn't charged until sixteen. The boy was sixteen. I stood beside him on the winter

street, outside the ticket window, shivering, obsessed with one thought- how would I ever walk past the ticket girl and face the usherette if he bought a child's ticket for me? He didn't, of course, so I had upset myself needlessly.

"Where are you going, Rachel? Are you going somewhere?"

"Yes." I should have told her before, I know. "I'm going to a movie."

"Oh, what's on? Maybe I'll come along."

"I mean I'm going- with someone."

"Oh, I see. Well, you might have said, Rachel. You really might have told me, dear."

"You know how glad I am, dear, when you go out. You might have mentioned it to me, that's all. It's not too much to ask, surely. After all, I do like to know where you are. I would have thought you could have said. Rachel."

"I'm sorry, Mother. I just-"

"Well, it's quite alright dear. I'm only saying if you had let me know, it would've been better, that's all. I could have invited one of the girls in, maybe. Well, never mind. I shall be quite fine here by myself. I'll just slip into my housecoat, and make some coffee, and have a nice quiet evening. I'll be just dandy. Don't you worry about me a speck. I'll be perfectly all right. If you'd just reach down my pills for me from the medicine cabinet. As long as they're where I can get them handly, in case anything happens. I'm sure I'll be fine. You go ahead and enjoy

yourself, Rachel."

-Margaret Laurence

Activity 12G

Analyzing Character Through Conversation

Without telling you directly about the characters in the previous selection, Margaret Laurence lets them tell you certain things about themselves. How would you describe the character and personality of Rachel and of her mother?

Does either Rachel or her mother remind you of anyone you know?

In the following passage from a short story called "Cress Delahanty", the main character reveals something about herself in a conversation with her parents. Read the message carefully and be prepared to discuss what it is about Cress that is revealed by the conversation.

I

"You have a perfect right to say, 'I told you so' now if you want to, Mother," Cress said. "You told me I was getting to be a character and I was, all right."

"What do you mean, Cress?" her father asked.

"I mean I'm a Character," Cress said bleakly. "I'm 'Irresponsible Delahanty.' I'm that 'Crazy Kid.' If you said I was dying, people would laugh." Water ran out of her hair and across her face and dripped off her chin, but she scorned to wipe it away.

"I made a good speech to the Student Council, and

they laughed at every word I said. They laughed and held their sides and rolled in their chairs like loons."

"What speech was this, Cress?"

"The speech everybody who is a candidate for an office has to make to them. Then if they like you, they nominate you. I was a candidate for freshman editor. What they nominated me for was 'Josh' editor. Josh' editor. A two-year-old can be 'Josh' editor. All you need to be 'Josh' editor is a pair of scissors to cut out jokes with. I wouldn't be 'Josh' editor if they shot me for not being. It's a silly job."

"Take off your coat, Cress," Mrs. Delahanty said, and Cress, not ceasing to speak, began also to unbutton.

"I would've been a good editor, and I told them the reasons- like I was responsible, knew the meaning of time, would see that the assignments were in on time, and so forth. They laughed like hyenas," she said, not bitterly but reflectively. "They said, 'This is the richest thing yet. Delahanty is a real character." So they nominated me for 'Josh' editor and I'm branded for life."

She threw her raincoat, which she had finished unbuttoning, onto the floor, said "I have ruined my life," and walked out of the room, no longer trying to hide the fact that she was crying."

-Jessamyn West

Activity 12H

Planning Conversations That Reveal Character

1. Think of several dramatic situations in which one or more characters reveal more about themselves in their words than they intended to. The following situations are possibilities for you.

a. A girl who has just celebrated her eighteenth birthday tries to register to vote. A local election official tries to discourage her and, in doing so, reveals some attitudes about youth, politics, democracy, and change.

b. The owner plans to sell a tract of land opposite a historic landmark. During his interviews with a manufacturer of chemicals, a low rental housing official, and a representative from a foreign embassy, he reveals his own biases.

c. Two students discuss a recent, highly-rated motion picture treating an important human theme. One student reveals either failure to understand the theme or inability to accept its values.

d. An instructor from a nearby community college reveals, as she speaks to Grade 12 students at your school, that her ideas about a good education differ from those some of the students.

2. After you have worked out several situations, write one or two pages of the conversation in rough form. If you have not thought of a better situation of your own, you may use one of those suggested in the first activity above.

3. In order to write conversations into your character sketch, you need to know the mechanics of organizing, punctuating, and capitalizing them. Refer to the Style Sheet to determine how you punctuate dialogue when:

a. Introductory words such as "he said" or "she replied" precede the actual words of the speaker.

b. Such words interrupt the actual words of the speaker, coming in the middle of the direct quotation.

c. Such words follow the actual words of the speaker. You may also wish to refer to the selections by Margaret Laurence and Jessamyn West on the preceding pages.

4. After you have checked the conventional mechanics of writing conversations, review and rewrite the pages you prepared in the second activity. Be prepared to discuss the kinds of details that make your dialogue sound natural.

Using Description to Reveal Character

Writers often use a straightforward descriptive passage to make their readers "see" the subject of a character sketch. In an essay called "On Stephen Leacock," Robertson Davies describes the famous humourist this way:

I

Only an artist could write like Leacock at his best. And only a man who thought of himself consciously as an artist would have undertaken to explain how he did it. And only a man who yearned for popularity would have thought it desirable or wise to do so.

I have stressed his desire for popularity because I want to call your attention now to the extraordinarily successful public personality which Leacock created for himself. There may be some among you who remember that personality- the strikingly masculine impression created by the big figure with the big head and the rough mop of grey hair; the rugged face alight with intelligence and merriment, the twinkling eyes and the infectious laugh, the deep voice, which he used as skillfully as a fine actor- for Leacock was a fine actor, and perhaps the finest that Canada has ever produced. Do you really suppose that there was not calculation in the impression which he gave, in his expensive, though rumpled clothes, his dress tie usually untied, and his great watch-chain fastened to his waistcoat with a safety-pin? He was a great man; he looked and behaved like a great man; and he knew that he was doing so.

-Robertson Davies

In her story, "The House on the Esplanade," Anne Hebert's description of the main character not only paints a vivid picture of the woman, but lets you know how she lives and what her philosophy of life might be.

II

Stephanie di Bichette was a curious little creature with frail limbs that seemed badly put together. Only her starched collerette kept her head from falling over on her shoulder; it was too heavy for her long, slender neck. If

the head of Stephanie Bichette looked so heavy, it was because all the pomp of her aristocratic ancestors was symbolized in her coiffure, a high up-swept style, with padded curls arranged in rows on her narrow cranium, an architectural achievement in symmetrical silvery blobs.

Mademoiselle de Bichette had passed, without transition period, without adolescence, from the short frocks of her childhood to this everlasting ashgrey dress, trimmed at neck and wrists with a swirl of lilac braiding. She owned two parasols with carved ivory handles- one lilac and the other ashgrey.

When she went out driving in the carriage she chose her parasol according to the weather, and everyone in the little town could tell the weather by the colour of Mademoiselle de Bichette's parasol. The lilac one appeared on days of brilliant sunshine, the ash-grey one whenever it was slightly cloudy. In winter, and when it rained, Stephanie simply never went out at all.

-Anne Hebert

Activity 121

Writing Description That Reveals Character

In Activity 12G you worked out several dramatic situations and made up conversations to reveal character. Choose one of the subjects of those sketches and write a paragraph of description. Choose details of appearance, mannerisms, facial expressions, and gestures that make your

subject different from anyone else.

Finding Insights into the Characters of Real People

Have you heard anyone talk about "roughing it in the bush?" This slang expression refers to more than just a weekend camping trip; at an earlier time in Canada, it summed up poineer life for early immigrants like Susanna Moodie, who emigrated to Canada with her husband in 1832. In her book Roughing It in the Bush , Susanna Moodie describes their experiences homesteading in the backwoods of Upper Canada, where her husband served in the militia to help put down the Rebellion of 1837. Today her book is a fascinating picture of the hardships endured by people who left the cosmopolitan cities of Europe for the backwoods of pioneer Canada.

There are many such fascinating people in Canadian and world history. By looking through the reference books in your library, you can find thousands of such stories of real people in interesting situations. After skimming some of the reference books, you may have to do additional research to flesh out your character sketch.

Here are some books in which to begin your search:

A Standard Dictionary of Canadian Biography: The Canadian Who Was Who . Edited by Sir Charles G.D. Roberts and Arthur Tunnell. 1934-38

Prairie Portraits . R. St. George Stubbs. 1954

The Macmillan Dictionary of Canadian Biography . 1963.

Canadian Writers: Ecrivains Canadiens . Edited by Brandon

Conron, Carl F. Klinck, and Guy Sylvestre. 1964

Flamboyant Canadians . Edited by Ellen Stafford. 1964.

Dictionary of Canadian Biography , 1966.

The Oxford Companion to Canadian History and Literature .

Norah Story. 1967.

Supplement to the Oxford Companion to Canadian History and Literature . Edited by William Toye. 1973.

Activity 12J

Exploring Library Resources for Your Character Sketch

Spend at least an hour browsing in your school or community library to find the kinds of resources that would be available to you if you decided to write your character sketch on a celebrity or a historical figure. Look especially at the reference section, the section on "collective biography" in which the lives of several people are presented in one volume, the vertical file, and the magazine and periodical collection.

Major Writing Assignment

A Character Sketch

Reread the sample character sketches at the beginning of this chapter and review the techniques the professional and student writers used. Then choose a subject and begin to work on your character sketch. To write an effective character sketch you must:

1. Observe as many aspects of a given character as possible.

2. Taking into account the audience who will read the character sketch, decide which aspects of character to emphasize and which to ignore.
3. From the material selected, decide on a dominant impression and try to put in into words.
4. Choose the appropriate point of view. Is the character described by someone who is intimately acquainted with that person or by someone who has only limited knowledge and insight?
5. Write down the description, interpretation, dialogue, and action that seem to support the dominant impression.
6. Compare the material written down with the dominant impression you decided to focus on.
7. If necessary, revise either the dominant impression or the material.

Just as in other kinds of writing, a character sketch has a beginning, a middle, and an ending. You may wish to begin your sketch by showing your subject engaged in a significant action. Fill in the descriptive details that will make the sketch come alive for the reader. One technique is to indicate your dominant impression indirectly. Choose the most appropriate method for supporting your dominant impression and for revealing or developing your character. Be sure the setting is appropriate for the subject. If you have decided to use conversation to reveal character, write it, read it, and rewrite it. Sometimes reading a dialogue aloud helps you to

spot any false or artificial notes. Provide careful transitions to make your sketch move along smoothly. One interesting way to end a character sketch is to have the subject perform an action that symbolizes or reinforces the dominant impression that was the focus of the sketch.

APPENDIX E

MECC:Minnesota Educational Computing Consortium

Writing a Character Sketch

A Computer Program for Prewriting

PROGRAM STRUCTURE

The formal outline below shows the framework of "Writing a Character Sketch". The order in which a topic or subpoint is accessed, however, is a choice. If a topic or a subpoint is bypassed for I, categories A through D, students will be offered a chance to go to the section they overlooked.

I. Writing a Character Sketch

- A. EXTERNAL CHARACTERISTICS
  - 1. Appearance
    - a. Examples
    - b. Check understanding
    - c. Type own ideas
  - 2. Physical Traits
    - a. Examples
    - b. Check understanding
    - c. Type own ideas
  - 3. Speech
    - a. Example
    - b. Check understanding
    - c. Type own ideas
- B. BEHAVIOR
  - 1. How Character Acts
    - a. Examples
    - b. Check understanding
    - c. Type own ideas

2. What Character Says

a. Examples

b. Check understanding

c. Type own ideas

3. Where Character Lives

a. Examples

b. Check understanding

c. Type own ideas

C. OTHERS' REACTIONS

a. Examples

b. Check understanding

c. Type own ideas

D. COMPARISON AND CONTRAST

1. Comparison

a. Examples

b. Check understanding

c. Type own ideas

2. Contrast

a. Examples

b. Check understanding

c. Type own ideas

II. Point of View

A. WRITING IN THE FIRST PERSON

1. Major involvement

2. Minor involvement

B. WRITING IN THE THIRD PERSON

WRITING A CHARACTER SKETCH

Description

"Writing a Character Sketch" is an interactive program to guide students by examples and questions to think through what is needed to characterize a person from fiction or history, or from their own experience. The ideas students enter for the program's four sections can be sent to a printer.

Curriculum Area:	Language Arts
Subject:	Creative Writing
Topic:	Prewriting
Type:	Interactive Tutorial
Grade Range:	9 - 12
Reading Level:	8 (Fry Test)
Classroom Use:	Individual, Small Group, Demonstration

Learning Objectives

After using this courseware, the student should be able to:

- analyze a character from literature or life and formulate key words or a phrase to appraise essentials of that character;
- evaluate and select the kinds of detail to:
  a. describe the character

b. compare and contrast the character to another

c. support the key words chosen to delineate the character;

- evaluate passage-related and experience-related inferences;
- write a character sketch;
- organize according to purpose and audience.

APPENDIX F

An Illustration of Time Groups Spent on Activities Included in Their Two Writing Assignments

ACTIVITY	ASSIGNMENT NO.	NO. OF 40 MINUTE PERIODS ALLOWED	GROUP
1. prewriting	1	2	E1,2,3,4,C
	2	2	E1,2,3,4,C
2. composing	1	4	E1,2,3,4
	1	2	C
	2	2	E1,2,3,4,C
3. revision	1	2	E1,2,3,4,C
	2	1	E1,2,3,4,C
4. editing	1	2	E1,2,3,4,C
	1	1	E1,2,3,4,C
Total		18	

APPENDIX G

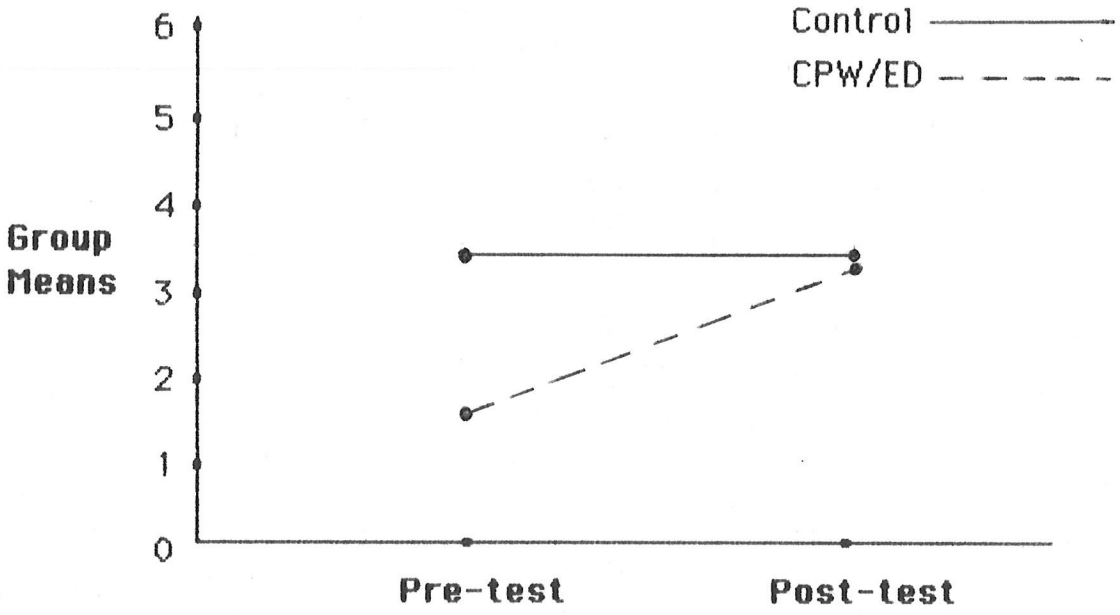
Interrater Reliabilites for Quality and Style Measures on Pre- and Post-tests

Interrater Reliabilities for Quality and Style Measures on Pre- and Post- Tests

Dependent Measure	Pretest	Post-test
GIM	.91	.77
ORG and COH	.86	.70
WORDING	.81	.69
STYLE	.83	.76
PAR. FOCUS	.82	.74
QUAL. IDEAS	.84	.74
DETAILS and ELAB. IDEAS	.82	.80
SENT. STRUC.	.81	.72

APPENDIX H

Illustrations of Mean Scores on Pre- and Post-tests for CPW/ED and Control Groups on Seven Dependent Measures Where Differences Are Significant



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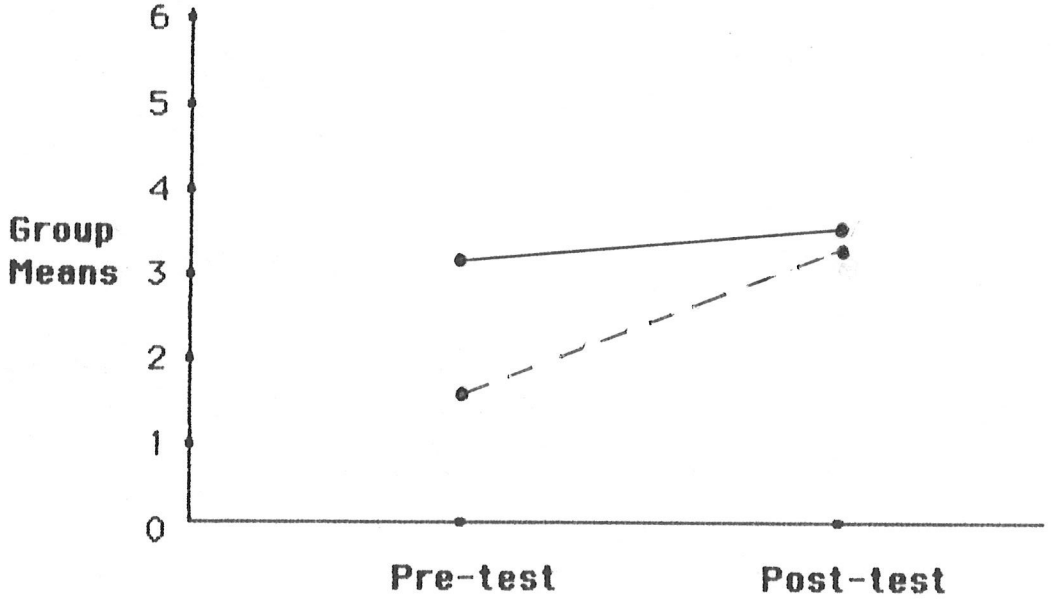

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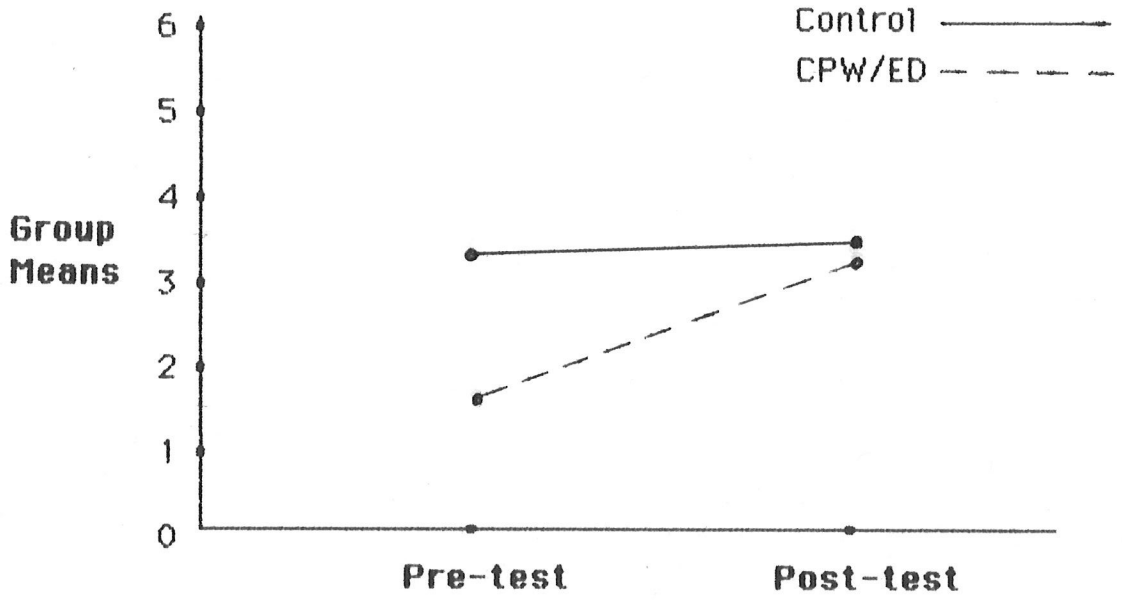

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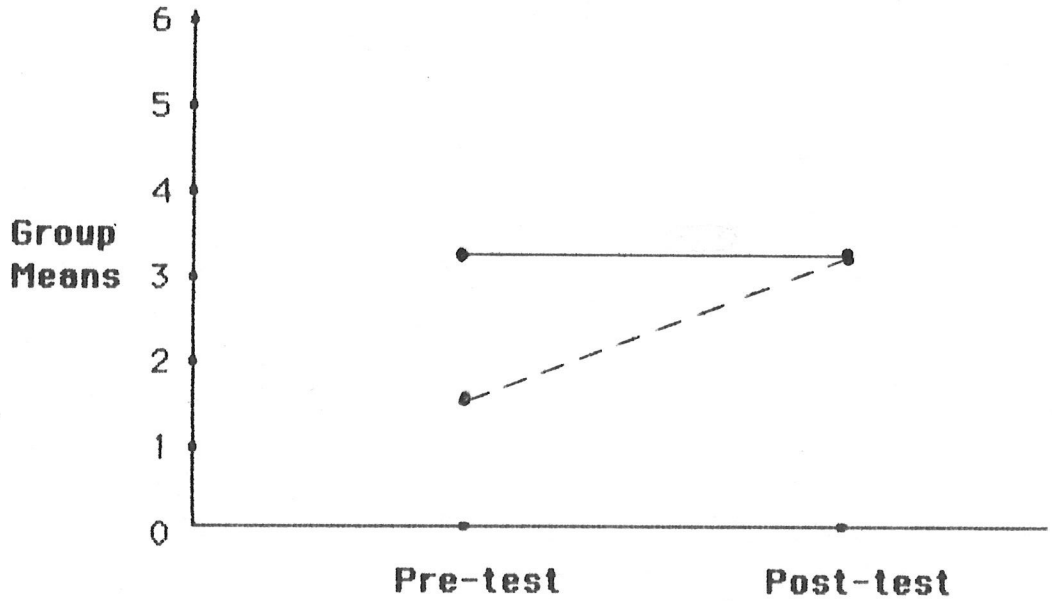

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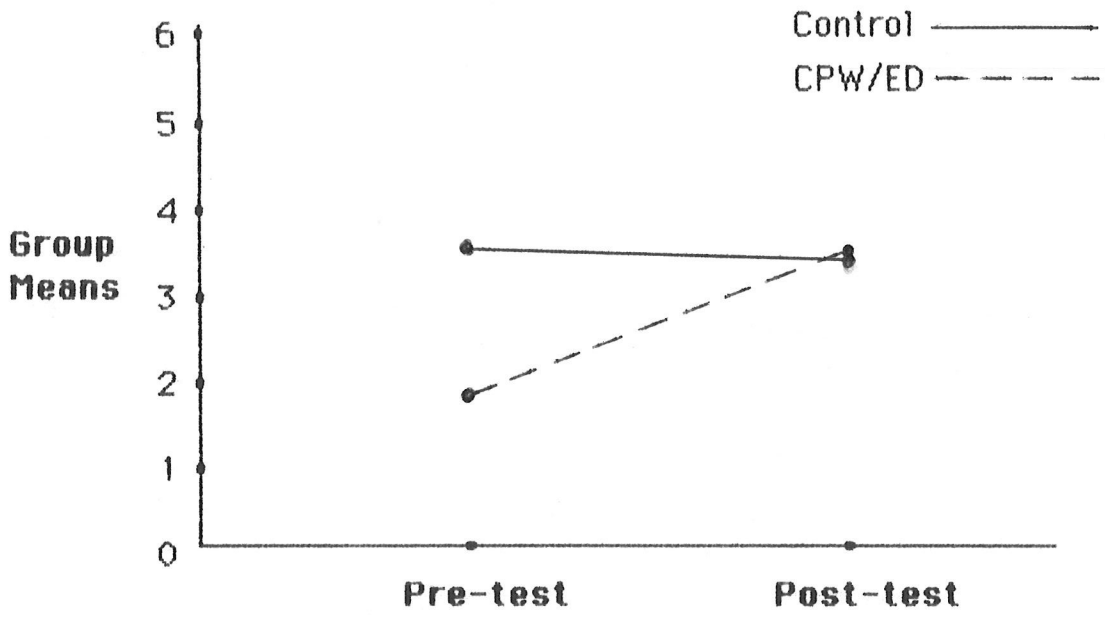

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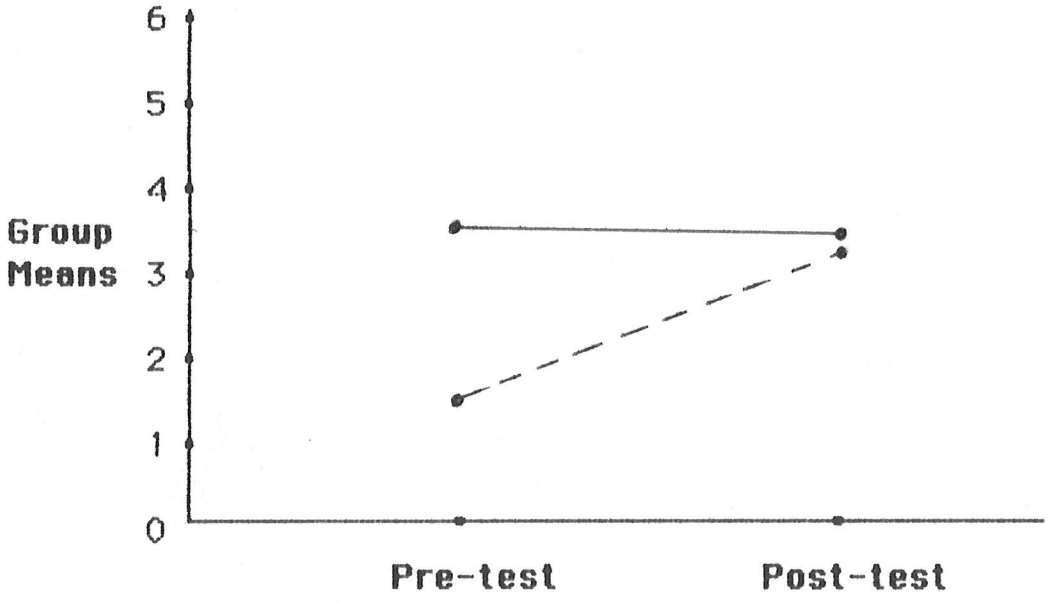
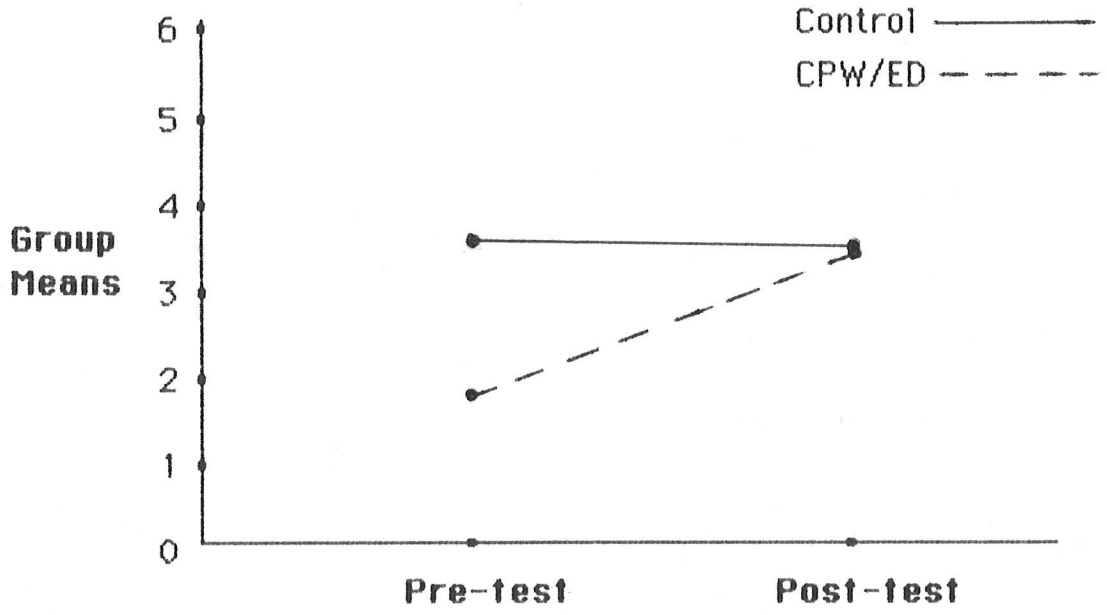


Choice of Details and Elaboration of Ideas



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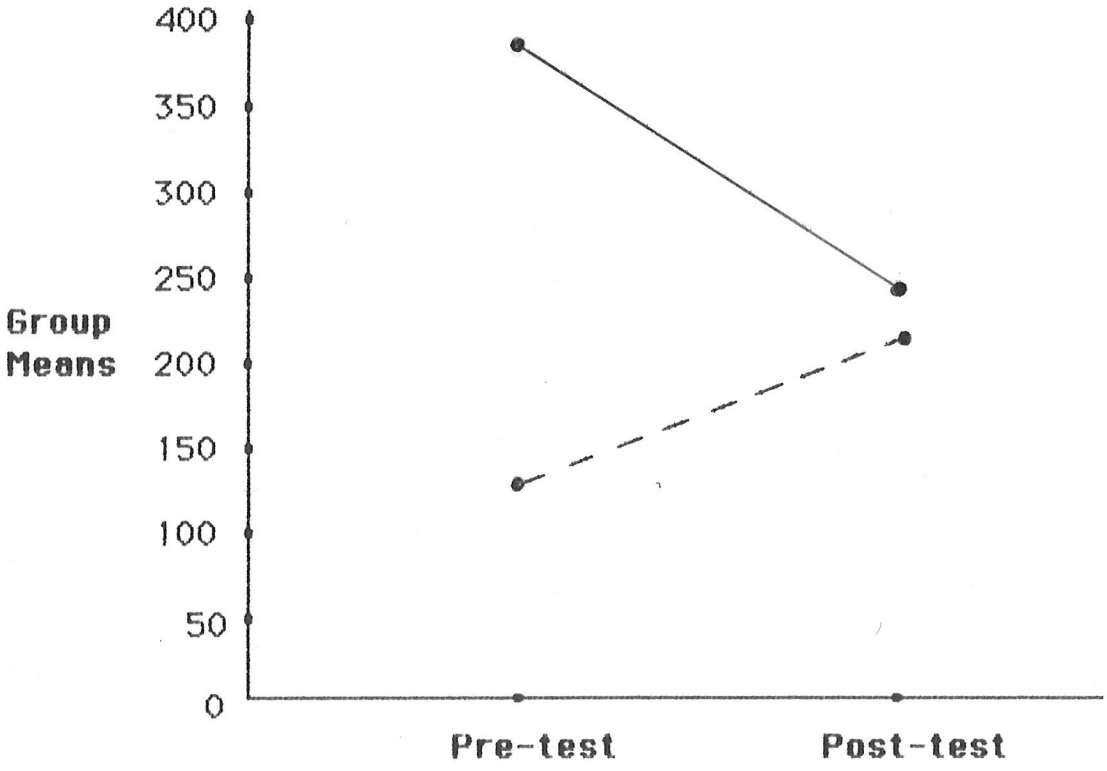
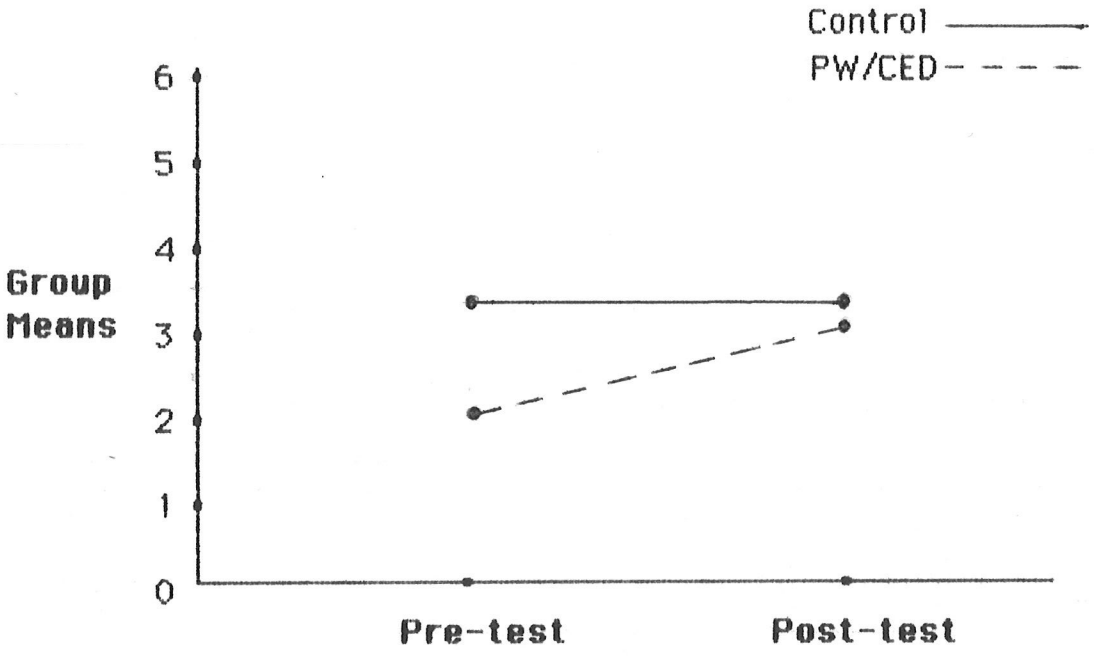


Word Count

APPENDIX I

Illustrations of Mean Scores on Pre- and Post-tests for PW/CED and Control Groups on Seven Dependent Measures Where Differences Are Significant



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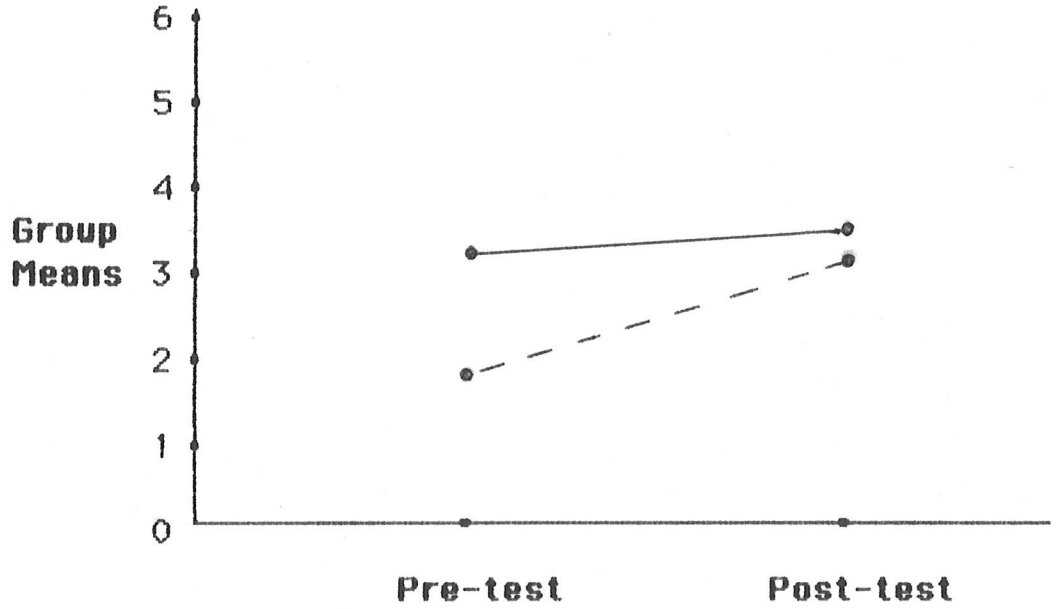

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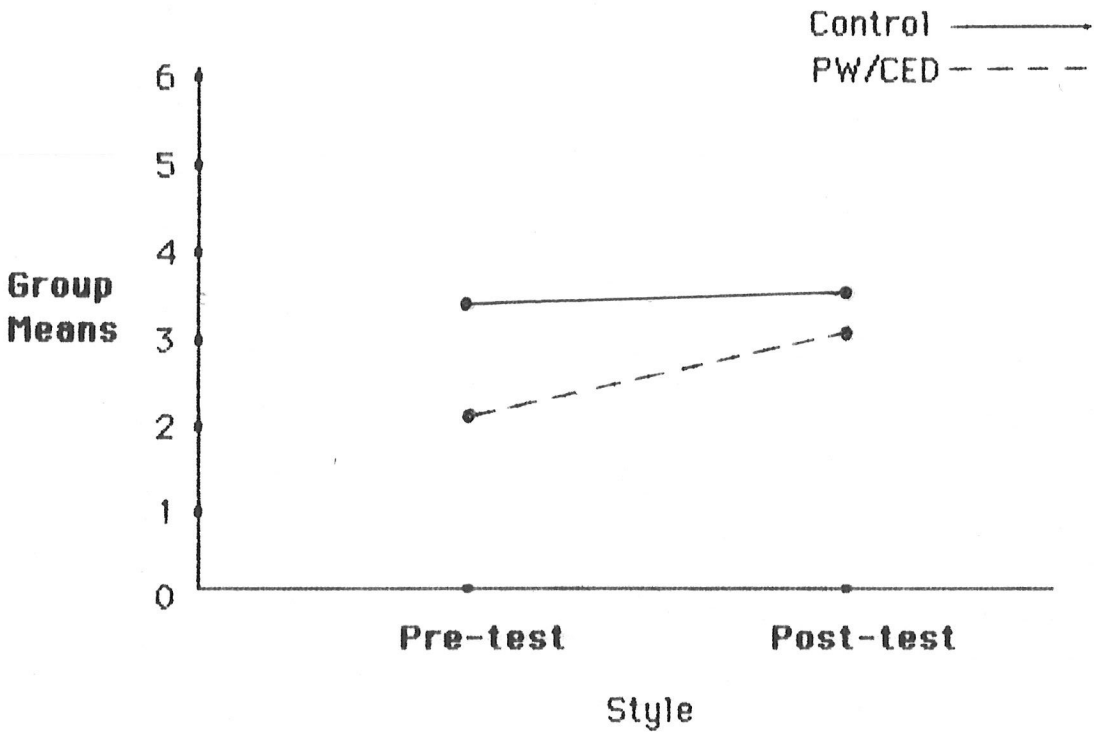
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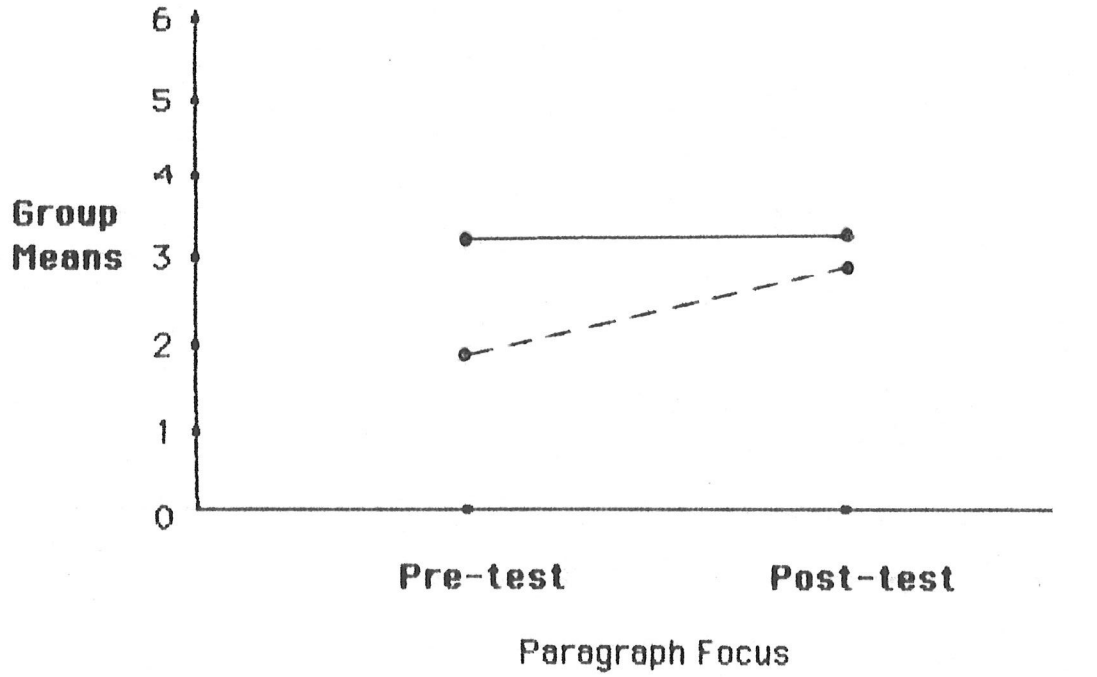
1
0
Group Means
Pre-test
Post-test
Style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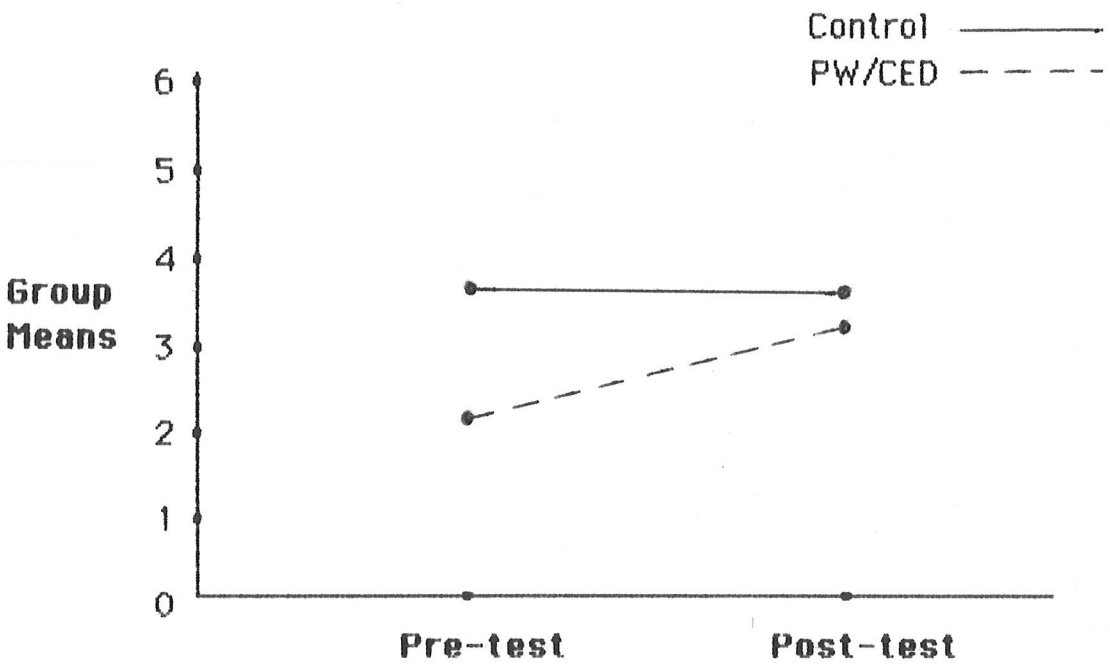
Group Means
Pre-test
Post-test
Paragraph Focus



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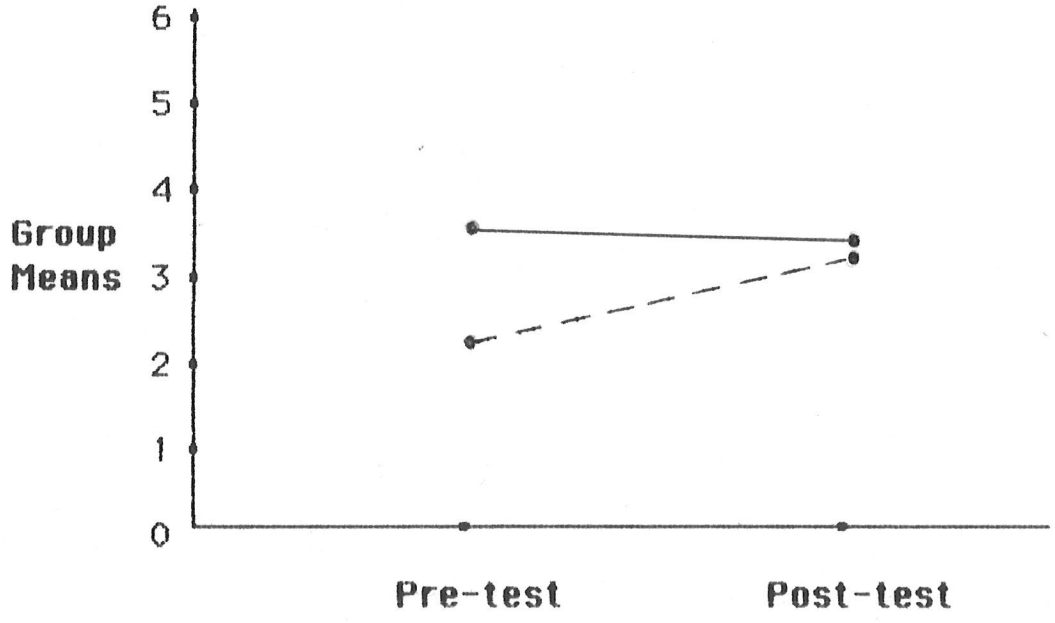

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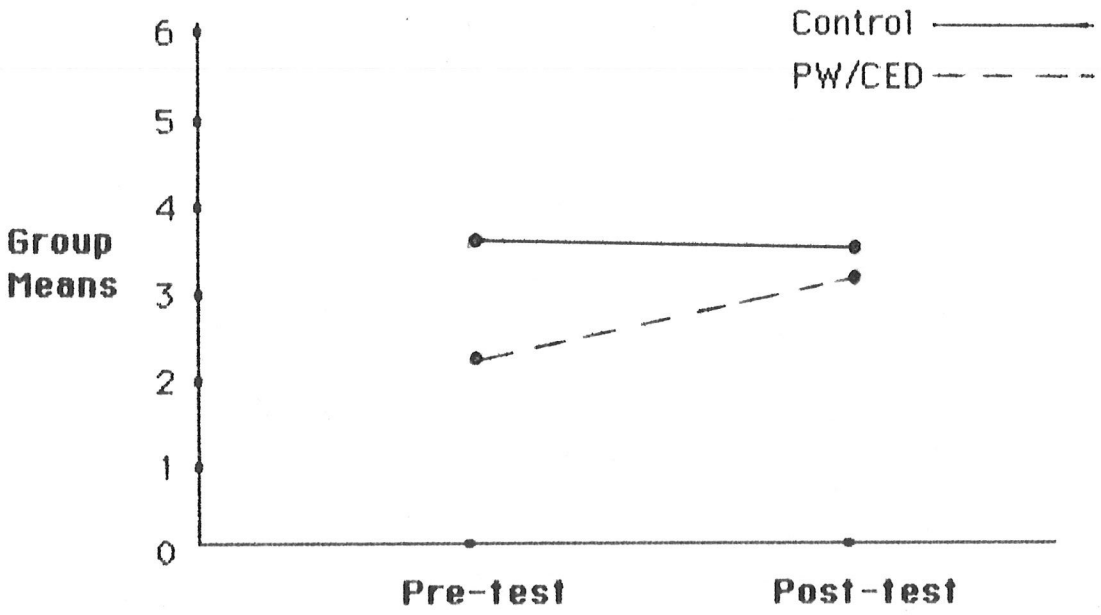

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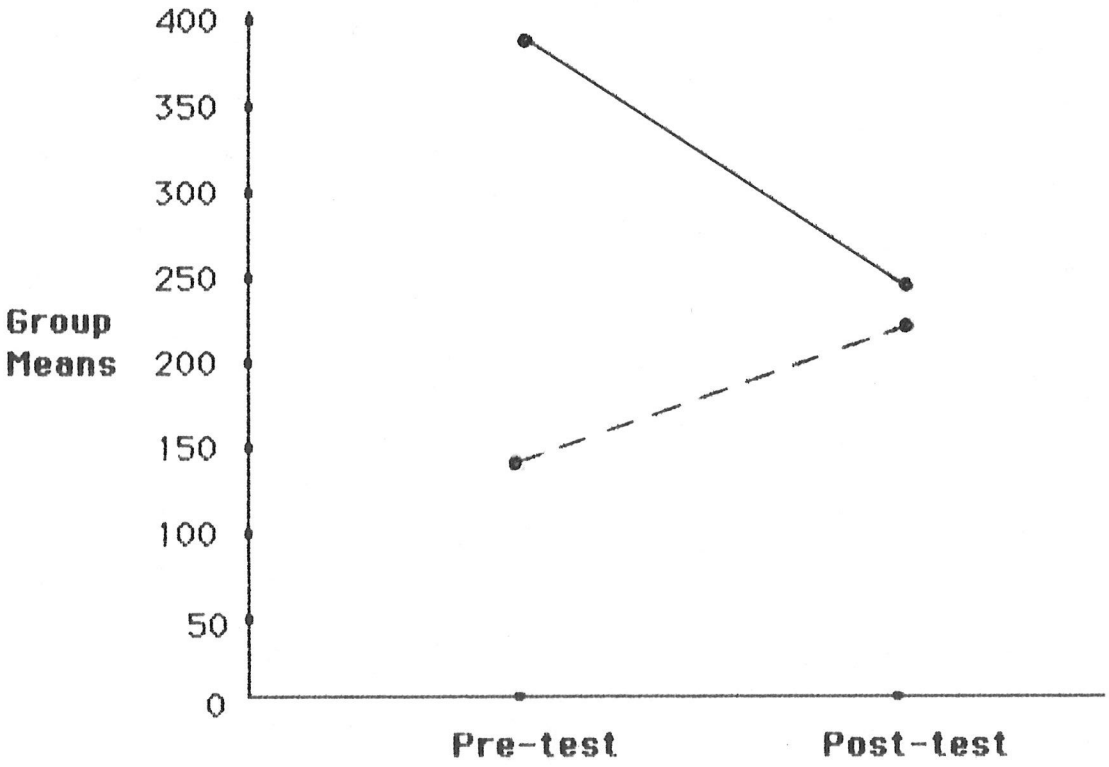

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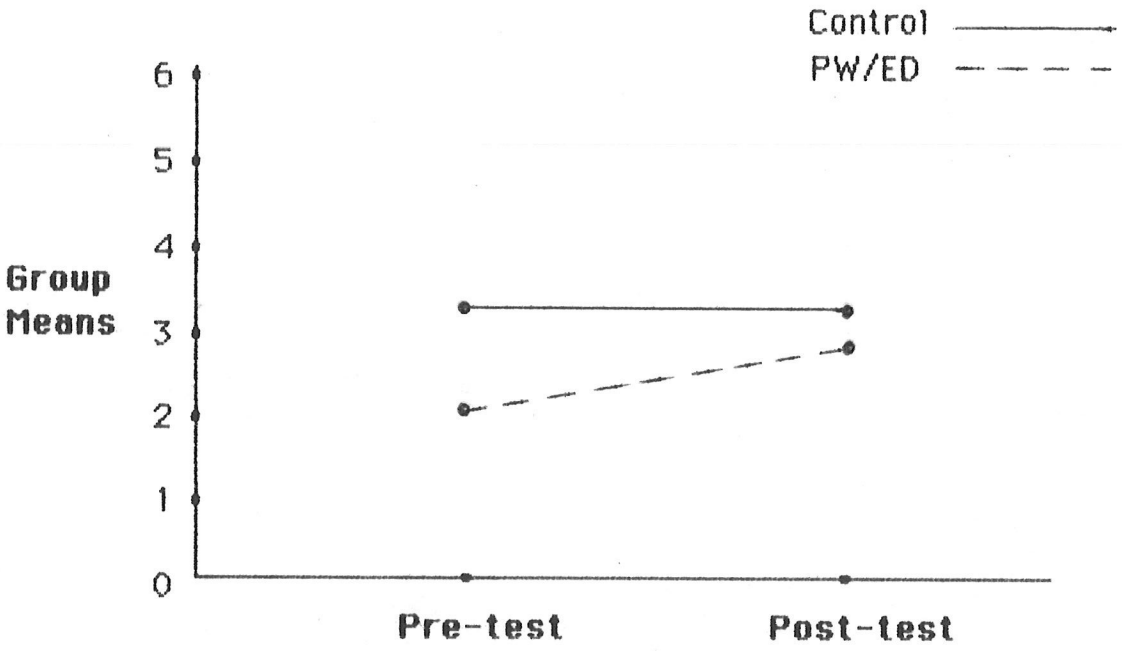
APPENDIX J

Illustrations of Mean Scores on Pre- and Post-tests for PW/ED and Control Groups on Two Dependent Measures Where Differences Are Significant



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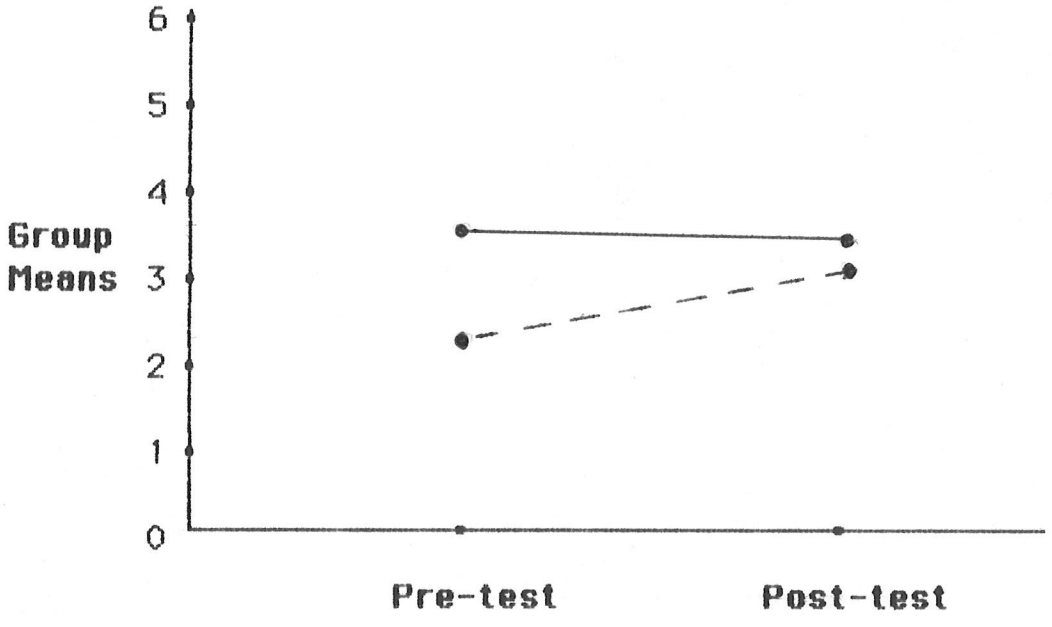

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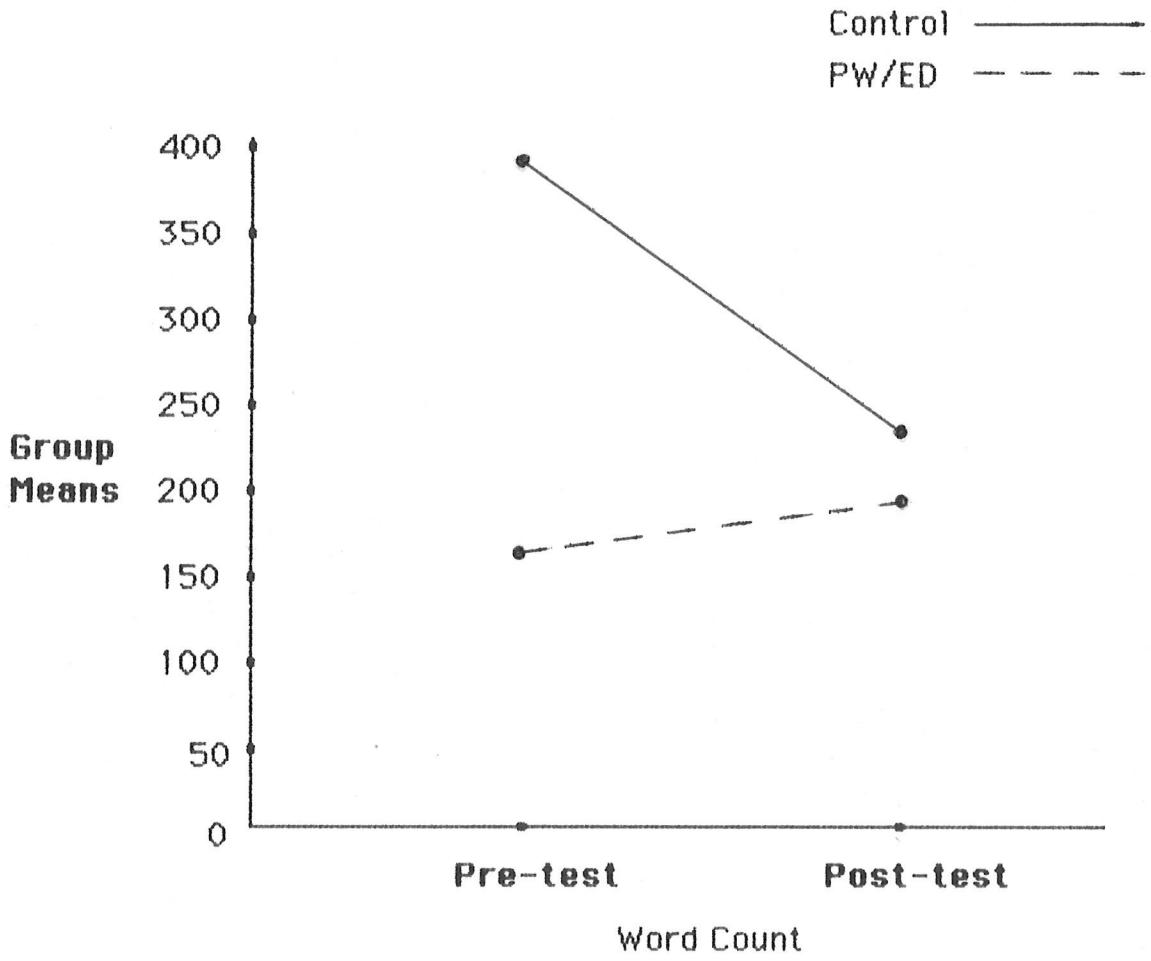
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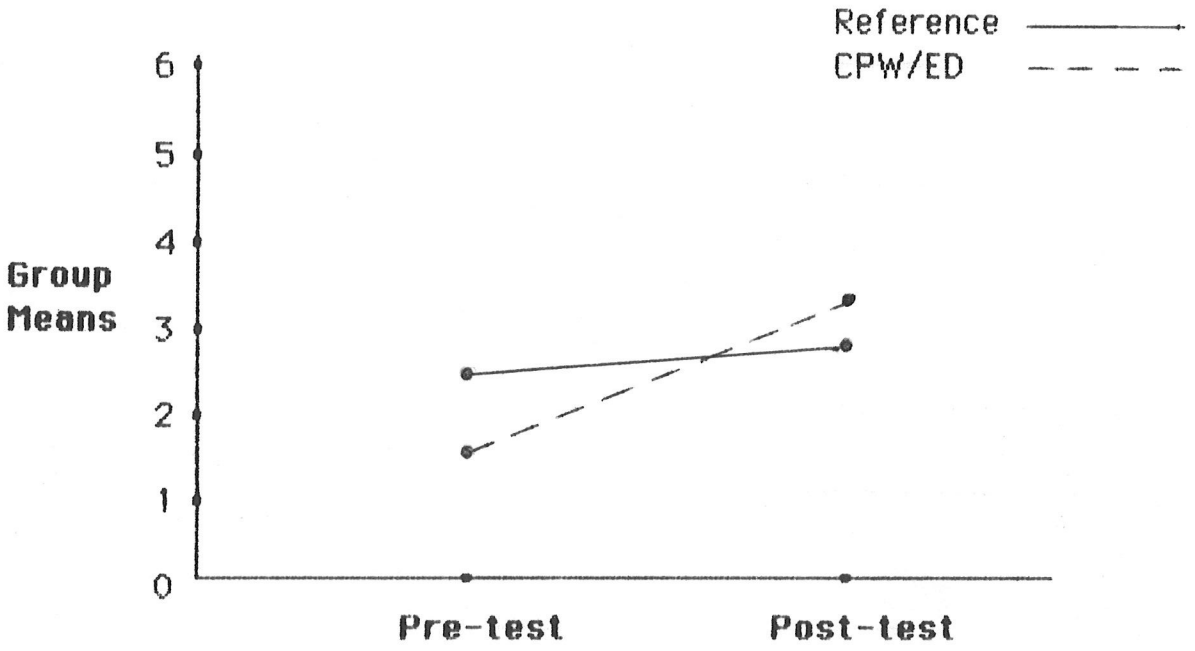
PW/ED
400
350
300
250
Group
Means
200
150
100
50
0
Pre-test
Post-test
Word Count

APPENDIX K

Illustrations of Mean Scores on Pre- and Post-tests for CPW/ED and Reference Groups on Seven Dependent Measures Where Differences Are Significant



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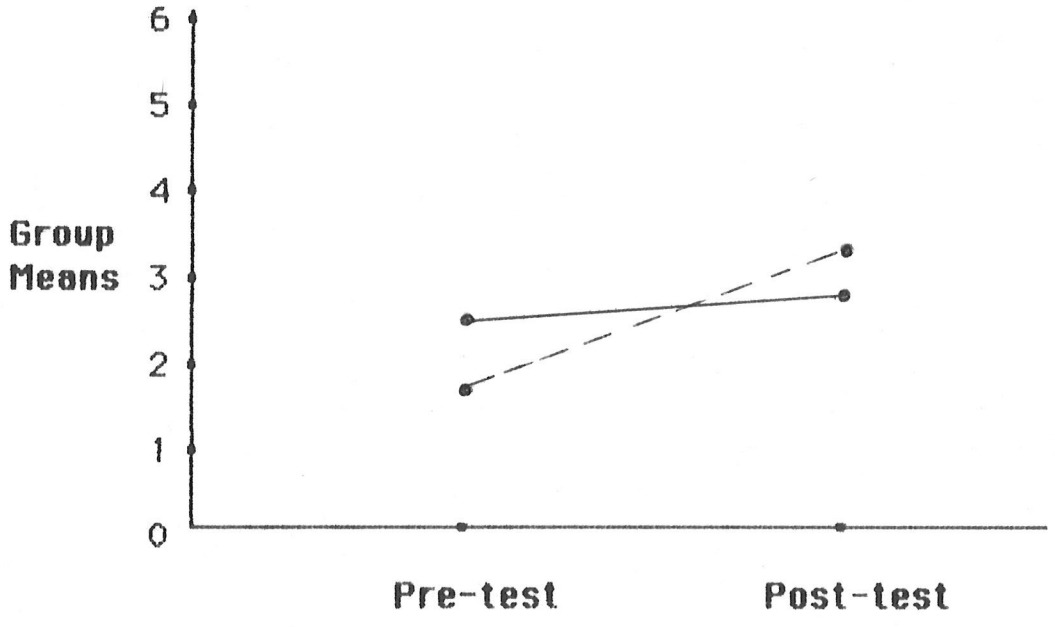

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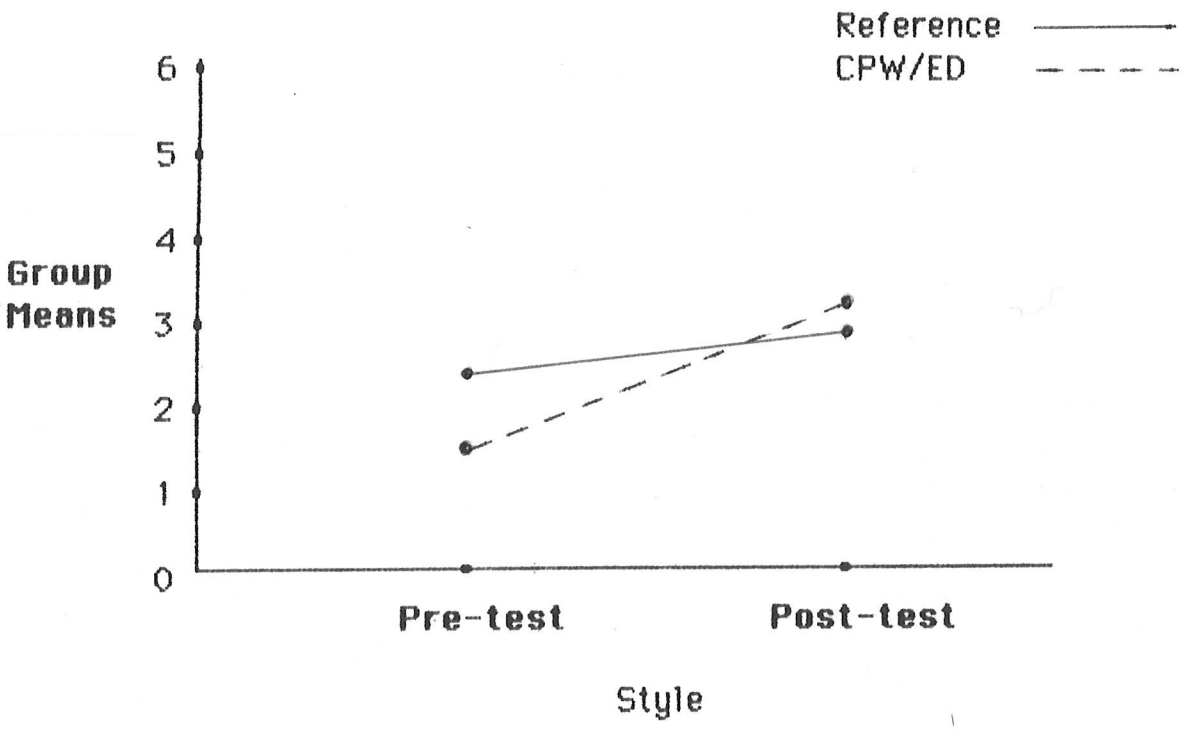

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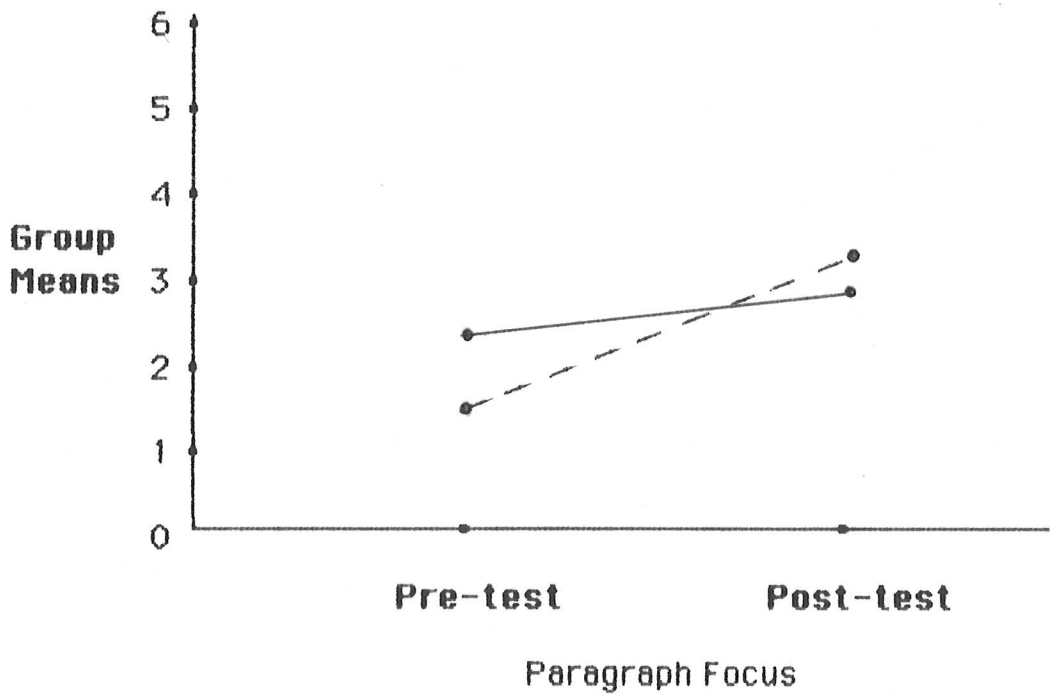

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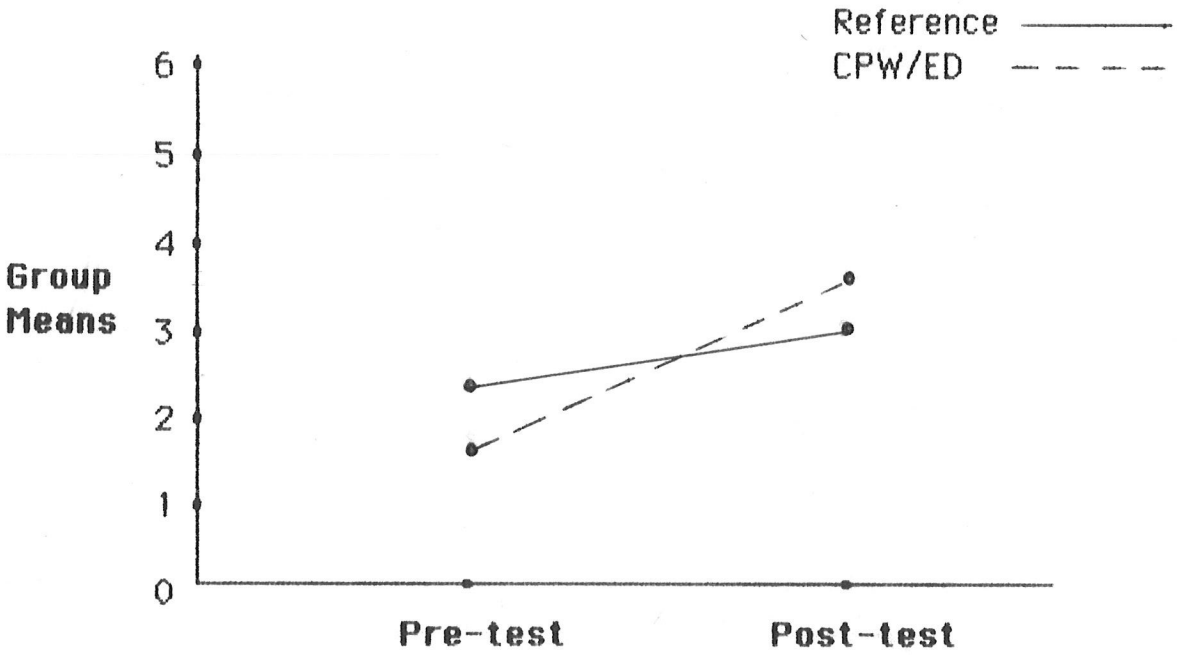

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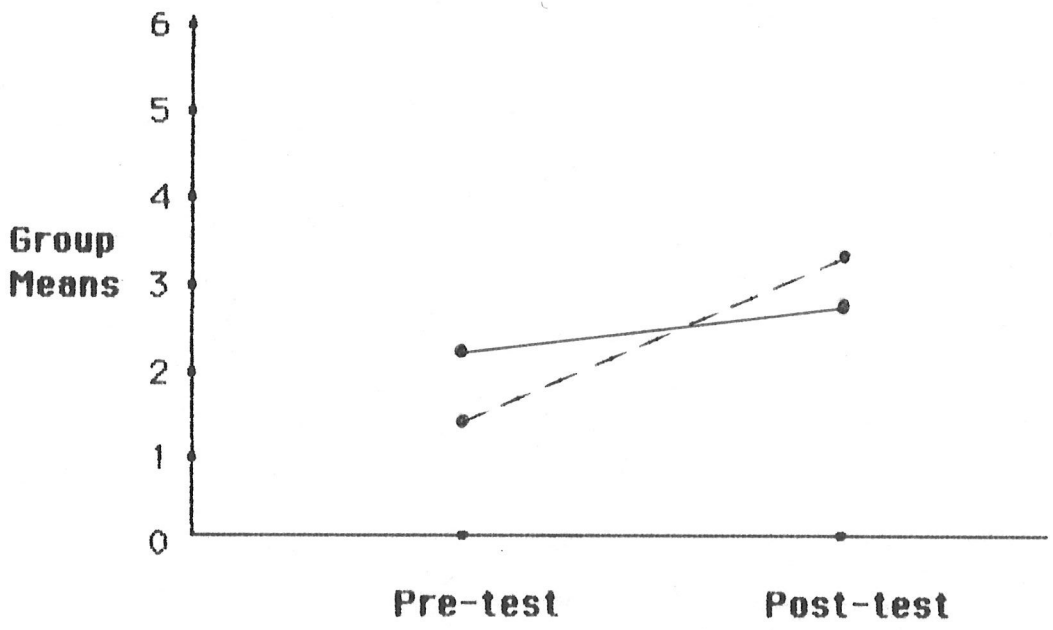
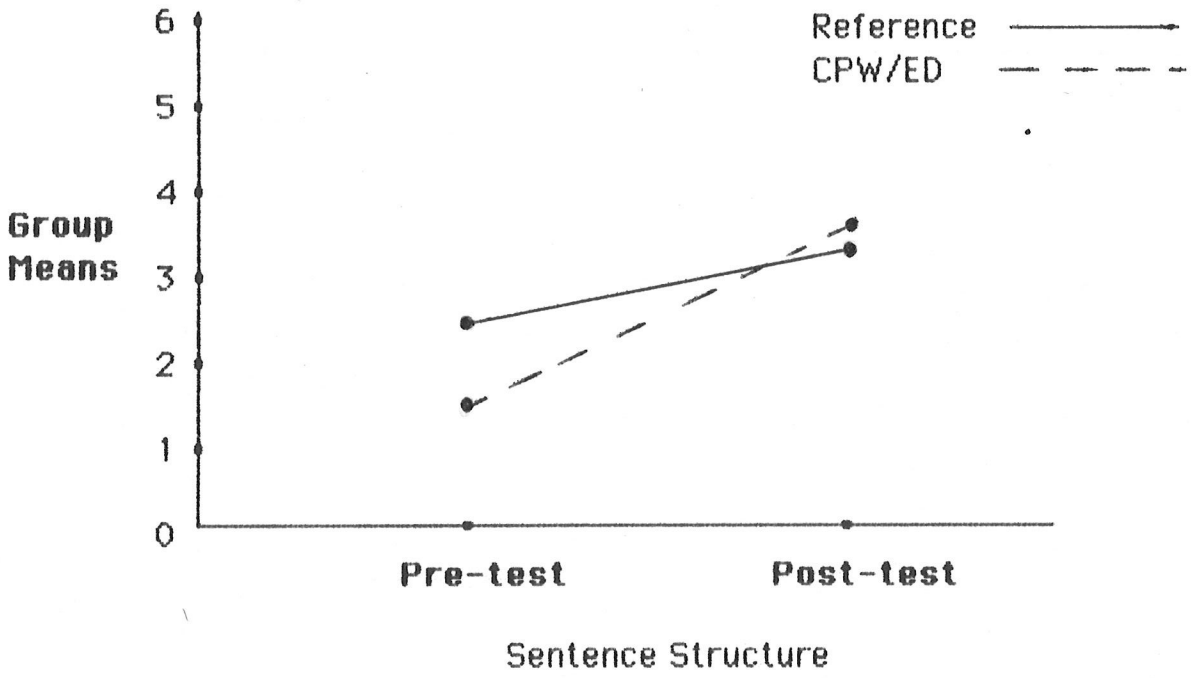


Choice of Details and Elaboration of Ideas


Reference
CPW/ED
Group Means
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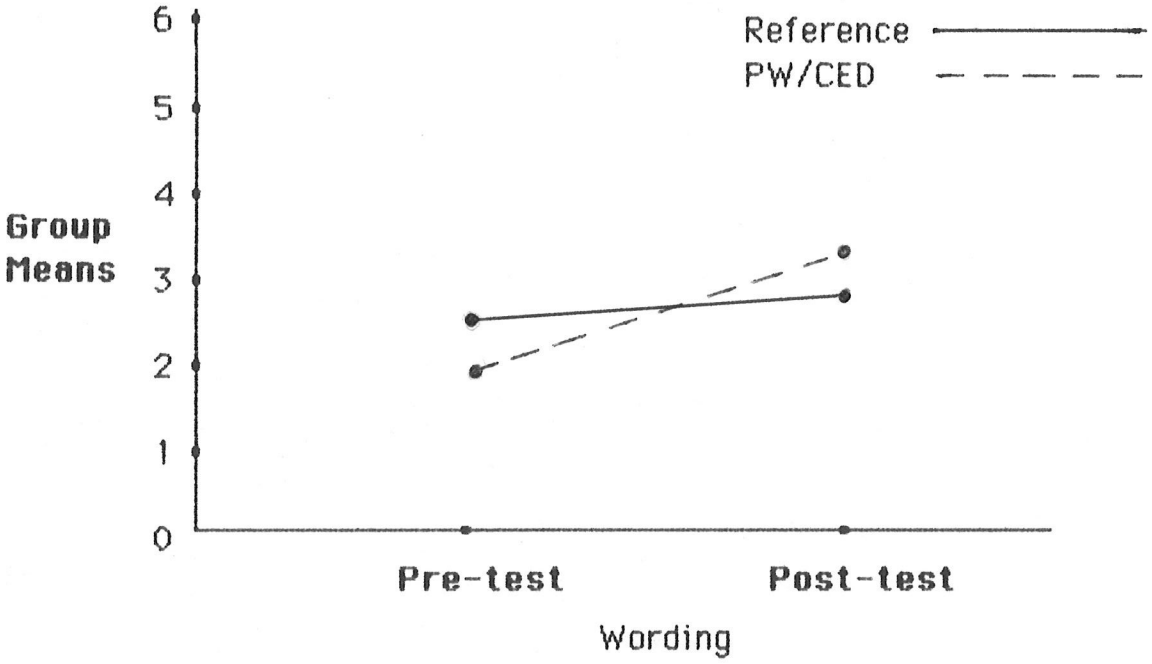
Pre-test
Post-test
Sentence Structure

APPENDIX L

Illustration of Mean Scores on Pre- and Post-tests for PW/CED and Reference Groups on Wording


Reference
PW/CED
Group Means
6
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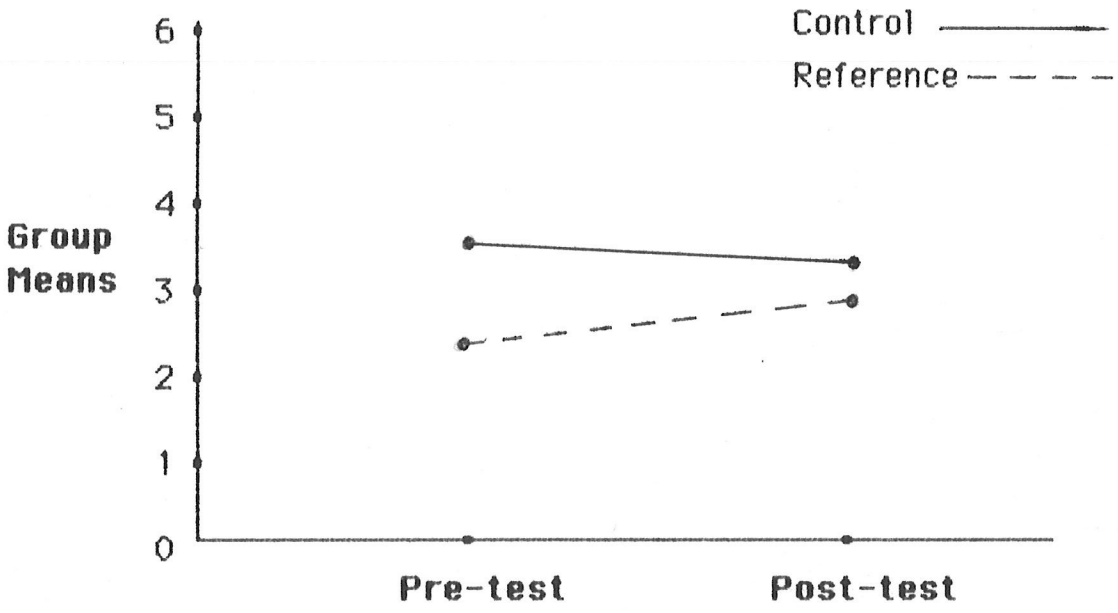
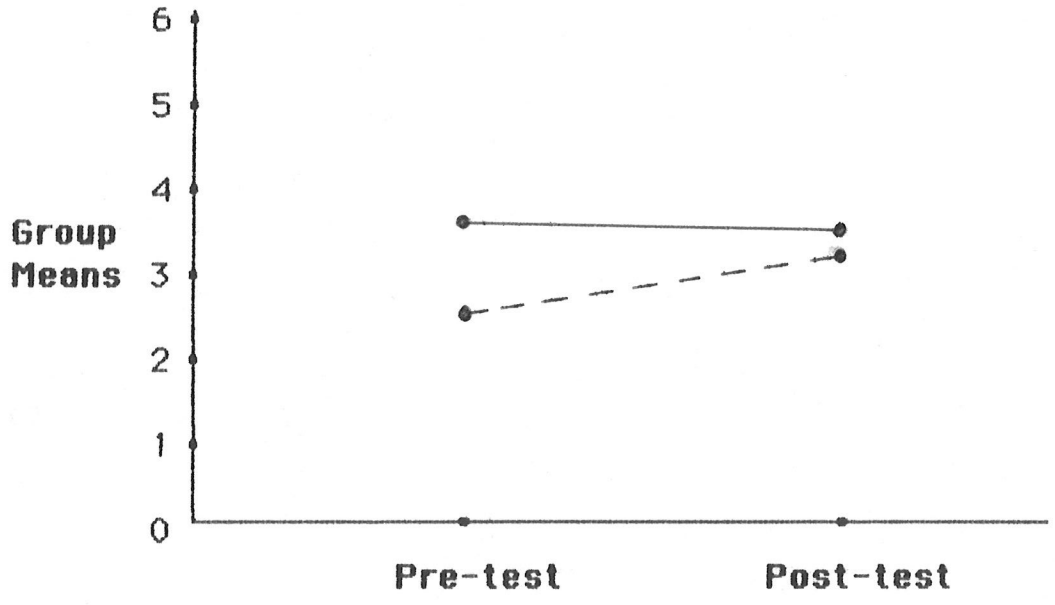
Pre-test
Post-test
Wording

APPENDIX M

Illustrations of Mean Scores on Pre- and Post-tests for Control and Reference Groups on Two Dependent Measures Where Differences Are Significant



Choice of Details and Elaboration of Ideas



Sentence Structure