An approach to teaching expository writing and research in support of that approach are presented in this book. The first section of the book discusses writing from given information, a technique by which teachers give students collections of nonverbal data (charts, graphs, maps, and other pictorial information) that the students must organize in written assignments. This section contains a rationale for using the approach, examples of assignments using the approach, ways to organize assignments so that stylistic strategies can be emphasized, classroom use of writing from given information, and suggestions for creating packets of given information appropriate for particular students. The second section of the book reports on two research studies comparing groups of ninth and eleventh grade students who were taught either with or without packets of given information. This section contains discussions of the research design, the methodology used, and the results. The research section concludes with the observation that, although there were mixed results from the studies, writing from given information in a teaching method can have a positive effect on student writing ability and can add to a good teacher's storehouse of resources. (Appendixes contain samples of student writing from the research projects.)

(RL)
WRITING FROM GIVEN INFORMATION

By
Stephanie Gray
English Department Chair
Foothill High School
Pleasanton, California

and

Catharine Keech
Research Assistant
Bay Area Writing Project

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Bay Area Writing

Project

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

University of California, Berkeley
Bay Area Writing Project

Collaborative Research Study No. 3
The Bay Area Writing Project is an effort by school teachers, college faculty, and curriculum specialists to improve the teaching of writing at all levels of education. The Project is funded by the CARNEGIE CORPORATION OF NEW YORK, the NATIONAL ENDOWMENT FOR THE HUMANITIES, and the UNIVERSITY OF CALIFORNIA, BERKELEY. The findings of this study do not necessarily represent the views of the National Endowment for the Humanities or the Carnegie Corporation of New York. Individuals desiring information concerning The Bay Area Writing Project or the National Writing Project should write to Bay Area Writing Project, Tolman Hall, University of California, Berkeley, California 94720.

Series Editor: Gerald Camp

Cover design: Guy Joy

Copyright 1980 The Regents of the University of California, Berkeley.
Acknowledgement

The authors wish to thank Mary Ann Smith and Jo Fyfe, English teachers at Northgate High School, Walnut Creek, California, for field-testing the Writing From Given Information material prior to the experimental study, and Ruby Bernstein, English teacher at Northgate High School and Linda MacLaren, English teacher at Albany High School, Albany, California, for their participation in the experimental study reported in this monograph. We also wish to thank Dr. Paul Ammon, Associate Professor of Education at the University of California, Berkeley, for reading the manuscript of the experimental study and offering many valuable suggestions.
Preface

Will students who have intensively practiced writing from given information improve their general performance on an expository writing test more than students who have not received this special practice? Will students who have practiced particular rhetorical and syntactical strategies for dealing with factual information put these strategies to use when faced with a writing test in which no clues as to strategy are given?

These are questions this study hopes to answer. The study was suggested by an experimental approach to composition (described in Section 1) developed by Stephanie Gray, an English teacher at Foothill High School in Pleasanton, California and a teacher/consultant for the Bay Area Writing Project.

After two Bay Area Writing Project teacher/consultants from Northgate High School in Walnut Creek, California—Mary Ann Smith and Jo Fyfe—had conducted an informal experiment with the approach and strongly aided Gray both in refining it and in creating additional materials, the Bay Area Writing Project suggested that a formal study of the approach be conducted during the 1978-79 school year. Two other Bay Area Writing Project teacher/consultants, Ruby Berstein from Northgate High School and Linda MacLaren from Albany High School, volunteered to test the materials with their eleventh and ninth grade classes respectively while simultaneously using their usual approaches with control groups at the same grade levels. (Both these teacher/consultants are considered exceptional writing teachers; their usual approaches are
recognized as excellent.) Catharine Keech, research assistant for the Project, assisted with the experimental study, interpretation of data, and preparation of this publication. Section 11 contains her report on the design and results of the study.

James Gray, Director
Bay Area Writing Project
University of California
Berkeley, California
## Contents

Preface. ................................................. v

I. Writing From Given Information. .................. 1

II. The Experimental Study. .......................... 22

References ............................................. 56

Appendix:  A. Sample Compare Essays .............. 58
          B. Sample "Imposter" Essays. ................. 67

vi
I

Writing From Given Information
Stephanie Gray

THE RATIONALE

Training Students for Writing In School and On the Job

If we were to survey the kinds of writing assignments given in all curriculum areas throughout the secondary and college years, we would surely find that straightforward exposition--a setting forth of facts, listing of qualities, summarizing of events, citing of reasons, describing of processes--is the type of writing which is most often required of students. Mastery of this mode is therefore essential to their academic success. When a history teacher asks students to "cite some of the major causes of the Civil War," or a science teacher asks them to "explain the difference between ionic and molecular bonding," the instructor will expect an expository reply, not a personal essay in which the writer (however vividly) describes some of his feelings about living in the South or his excitement at having created salt from hydrochloric acid. That the writing of such "personal" responses may be a valuable educational experience is beside the point; a student who is unable to express required information with some ease in clear prose is, and will continue to be, severely handicapped within the present school curriculum and in most professional and many semi-professional vocations.

The job-related writings which our students will be asked to perform after graduation will probably be almost exclusively "informational" in quality. In addition to those careers which traditionally require factual report writing--police officer, civil servant, journalist, lawyer, military officer, and so on--teachers ought to be aware of the
increasing number of other professions in which a demand for informational writing plays a key role. Recently, for example, a speaker at a conference on minorities in engineering estimated that engineers in supervisory positions spend more than 60 per cent of their work day writing reports. He added that the single factor which prevents most engineers from achieving supervisory rank is their inability to write clear prose.

Giving students practice in conveying information clearly can be of considerable help to them both in the future and during the key secondary years. My program is designed to give students such practice by providing them with what can best be described as 'given information'--collections of data which I have gathered from many sources, including such curriculum areas as science and social studies. This information has been transformed into charts, lists, maps, illustrations and so on. Students are asked to convey the given information in clear prose--in effect to re-transform the information from the non-verbal mode in which they see it, such as a map, to a verbal one, such as a paragraph. The data is presented to students in packets, each of which deals with a different type of information (general information, information on processes, information about events, and so on). Sample assignments are described and analyzed below (pp. 5 - 10).

Because the approach draws so heavily on information from fields outside of English, it provides opportunities for across-the-curriculum projects, with perhaps several teachers from various course areas getting together to select and create data packages, using them not just to reinforce writing instruction but to teach some of the specific content of their courses.

Diagnosing and Attacking General Composition Problems

A Diagnostic Tool

Many student essays are flawed by a severe lac... of coherence.*

*In 1977, the Subject-A (remedial writing skills) Department at the University of California, Berkeley, commented that while current freshman examination essays had no more problems in spelling and mechanics than those they had analyzed from past years, current student papers were marked by noticeable failures in coherence.
It is sometimes difficult to judge whether this incoherence results from a student's failure to think through his topic or from actual lack of skill in expression. In more instances than we suppose, it may be that the student's thoughts are clear to him, but he lacks the rhetorical resources or verbal control which would allow him to present these ideas coherently. Providing the student with a concrete content for his writing can allow us to determine very quickly whether the student's control of language and structures is at fault. If the student cannot present such "given" information clearly, it is doubtful that he will be able to perform more complex writing tasks successfully. Therefore, before moving on to such tasks, we can concentrate on the kinds of practice we have determined are most needed. We might determine, for example, that most students in our class under-use transitional signals and that concentrated practice with these devices would improve coherence in their writing.

A Spur to More Fully Developed Writing

Student writing is often much thinner than we would like. Assertions are weakly documented, details but lightly sketched in, ideas only slightly developed. Such poor development, normally signalled by production of extremely brief paragraphs, results in writing that may appear to be only a series of vague generalizations. It may be that if students practice expressing a dense collection of given information about a topic they will recognize the advantages of using information of this kind as documentation in their other writings where appropriate. For example, the longer paragraphs which generally result when students express given information may give them a better instinctive sense of the amount of material needed to document a single point. More important, the habit of working continually with very specific material may encourage greater specificity in general--whether that specific material takes the form of information, examples, or descriptive detail.

A Motivational Tool

To those who write fluently and find pleasure in exploring their own ideas through writing, it may seem unlikely that very structured assignments to express already given content (the "given" information)
could motivate writing. However, for students who have had little success with writing or who feel intimidated by the whole process of selecting a topic and an individual approach to it in an essay, a predetermined subject and content can provide a sense of security which leads to greater willingness to write. Such assignments seem manageable to a less able student. And while some of the more able prefer assignments which allow imaginative scope, others find creative pleasure in devising logical, even elegant, arrangements of given data.

The data itself may also serve as motivation. One of the groups in the experimental study (see Part II) specifically commented to their teacher that they were interested in the information as information—they found the data generally intriguing and relevant—and this interest encouraged them to write.

THE METHOD

There are other teaching approaches which rely on giving information to students. The "case-book" approach, in which students are given capsule accounts of critics' interpretations or other summarized material, is an obvious example; less obviously the sentence-combining techniques of such teachers as O'Hare and Strong (see References) depend on giving students complex information that has been broken into simpler "bits." But all of these present the information in strongly verbal form: the material from which students are to write is generally given in whole sentences or even whole paragraphs. I have taken a different tack, presenting the information, insofar as possible, in non-verbal form—through the use of charts, graphs, maps, and other pictorial representations. I chose this method for two reasons. First, I wished to encourage students to discover for themselves the language and structures that would best convey the information. Second, in most cases I did not wish to restrict the kinds of relationships students might discover between various parts of a single data package, and I feared that a wholly verbal presentation of the information would imply my own sense of
THE CONTINENTS OF THE WORLD

NORTH AMERICA
1. bobcat
2. cheetah

SOUTH AMERICA
3. jaguar

AFRICA
4. leopard

EUROPE
5. lion

ASIA
7. tiger

AUSTRALIA

LOCATION OF THE BIG CATS

TYPES OF LARGE CATS FOUND ON THIS CONTINENT:
1. bobcat
2. cheetah
3. jaguar
4. leopard
5. lion
6. mountain lion
7. tiger

* no big cats

A sample assignment will help clarify these distinctions and indicate the unique focus of the approach (see Figure 1).

Express clearly in writing the information about the locations of the big cats given in the map above.

ASSIGNMENT
The format of this assignment—the presentation of concrete information about a topic of general interest presented by way of a map and legend accompanied by directions to express the given information clearly in writing—is typical of most of the assignments in my materials. The following assumptions underlie such assignments:

1. Charts, maps, and graphs imply, through spatial arrangements, that logical relationships exist between separate bits of information; students, recognizing these implied relationships, will be forced to produce verbal methods for expressing them—methods which will later aid them in expressing relationships between other ideas or data.

2. Given specific content, students can shift their attention from "what to say" to "how to say it"; there is automatically more emphasis on the importance of word choice, sentence structure, and arrangement in such assignments. (Students themselves acknowledge this difference in emphasis. While working on such assignments, their questions usually focus on problems of craftmanship: "Can I combine these two phrases?" "Can I put this list in the middle of the sentence?" etc.)

3. While the content of the sample assignment is factual, it will suggest a variety of emphases around which the facts can be organized. Some students, for example, may choose to emphasize the large number of big cat species which exist, others the wide territorial range of the cat, others the comparative richness or paucity of big cats on the various continents, and so on. Given several similar assignments, almost all students will discover the advantage of having such an emphasis (from another perspective, an emphasis we might label a "main idea statement") when they...
try to express information coherently.

4. Students who have difficulty writing will benefit from a technique that allows them to visualize what is to be said. While these students may have trouble perceiving the logic of a traditional outline—a device often suggested as an aid to poor writers—they seem able to assimilate fairly easily content that is spatially or visually arranged.

The variety of information which can be presented by way of data packages is greater than one might at first suppose. Some of the possible range is indicated by the two additional sample assignments below, the first (Figure 2) from a packet on explaining events and the second (Figure 3) from a packet on explaining processes:

FIGURE 2

ASSIGNMENT

Using the information given below, write a brief account of the life of the comic-strip character Superman.

Superman

Born:

Where: Krypton (planet in another solar system)
To Whom: Jor-El and Kal-El (Krypton scientists)

Sent to Earth:

When: as infant
Why: Krypton doomed to explode
How: in rocket ship

Found:

By Whom: elderly American couple (Eben and Sarah Kent)

Became:

What: the Kents' adopted child
Who: Clark Kent

Discovered to have:

What: unusual powers (ability to leap tall buildings, enormous strength, x-ray vision)
When: as he grew up

Employed:

When: when adoptive parents died
Where: Daily Planet (large newspaper)
As What: reporter
By Whom: Perry White (editor of paper)
Kept identity hidden:
  From Whom: fellow workers (Lois Lane, reporter, and Jimmy Olsen, cub reporter)
  How: by assuming disguise (glasses, business suit, and meek manner)

Assumed true identity when needed:
  How: by removing disguise to reveal Superman costume (blue tights and red cape)
  To Do What: fight crime and rescue people

FIGURE 3
HOW TO MAKE POPCORN

SUPPLIES NEEDED
  CORN POPPER  POPCORN KERNELS  SALAD OIL  SALT  1/4 CUP MEASURING CUP  SERVING BOWL

STEP 1

STEP 2

STEP 3

STEP 4

STEP 5

STEP 6

STEP 7

STEP 8

ASSIGNMENT

Write a clear explanation of how to make popcorn based on the information given in the illustration above.
Because visualizing relationships seems so helpful in writing about information, I encourage students to create visual/spatial arrangements of their own information (information gathered from lecture notes, reading, films) from which they might write more easily. To provide practice in organizing information, I include a few exercises in each packet in which information is given in various stages of disorganization. Students are asked to arrange the relevant facts in a chart or diagram. Sometimes, as in Figure 4 below, specific organizational clues are given:

FIGURE 4

ORGANIZING INFORMATION

ASSIGNMENT

Below is a chart which as yet contains no information. All the information that belongs in the chart is given in the sentences below it. Copy the blank chart onto your paper. Then, using the headings on the chart as a guide, fill in all necessary information to complete the chart.

<table>
<thead>
<tr>
<th>Vitamin</th>
<th>Food Group Which Supplies this Vitamin</th>
<th>Specific Foods in this Food Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Vitamin A is found in corn and carrots.
2. Leafy green vegetables include spinach, kale, and mustard greens.
3. Vitamin D is supplied by dairy products.
4. Citrus fruits provide Vitamin C.
5. Milk and butter are dairy products.
6. Whole grain cereals and bread both belong to the food group called "cereal products."
7. Corn and carrots are yellow vegetables.
8. Vitamin C is found in oranges, lemons, limes, and grapefruit.
9. Spinach and kale are good sources of Vitamin K.
10. Cereal products provide Vitamin B.

In other exercises, such as Figure 5 below, students are asked to create their own organizational design:

FIGURE 5

ASSIGNMENT

Below are some sentences giving information about the relationship between body type and personality. Create a chart that conveys this information in a simple and logical form.

INFORMATION:

1. Some psychologists say that a person's personality is keyed to his body type.
2. A person who is medium-sized or muscular is said to have a mesomorph body type.
3. Ectomorphs enjoy quiet activities.
4. Mesomorphs are outgoing: they are not bothered by loud noises or large groups.
5. Endomorphs are people who tend to be plump.
7. People who are thin or slightly built are called ectomorphs.
8. Mesomorphs are usually athletic and enjoy activity.
9. Endomorphs are cheerful and sociable.

STYLISTIC STRATEGIES

Writing assignments and organizing exercises at first formed the entire teaching approach. But a phenomenon which repeatedly occurred as I experimented with the materials in class led me to extend the method to include the teaching of specific rhetorical/syntactical strategies as well. Again and again as students read aloud their responses to a writing assignment from the packets, other students would comment on how "good" certain papers were. Since the content in all papers was virtually the same, students
were obviously reacting to the way certain writers were conveying that information. What was especially intriguing was my perception that almost all these particularly successful writers were relying on a particular set of rhetorical devices, and that some of these devices were frequently associated with certain kinds of information.

For example, the not-so-successful writers relied heavily on the word "then" in giving their directions on making popcorn:

Put in one-fourth cup oil in a corn popper. Then add one-fourth cup kernels.

But almost every writer who had done an outstanding job made heavy use of adverbial clauses or participial phrases:

After you have put one-fourth cup oil in the corn popper, add one-fourth cup kernels.

After pouring one-fourth cup oil into the corn popper, add one-fourth cup kernels.

Similarly, virtually all the successful papers on explaining events made heavy use of appositives, while the less successful struggled with constant repetitions and over-use of the verb to be:

Superman worked as a reporter on the Daily Planet. The Daily Planet was a large newspaper.

Versus:

Superman worked as a reporter on The Daily Planet, a large newspaper.

or:

Superman worked as a reporter on a large newspaper, The Daily Planet.

Therefore, it seemed reasonable to provide, with each information packet, instruction and practice in the technique which had proved most effective in presenting that type of information.

The following list of stylistic devices taught with the various packets was derived from analysis of papers by average tenth-grade students. Other students at other grade levels might benefit from using other devices to express these kinds of information, depending on their particular degree of writing competence.

Packet One: "General Information" - Device TAUGHT: Methods of incorporating a list of examples within a more general sentence
The first step in training students to use the particular stylistic device was to help them recognize it in their own and others' writings. Following the first writing assignment in the packet are some questions that help students analyze what they have just written to see to what extent they are already using the desired technique. For example, to determine whether they need to make greater use of adverbial clauses, the packet asks them to examine their first writing and count how many times they relied on the word \textit{then}. They are also asked to determine their average sentence length. The packet then briefly explains the stylistic device to be emphasized and shows two student samples like those below, the first not using the desired technique, the second making heavy use of it, to demonstrate the device in action. The following student samples from the packet "Making Comparisons" demonstrate the use of words which signal similarities and differences:

\textbf{WRITING \#1}

The movie \textit{Jaws} was based on the novel \textit{Jaws} by Peter Benchley. In the novel the wife of police chief Brody becomes involved with Hooper, the young scientist. The movie ignores this romantic subplot. The novel portrays the fisherman Quint as motivated primarily by greed. The film shows him obsessed by a hatred of sharks. In the book Hooper does not survive the final shark attack. In the movie version, he and Brody both make it to shore safely.

\textbf{WRITING \#2}

Peter Benchley's novel \textit{Jaws} and the movie based on the book are different in several important ways. In the novel the wife of police chief Brody becomes involved with Hooper, the young scientist. The movie, however, ignores this romantic subplot. The novel
portrays the fisherman Quint as motivated primarily by greed, while the film shows him obsessed by a hatred of sharks. In the book Hooper does not survive the final shark attack. In the movie version, on the other hand, he and Brody both make it to shore safely.

This method of teaching the required device proved insufficient for some students. Both teachers in the experimental study found it necessary to provide supplementary instruction at this point for most packets. One asked students to do additional grammar exercises to reinforce their understanding of some of the devices.

The packets themselves include some special practice in using the technique, such as these sentence-combining exercises on the adverbial clause:

Combine each set of sentences below by turning one sentence into an adverbial clause.

Example: A. First you add the flour to the liquid mixture.

B. Then beat until all the lumps disappear.

After you have added the flour to the liquid mixture, beat until all the lumps disappear.

1. a. Do not try to replace the fuse yet.
   b. First you should be sure that the main switch is turned off.

2. a. The clouds darken and a sudden silence descends.
   b. At the same time the wind starts to drop.

3. a. The baby alligator escapes from the egg.
   b. Then it instinctively races for the water.

4. a. The surgeon makes the incision.
   b. But first his assistant swabs the area with antiseptic.

5. a. A smart businessperson thoroughly reads an important contract first.
   b. Then he or she signs it.

6. a. First food is chewed by the teeth.
   b. Then glands within the mouth secrete saliva containing enzymes which digest food starch.
7. a. One must first remove all paint and surface finish from the wooden boards.
    b. One can then steam-treat the boards in a steam box to remove warps.
8. a. Berries from the coffee tree are washed in running water.
    b. They are washed to the point where all the good berries sink to the bottom.
9. a. Make a plan on paper of where the furniture will go first.
    b. Then you can actually move it.
    c. You will save yourself work.
    (SUGGESTION: use two adverbial clauses—one beginning with "if" and one with "before.")
10. a. The knights would put on their heavy armor.
    b. Then a crane would hoist them into the air.
    c. Then the crane would lower them onto the backs of their horses.

Teachers working with the materials commented that more exercises of this kind would be useful.

One final note about such exercises, whether they come from the packet or from a grammar text: for most students, this "grammar practice" will have greater than usual impact because it is directly keyed to particular writing problems students are trying to solve. There is little resistance to learning the stylistic techniques because students can see immediately that the devices aid them in presenting information effectively. This letter from a student in that ninth grade class at Northgate High School, at which the materials were originally tested, expresses a typical reaction:

Dear Mrs. Gray,

My English class has been using your composition workbook for the last quarter and my hand has nearly fallen off from all the writing we've been doing. However I found it very worthwhile to me because I have wanted to learn how to write better. All of my previous English teachers have told me, "I want to see you write excellent compositions, not kindergarten stories." Well how do they expect us to be able to do that if no one wants to teach us what we were doing wrong
and how to correct it? Thanks to your pain in the neck workshop I now have the knowledge to do so, except for paragraphing. I still am not sure how and when to make a new paragraph. Maybe you could include something on paragraphing next time?

Following the intensive practice with a stylistic device, each packet concludes with an exercise asking students to employ the desired technique in revising a given paragraph. The paragraph lacks coherence or contains other flaws which could be removed by using the new device. The sample "faulty paragraph" that follows is from the packet on comparisons:

The paragraph below is confusing because the similarity/difference relationships between the statements is not made clear. The sentences are also rather choppy. Rewrite the paragraph, adding words that signal comparison or contrast as needed. Combine any pairs of short, choppy sentences that show contrast with the word "while."

It can be difficult to distinguish between a cold and a hay fever attack. Their causes are quite different. A cold is caused by a virus. Hay fever is a reaction to pollens or other irritating substances in the air. The person with a cold will sneeze or cough; his eyes may feel watery and his throat raw. The hay fever victim may suffer sneezing or coughing spells, reddened eyes, and a scratchy throat. A cold sufferer will usually run a slight fever. The allergy victim will not. And a cold usually disappears within a week or two. The allergy may hang on for several weeks or even months.

To summarize, each packet contains the following materials:

1. Writing assignment number one: writing from a given data package.
2. Self-analysis of style used in writing assignment number one.
3. Samples of two student writings--one using special stylistic device, one not--and discussion of the device.
4. Exercises on use of this device.
5. Faulty paragraph to revise.
6. Additional writing assignments similar to number one above.
7. Exercises in transforming disorganized written data into charts, diagrams, etc.

CLASSROOM USE

The materials that I designed and that we tested for this experiment were aimed especially at average tenth grade students. However, in determining whether the materials are "too hard" or "too easy" for a particular group, much seems to depend on the level of perfection the teacher demands in the completed assignments. Teachers who tried the materials with their ninth grade classes—classes which represented a very wide range of ability—reported few serious problems. One teacher did comment that many of her students began to create run-on sentences when they first began to incorporate specific lists into general statements, but she drew little attention to this problem, assuming that the problem would eventually solve itself, as in fact it did. Another teacher, however, might view this development with alarm and thus perceive the materials as being too difficult. The teachers in the experimental study had complex reactions to the difficulty of the materials but generally found the ninth grade class struggling at times and the eleventh grade finding some portions too easy.

Another factor which undoubtedly affects perception of the materials' degree of difficulty is the manner in which they are integrated into the on-going curriculum. One teacher in the experimental study felt that though the materials were themselves not too difficult, they often placed an unfair burden on her students because they were added to an already crammed eleventh grade curriculum. Often her students were asked to do this work at home since class time was spent primarily in discussions of required literature.

Because this teacher's students were well-motivated and
perceptive, they were generally successful working on their own. However, for most classes I would strongly recommend allotting class time for the materials. Students frequently desire assistance with the problems of craftsmanship; this offers excellent opportunities for one-to-one teaching--by the teacher or by a more advanced student. Moreover, as soon as students have finished a writing assignment, it can be shared with either a small group or with the whole class with good effect.

The sharing of responses to a particular assignment is almost essential. It is through such sharing that students perceive the variety of approaches which can be taken to a given problem and begin to evaluate which are most successful. Because the content of all student writings to an assignment will be similar, however, it is important that the teacher devise some means of avoiding the monotony of having every paper shared with the whole class. The teacher can read randomly selected papers aloud; small groups can read each other's papers and select "best" papers for sharing; sample papers can be written on the board--or any combination of these techniques can be tried. However the sharing is done, the emphasis should be on discovering methods that work especially well with the material. Teachers should allow sufficient analyses of these methods so that other students can use them in their next writing.

It is less important that the exercises on particular stylistic devices be done during class time, although the two ninth grade teachers who used the materials had their students do all the work in class, concentrating the materials into the final six weeks of the second semester. Such concentrated focus has much to recommend it if student interest can be maintained during the necessary block of time. A careful integrating of the program with other instruction also seems appropriate as long as the material is not merely "added on" but truly integrated.

An excellent means of supplementing the materials while integrating them with other curriculum is to select prose passages for analysis which can also serve as models for the kinds of exposition
covered in the packets. The reading of a passage by Gerald Durrell on ways to smoke animals out of a tree, for example, can provide an excellent example of explaining processes, while also providing practice in reading for main ideas and details.* One of the teachers in the experimental study made a special effort to include such models in her instruction and reported a very favorable response from her students.

I had suggested that after the experimental groups finished each packet, they should be given a major writing assignment keyed to the kind of writing emphasized in that packet. After the packet on explaining information, for example, students were asked to write an article for a newcomer's handbook that gave information about some special place or event of interest in their community. These major assignments give teachers the opportunity to judge the degree of carry-over from the packets and to spot any confusion students may reveal in attempting to use the new stylistic techniques.

CREATING YOUR OWN PACKETS

Teachers who would like to try this approach but are unsure how to create packets which will be appropriate for their particular students may find the following suggestions helpful:

1. Determine what types of information are of special interest to students at your grade level by noting the kinds of books they select on their own, the kinds of subjects they most like to discuss, or by actually polling the class. Start a search for material in these subject areas that can be represented visually/spatially--information that can be charted, mapped, graphed. Particularly good sources are series like the Time/Life books, illustrated instruction manuals, The People's Almanac, The Book

---

*The passage can be found in How We Write by Ians Guth (see References).
of Lists, atlases.

2. Alternately, you can make up generalized chart outlines like the "Comparison of Two Similar Retail/Food Items" chart which follows.

| FIGURE 6 |
|------------------|------------------|
| **COMPARISONS OF TWO SIMILAR RETAIL/FOOD ITEMS** (sample) |
| Items to be compared: **deluxe cheeseburgers** |
| **STORES**: | **#1 MacDonald's** | **#2 Burger King** |
| **COSTS**: | **#1 $1.19** | **#2 $1.29** |
| **MATERIALS/INGREDIENTS**: | **#1 2 meat patties, 3 buns, chopped lettuce, onions, sauce, pickles** | **#2 1 large meat patty, 2 buns, lettuce, tomato, pickles, mayonnaise** |
| **APPEARANCE**: | **#1 tall, somewhat narrow, sesame seeds on a bun, sauce oozing down side** | **#2 wide, flat, bun dull brown in color, somewhat squashed** |
| **PERFORMANCE/TASTE**: | **#1 lettuce very crisp, meat rather dry, hard to fit into mouth because so tall** | **#2 lettuce soggy, meat juicy, drips as one eats it** |
| **COMMENTS**: | **#1 very fast service** | **#2** |
| **ITEM PREFERRED AND WHY**: | | |

Have your students do the research, either by having them do comparison shopping, looking up facts in reference books, or tapping the texts they are currently using in another course area. I particularly suggest the use of charts to convey information when students are first assembling information because they create less confusion than graphs and take much less time than pictorial representations. However, if you
have some artists in class, you should certainly take advantage of their talent and encourage the production of illustrations of data as well as charts. Carrying this process one step further, once your students have had some experience in working with data packages or filling out charts, you can have them do both the research and the creation of a data package that will present their information in clear and logical form.

3. Decide what kind of exposition each data package you have seems to call for (describing a process? giving general information? making comparisons? citing reasons?). Gather into a large packet several data packages that call for the same kind of writing assignment. Each packet will stress a particular kind of informational writing. Tentatively arrange the assignments within each packet from least to most difficult.

4. Try out each packet on a small group of students and carefully analyze the resulting writing. What features did the more successful writings share? What stylistic or rhetorical devices in conveying the information emerged in your samples? Begin to determine—even if tentatively—the devices which most need to be learned by students if they are to deal with the material in the packet.

5. Determine ways to teach these devices to your class as a whole while they are working through each particular packet. You may, of course, wish to create your own exercises or instructional materials to teach these devices, but if you have standard usage or grammar materials on hand, chances are you can use them very satisfactorily for this purpose as long as you stress to students that these exercises are intended to help them solve the immediate writing
problems they will be encountering as they work through your materials and are not just busy work.

The teacher in the experimental study who was teaching a literature-centered curriculum asked students to apply the whole "data package" approach to their reading. For example, she had them make charts about the various characters in Arthur Miller's *All My Sons* and then use these charts both to devise a thesis and as outlines for a paper about the play. She noted that while the resulting essays were extremely well organized, they tended to be somewhat thin, indicating that a single chart seldom provides enough material for a full-length essay. She used a second kind of charting to help students generate more detailed support for their central theses. Her experiment was a provocative one and demonstrates how successfully the approach can be integrated even with a strongly pre-set curriculum.
The Experimental Study
Catharine Keech

RESEARCH QUESTIONS

The experimental study was actually two mini-experiments—one at grade eleven involving classes taught by Ruby Bernstein at Northgate High School, Concord, California, and one at grade nine with classes taught by Linda MacLaren at Albany High School, Albany, California. This structure allowed Stephanie Gray and me, as researchers, to examine the effects of the materials separately at two different grade levels. The experiment as conducted could be repeated indefinitely by teachers at other schools who wish to evaluate the effects of the program in their own classrooms.

Our research questions were:

1. Will students who have practiced writing from given information using the experimental program improve their "holistic" scores on a post-instruction writing test more than students who have not had the special practice?*

*Holistic Scoring is the name given to a rapid impression marking of student writing samples according to a scoring guide or based on a set of anchor papers which exemplify the quality of writing expected for each scoring category. The scoring serves to rank order a given set of papers from strongest to weakest on a scale of, for example, 1 - 6. More information on this scoring method can be found in Paul R. Diederich, Measuring Growth in English (Urbana, Illinois: National Council of Teachers of English, 1974), Charles R. Cooper and Lee Odell, Eds., Evaluating Writing: Describing, Measuring, Judging (Urbana, Illinois: NCTE, 1977), and Catharine Keech, et al., National Writing Project Guide to Holistic Assessment of Student Writing (Berkeley: National Writing Project, in preparation, available Spring, 1981).
2. Will students who have practiced certain syntactic strategies for presenting factual information increase their use of these techniques on a writing test more than students who have not had the special training?

3. Will the particular writing strategies taught by the program, if used by students in either the experimental or control classes, be associated with higher holistic scores? In other words, will stylistic suggestions made in the instructional unit improve the effectiveness of a piece of writing as measured by a general impression marking of the essays?

The experiment was a comparative methods study, in which the performance of an "experimental" class using the materials to be evaluated was compared to the performance of a "control" class which did not use the materials, but whose instruction was similar in all other ways to the instruction in the experimental class.* A pretest consisting of two essays was administered at the beginning of instruction, and a similar posttest was administered at the end of instruction. In addition, scores on an indirect measure of writing ability, the California Test of Basic Skills (CTBS) were collected for all students to determine initial differences between control and experimental students at each grade level.

**DESIGN OF THE STUDY**

In designing the study we wanted to limit the number of factors that might make students using the materials write differently from the students who were not using them. If there were differences at the end of the year in the way the two groups wrote, it was important that those differences stemmed from use of the materials being tested, and not from other influences. The experimental design adopted deals with this concern by studying an individual teacher who works with two similar classes which she would ordinarily teach.

*The problems of matching classes of students and of keeping instruction similar except for the experimental materials are more fully discussed below in "Designing the Study."

---

* The problems of matching classes of students and of keeping instruction similar except for the experimental materials are more fully discussed below in "Designing the Study."
in the same way, such as two sections of English 9, American Literature, or Advanced Composition. The teacher then adds the experimental materials to the work of one class while keeping all other work as similar as possible for the two groups. For purposes of evaluating the effects of Writing From Given Information the class not using the materials should spend an equivalent amount of time engaged in alternative kinds of writing practice. Researchers must keep a careful record of these alternative activities, since they too may enhance student growth in the skills addressed by the special program.

In our study both teachers taught their two classes as they previously had except for introducing the Stephanie Gray program in one class. All the students of one teacher, then, read the same literature, completed the same major essays, received the same kind of instruction in sentence combining, and so on. Time spent during the experimental class on the special program was used in the eleventh grade control class to allow students more time to work on their major expository essays and for increased instruction in sentence combining and creating a good thesis for exposition. The ninth grade teacher expanded various classroom activities for control students, including sentence combining and preparation for special items on the district competency tests (such as usage and vocabulary) for a time equivalent to that spent on the special program in the experimental class. All of these activities were also included in the experimental class to a lesser extent.

The students in the two sections at each grade level were assigned from a general pool of students according to the period they wished to take English. For most students, the assignment was random. Both teachers reported that they knew of no special scheduling factor that might have resulted in higher ability students being concentrated in one section or the other. Such a design helps assume that differences between the performance of program students and control students at each grade level at the end of the study are not the result of differences in initial
ability of students, differences in how much students liked their teacher, differences in course content outside the experimental program, or differences in external factors like events in the school at large, since these factors are the same for both classes of the same teacher.

The remaining larger research concerns were dealt with in designing the writing test and planning our scoring and analysis of student writing to yield as much information as possible about the effects of the instructional program on student performance.

DESIGNING THE MEASURES

Since the instructional program is intended to help students compose better essays, not merely to pass objective tests of skills related to writing, Ms. Gray and I agreed that the only valid measure of performance would be an essay test. We wanted to be sure the writing test we gave the students called for the particular kinds of skills the program was designed to improve. Typical writing assessment topics such as "Describe your favorite object" or "Tell about a childhood experience that taught you something" invite descriptive and narrative writing which may be improved by, for instance, training in the use of concrete details. To evaluate the program, however, we were more interested in whether students could learn to write better informative essays of two kinds: the kind that gives directions (a "process" essay) and the kind that compares and contrasts two things in an evaluative way. The lessons in the program were designed to have specific effects on these two kinds of writing tasks.

To elicit the kinds of writing addressed by the program, we developed and piloted topics for a process essay and topics for a compare/contrast essay. We created two versions of each kind of topic so students wouldn't be bored by writing on the same subject at pretesting and posttesting.

The two topics for the process essay were:
A. Imagine that someone named Lee Jacobs, who looks exactly like you, has agreed to take your place at school and pretend to be you for a day. You plan to write a long letter explaining to the imposter exactly how to behave in order to fool your teachers and friends. Below, write PART of that letter, describing in complete detail how to get through ONE part of your day. (Do NOT include your English class. Please use fictitious names when referring to friends or teachers, but you may use accurate physical descriptions.) Include only as much as you can describe well in the time allowed.

Write directly to Lee.

B. Imagine you are going to be away for the summer, and someone named Pat Michaels plans to live with your family and take over your duties at home. You plan to write a long letter explaining to Pat exactly how to behave in order to fill your shoes satisfactorily. Below write PART of that letter, describing in complete detail exactly how to get through part of the day, or how to do one job well. Include only as much as you can describe well in the time allowed.

Write directly to Pat.

The two topics for the compare/contrast essay were:

C. Compare two stores you know which sell similar items. Consider such things as prices, merchandise, service, atmosphere, location, or other special features. Which of the two stores do you prefer? Explain why.

D. Compare two actual holidays or special events you celebrate in your family (such as Thanksgiving, Passover, Christmas, the Fourth of July, your birthday, etc.). Consider such things as food, decorations, activities, behaviors, atmosphere, or other special features. Which of the two do you prefer? Explain why.

When students are offered new topics to write on there is a danger that the posttest topic will be more difficult or less inspiring than the pretest topic or vice versa. To guard against this problem we scrambled the topics, so equal numbers of each topic appeared on both pretests and posttests for all groups. To scramble the topics, we created four forms of the test. Each
student was assigned one form, which told the teacher which essay he should receive at each sitting. The four forms of the test were as follows:

<table>
<thead>
<tr>
<th></th>
<th>PRETEST</th>
<th>POSTTEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form 1:</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td>Form 2:</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>Form 3:</td>
<td>B</td>
<td>D</td>
</tr>
<tr>
<td>Form 4:</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>

Students wrote for thirty minutes on each topic. The papers were coded so that readers later would not be influenced by knowing whether the writer was in ninth or eleventh grade, in the experimental or the control class, or writing before or after instruction. Pretest and posttest essays were pooled to be scored at one time so that differences in reader training would not create misleading differences in scores on these two tests.

SCORING

In planning the scoring and analysis of student writing, we wanted to look at the essays in two ways. First, were the essays of students in the program generally more successful than the essays of other students? Second, did the students in the program seem to be using the particular stylistic devices taught in the package? The researchers recognized that students might adopt some of the sentence forms taught in the program, such as use of transitional words and phrases in comparing and contrasting, without necessarily writing more successfully when essays were considered for their overall quality. On the other hand, the students using Gray's program might begin to write better essays than the other students because of some side effect of the program, e.g., the effects of more writing practice or of learning to think about information graphically, without necessarily adopting the new sentence forms being taught.

To judge the program successful in achieving its goals, we
believed students in the program should write essays that were
generally better than they might have written otherwise. But
we also hoped to find that students were writing better essays
by using some of the special writing strategies the program had
introduced them to.

At the outset, we refined the general research questions
into five more precise research hypotheses which could be tested
quantitatively by scoring the student essays in several different
ways using one holistic reading and four analytic readings:

1. Students in the training program at each grade level
would improve their holistic scores on the posttest,
compared to pretest scores, more than students in
the control classes at the same grade level.

2. Experimental students at each grade level would
increase their use of adverbial clauses in the
posttest process essay more than control students
at the same grade level according to a count of
certain types of adverbial clauses introduced in
the experimental instruction.

3. Experimental students at each grade level would
increase their use of comparing words and phrases
on the posttest compare essay more than control students
at the same grade level according to a count of specific words and phrases emphasized
in the program.

4. Experimental students at each grade level would
be more likely than control students at the same
grade level to move from a lower to a higher
rating on method of development of the compare
essays based on a special hierarchical classi-
fication of methods of development described
below (see p. 35).

5. In the compare essays, experimental students at
each grade level would be more likely than con-
trol students to increase the ratio of sentences
that combine both terms of a comparison to total
sentences.

THE HOLISTIC SCORING

Each paper was scored twice using the holistic method. Each
reader rated the essay on a scale of 1-5, with a score of 5
representing the best writing in the whole sample and a score of 1 reserved for the poorest writing. When the scores of both readers were summed, the total range of possible scores for an essay became 2-10. If two readers disagreed by more than one point, the paper received a third reading, and an average was taken of the three scores and doubled for the final score on the essay. Sample essays showing the quality of writing typical of each point in the scoring range are included in the Appendix.

Readers experienced in holistic scoring were trained using a set of anchor papers from each of the two types of essays. One group of readers scored the process papers, while a second group scored the compare essays. The anchor papers from each of the two essay types, process and compare, included samples of both topics given the students. Within each essay type, the topics were randomly mixed throughout the reading, and readers seemed to have no trouble applying the same standards to judging writing about two favorite holidays or writing about two stores. In fact, having two topics, especially for the compare essay, seemed to provide welcome relief.*

Although the essay topics were scrambled for pre and posttesting, we wanted to know whether the topics within each essay type were really equivalent in their effects on student writers and readers. Comparing the average scores and standard deviations of these topics, we found that the readers of the compare essay appeared to be just as easy or difficult to please whether the student was comparing two stores or two holidays, while the readers of the process essay seemed equally responsive to essays instructing an imposter how to act at school as they were to essays telling a replacement how to survive in the writer's home situation.  

*In general, readers of the compare essays found the papers less entertaining and individual than did readers of the process essays, the latter being more like the personal experience essays readers were familiar with from other holistic scorings. We recommend, therefore, that topics such as the two we used to elicit comparing writing be avoided for large-scale holistic assessments of general fluency, as the similarity of content in responses increases reader fatigue.
It is fair to conclude that the topics were well matched for pre and posttesting.

A major concern in holistic scoring is the reliability of the scoring as estimated by the rate of agreement of the first and second reader of each essay. We may report this reliability in two ways: first, by the proportion of discrepancies, or papers needing a third reading; second, by the correlation between first and second readers' scores. For both compare and process essays, discrepancies totalled approximately five percent of all papers scored. The Pearson correlation between scores given by first and second readers of the process essay was \( r = .79, (p = .05) \); for the compare essay, \( r = .84 (p = .05) \). These high levels of agreement may be explained in part by the careful training of a small group of experienced readers, but may also result from the narrowness of the writing task, especially for the compare essay. Students' responses tended to fall into more easily recognized categories or levels of quality than they do in literary or more personal essays.

**Inter-Measure Correlation**

Table One indicates that the California Test of Basic Skills (CTBS) scores correlate equally well (about .45) with all essay scores, whether students were writing for pretest or posttest or for process or compare topics. This is a moderate correlation,

<table>
<thead>
<tr>
<th></th>
<th>CTBS</th>
<th>Pretest Imposter</th>
<th>Posttest Imposter</th>
<th>Pretest Compare</th>
<th>Posttest Compare</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTBS</td>
<td>1.0000</td>
<td>.4421</td>
<td>.4507</td>
<td>.4346</td>
<td>.4277</td>
</tr>
<tr>
<td>PRE-Imposter</td>
<td>.4421</td>
<td>1.0000</td>
<td>.5228</td>
<td>.5874</td>
<td>.4734</td>
</tr>
<tr>
<td>POST-Imposter</td>
<td>.4507</td>
<td>.5228</td>
<td>1.0000</td>
<td>.5776</td>
<td>.6220</td>
</tr>
<tr>
<td>PRE-Compare</td>
<td>.4346</td>
<td>.5874</td>
<td>1.0000</td>
<td>1.0000</td>
<td>.5632</td>
</tr>
<tr>
<td>POST-Compare</td>
<td>.4277</td>
<td>.4734</td>
<td>.6220</td>
<td>.5632</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

All correlations reported are significant at \( p \geq .001 \)
and is typical of the agreement between scores on writing samples and scores on "objective" standardized measures of verbal skills. Some testers (Educational Testing Service, National Assessment of Educational Progress) have reported higher correlations in some instances, but, in general, tests like CTBS do not provide strong indications of how students are likely to perform when they actually compose.

In part this is because students themselves are inconsistent in their level of writing performance, depending on topic, test condition, and many other factors which are only beginning to be understood. At pretesting, performance on the two tasks, one process topic and one compare topic, is only moderately correlated ($r = .5874^*$), with the correlation between the two samples of writing at posttest being somewhat higher ($r = .6220^*$).

Some test makers suggest that a student's pretest and posttest writing scores should correlate well if test conditions are equivalent and if the treatment is not differentially effective according to the initial abilities of individual students. This would mean that, although all students may improve somewhat, their positions relative to one another would remain roughly similar. For our test, pre and post compare essays are moderately correlated ($r = .5632^*$). Similarly, pre and post process essays are moderately correlated ($r = .5228^*$).

None of these correlations is particularly low, suggesting that all measures register some common abilities. But no correlations are high, which suggests that other factors besides a general level of ability are also affecting these scores, particularly an unpredictable individual inconsistency of performance on the essay tests. Reader inconsistency may play some part as well, of course, but is insufficient to explain the low correlation between scores of the same student, since the correlations between first and second readers are quite high.

*Significant at $p \geq .05$. 

31 38
ANALYTIC RESCORING

While holistic scoring is the best measure of the overall quality or general impact of an essay on a reader as compared to other essays in the sample, it does not provide much information about particular effects of the training program. Specifically, it cannot reveal whether students are using any of the particular stylistic strategies they learned from the experimental program. For this reason, essays were rescored using counts of certain features in the writing.

Rater agreement for the analytic measures was found by calculating a percentage of disagreement between the actual rater and the rating supervisor who re-rated about 40 percent of papers on each measure. The supervising rater found no more than 5 percent disagreement on any measure, and for some measures achieved even more consistent agreement with the first rater.

The Process Essay

The topics invented for the process paper invited students to give instructions to their imposters. We hoped to elicit the kind of writing addressed in Chapters I and II of the materials, in which students learn to present a great deal of descriptive information about things and processes clearly and concisely. The stylistic tools taught in these chapters include the use of appositives to expand information about a person or thing:

Example: ° Sit next to Mary Caldwell. Mary is my friend. She is the girl with red hair in the back row.

+ Sit next to my friend, Mary Caldwell, the girl with red hair in the back row.

and the use of adverbial clauses to show the relation between two actions:

° Expected form before instruction.

+ Expected form after instruction.
Example: First go to P.E. in the gym. Then find my locker, number 607. Then suit up. Then you are ready to play volleyball...

+ After you get to the gym, find locker number 607. As soon as you suit up, you are ready to play volleyball...

These two stylistic features appeared easy to count reliably and promised to provide a fair indication of whether the practice and instruction in Chapters I and II had actually induced students to adopt new sentence strategies.

Another revealing feature analysis might have been Kellogg Hunt's "measure of syntactic maturity," a count of word, T-unit, word/clause, and clause/T-unit ratios.* Certainly the underlying message of the first chapters of the program suggests to students that short choppy sentences can be replaced by longer sentences that combine information, wasting fewer words and expressing clearer relations among the ideas. However, both teachers in the study normally teach sentence-combining strategies as a regular part of their instruction in all classes. This instruction generally results in longer, more complex T-units, and would affect control students as well as experimental students. Since we wanted to discover particular effects of the Gray materials, as distinguishable from general sentence-combining instruction, we limited our count of features to appositives and adverbial clauses.

The Compare Essay

Two kinds of analysis were suggested by the nature of the instructional materials on how to compare or contrast two subjects. The first lesson in Chapter IV of the Gray program points out that

---

*Hunt (1965) coined the term T-unit to identify an independent clause plus all its attached and embedded modifiers. He discovered that as writers mature, their T-units become longer and contain more embedding. Hunt and others, including Mellon (1967) and O'Hare (1971), have shown that this natural maturing in student writing can be accelerated if students practice sentence combining for a sufficient amount of time.

---

33
use of comparing terms like *prettier, older, sadder, as--as, more, less* and *both* alert the reader that a comparison is being made. Transition words also signal comparisons or contrasts: *however, in contrast, similarly, while, whereas.* These two groups of comparing words were designated -ER words or AS words (or phrases) and were coded in each compare-contrast essay.

In addition, the instructional program provided models of comparisons or contrasts in which the use of comparing words and phrases made possible a special kind of sentence combining.

Example: ° Safeway has a good selection of things, just about everything you need, and they are well-stocked. Lucky's carries all the same selection, but sometimes they are low on supplies or completely out.

+ While Safeway and Lucky's both carry a wide range of goods, Safeway is generally better stocked than Lucky's which is sometimes low on supplies or completely out of what you need.

+ Safeway has a large selection of goods, but Lucky's is sometimes out of what you need.

A clear effect of the instructional program then might be an increase in the proportion of sentences which include information about both terms of the comparison, as opposed to sentences which make discrete statements about one term or another. Wherever a sentence combined statements about both items being contrasted or compared, using coordinating or subordinating conjunctions, the sentence was called a "combining" sentence. These were counted in all essays.

Finally, the extent to which a student uses comparing terms and combining sentences to highlight differences and similarities between two objects of discussion seems to affect the overall method of organization or development of an essay. Five methods of organization were recognized and coded on a scale of increasing

° Expected form before instruction.
+ Expected form after instruction.
difficulty and complexity. Each paper was classified according to the method of organization a student had chosen. The five methods of organization form a kind of developmental hierarchy suggested to the researchers by a close look at the students' compare essays, with the highest level appearing to arise out of use of the experimental materials by more able students.

Briefly described, the five methods are as follows:

0 = no apparent organization, random association of ideas or confusing changes of direction. (a)

1 = "integrated" or point-by-point comparison; usually three to seven sentences listing differences or similarities between the items being compared or contrasted; no development or larger framework of organization. (b, c, d)

2 = "bi-polar"; each item of comparison is examined in some detail separately, usually in its own paragraph, with a minimal introductory or concluding sentence used to name a preference or draw a comparison. (e, f, g)

3 = essentially "bi-polar" in main development, but has at least a paragraph of introduction or conclusion which contains one or more combining sentences establishing a comparison. These papers may also have transitional devices or comparing terms scattered through the "bi-polar" paragraphs. (h, i, j)

4 = "integrated," for the most part, throughout, but unlike Type One, contains some development and some movement from one idea to the next; may be more detailed than Type One, or may relate the entire body of the comparison to other abstract questions such as "how do we choose where to shop?" (k, l, m)

The classification was developed from a random sample of essays drawn from the entire pool including pretest and posttest essays from all groups. Examples of each approach are included in Appendix A. Letters refer to particular papers in the Appendix.

The concepts of "bi-polar" versus "integrated" comparisons were suggested by differences apparent in the work of experimental versus control students, and by differences between the styles of organization used by eleventh grade versus ninth grade students. The concepts are most easily explained by reference to the
experimental materials from the chapter on writing comparison and contrast essays. Figure 7 shows a chart presenting information about two kinds of rescue dogs, with instructions to write a

FIGURE 7

TWO TYPES OF RESCUE DOGS

<table>
<thead>
<tr>
<th>NAME OF BREED</th>
<th>PLACE OF ORIGIN</th>
<th>COLOR</th>
<th>FUR TYPE</th>
<th>WEIGHT OF MATURE MALE</th>
<th>HEIGHT</th>
<th>TYPE OF RESCUE PERFORMED</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Bernard</td>
<td>Europe (Swiss Alps)</td>
<td>white with brown or reddish patches</td>
<td>dense, smooth</td>
<td>155-170 lbs.</td>
<td>27-28&quot;</td>
<td>mountain rescue; guide humans through snow</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>North America (coast of Newfoundland)</td>
<td>black</td>
<td>dense, smooth</td>
<td>140-150 lbs.</td>
<td>27-28&quot;</td>
<td>water rescue; pull drowning persons to shore</td>
</tr>
</tbody>
</table>

ASSIGNMENT

Compare the two rescue dogs described in the chart above, explaining in what ways they are similar and ways they differ from one another.

paragraph comparing the two dogs. If a student reads from left to right on the chart, more or less ignoring the strongly suggested points of comparison like fur type or color, he might write what we would call a bi-polar comparison, describing in full first the St. Bernard, then providing all details about the Newfoundland. This kind of paper can be simply informative, drawing no explicit comparisons between the two dogs; or it can use -ER terms in the passage describing the second dog to make some comparison possible. Parallel structuring of the two passages also helps establish an implicit comparison of the two dogs:

The Saint Bernard, which weighs 55-75 pounds, is a rescue dog which works in the Swiss Alps. Its smooth heavy coat protects it from the cold and snow.

The Newfoundland is lighter, weighing 45-55 pounds. It rescues drowning people from the ocean off Newfoundland. Its smooth heavy coat protects it from the freezing water.

The bi-polar organization is familiar to us as the "on the one hand...on the other hand" format, and has some advantages for the beginning writer, who is allowed to concentrate all his efforts
on adequately describing first one then the other of the two
two items being compared. It is a style of organization likely to
occur if students are asked to compare the two dogs using infor-
mation from separate lists or articles on each dog, or a chart
which lists in random order all the characteristics of a St.
Bernard followed by all the characteristics of a Newfoundland.
Each dog, or each term of the comparison, becomes a separate
"pole" of the essay, hence the term "bi-polar" to describe this
common style of organization.

The chart in Figure 7, however, presents the information
about the two dogs in a way which strongly encourages a different
method of organizing the material. It provides a point-by-point
comparison of the two dogs, naming the points of comparison such
as fur type or size, and providing parallel information for both
items being compared. The information has been pre-organized to
make it more likely that students will "integrate" the information
about the dogs: rather than describing each dog separately, the
writer will tend to write a sentence comparing fur type and color,
another sentence comparing size, and so on, moving from one
characteristic to another:

Both the Saint Bernard and the Newfoundland are large,
strong dogs, but the Newfoundland weighs only 45-55
lbs. in comparison to the Saint Bernard which weighs
from 55-75 lbs. Both have smooth heavy coats which
protect them from the freezing elements in which
they work. The Bernard is famous for rescuing
travellers in the snow of the Swiss Alps, while the
Newfoundland pulls drowning people from the North
Atlantic.

This "integrated" style of comparing two items is further
encouraged by the instruction on style in the accompanying chapter,
which teaches students to use such comparing terms as but, while,
both. Students who learn to write the combining sentences described
above will find more use for such sentences in an integrated
comparison than in a bi-polar organization of information. The
graphic presentation of data in this unit, then, does more than
"give information." It also suggests relationships, points of
comparison. Students learn from the chart that "to compare" means
to analyze and classify as well as to describe. It is possible that the implicit lesson derived from the graphic presentation of material in this chapter discourages students from producing bi-polar comparisons more than does the stylistic instruction, although both provide strong encouragement to attempt integrated comparisons.

We made a particularly interesting discovery, however, in identifying these two types of organization. While we found the integrated approach to comparison in the very best and most complex papers, we also found it characteristic of the very poorest papers—papers which seemed thinly textured and lacking in details. Clearly there was a type of paper using integrated comparison which was inferior to the more commonly presented bi-polar comparison—the latter allowing a fuller play to the writer’s descriptive abilities. But there was also a type of paper using integrated comparison in combination with a full range of details and points of comparison which, when successful, was clearly superior and more difficult in its demands on the student writer. There was no difficulty in distinguishing between these two kinds of integrated comparisons: they seemed to be at opposite ends of a developmental scale. We coded these with a One for the simplest and Four for the most complex, leaving the levels Two and Three for bi-polar comparisons that seemed to fall into intermediate levels of difficulty and complexity. The simplest bi-polar essay could be called a comparison only by courtesy: the descriptions of the two items being compared were often not parallel in content or structure; few comparing terms were used, and combining sentences were rare, usually appearing as introductory or concluding sentences to the essay. Type Three essays, although they were primarily bi-polar in that the student tended to devote a separate paragraph to each term of the comparison, often had several sentences of introduction or conclusion which made integrated comparisons. In addition, these essays often used internal comparing devices such as comparing words or parallel structuring of information within the two paragraphs.

Finally, the code of 0 was reserved for papers which had
none of these recognizable forms of organization. In all cases these latter were meager papers with a random approach to presenting information about the two items being compared.

RESULTS AND DISCUSSION

Comparability of Experimental and Control Groups

Although the distribution of students at each grade level should have provided two classes of about equal ability for each teacher, our pretest results show that, in fact, the ninth grade classes did not begin the year at the same level of performance. As we can see in Table Two, the experimental students made a mean

<table>
<thead>
<tr>
<th>TABLE TWO</th>
<th>Group Differences: Holistic Scores (2-10 possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Imposter (Process) Essays</strong></td>
<td></td>
</tr>
<tr>
<td>Overall Mean:</td>
<td>N = 90</td>
</tr>
<tr>
<td>Group:</td>
<td>Experimental</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>11th Grade</td>
<td></td>
</tr>
<tr>
<td>PRETEST:</td>
<td>25</td>
</tr>
<tr>
<td>POSTTEST:</td>
<td>25</td>
</tr>
<tr>
<td>CHANGE:</td>
<td>- .04</td>
</tr>
<tr>
<td>9th Grade</td>
<td></td>
</tr>
<tr>
<td>PRETEST:</td>
<td>17</td>
</tr>
<tr>
<td>POSTTEST:</td>
<td>17</td>
</tr>
<tr>
<td>CHANGE:</td>
<td>- .17</td>
</tr>
<tr>
<td><strong>B. Compare Essays</strong></td>
<td></td>
</tr>
<tr>
<td>Overall Mean:</td>
<td>N = 90</td>
</tr>
<tr>
<td>Group:</td>
<td>Experimental</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>11th Grade</td>
<td></td>
</tr>
<tr>
<td>PRETEST:</td>
<td>25</td>
</tr>
<tr>
<td>POSTTEST:</td>
<td>25</td>
</tr>
<tr>
<td>CHANGE:</td>
<td>+ .60$^*$</td>
</tr>
<tr>
<td>9th Grade</td>
<td></td>
</tr>
<tr>
<td>PRETEST:</td>
<td>17</td>
</tr>
<tr>
<td>POSTTEST:</td>
<td>17</td>
</tr>
<tr>
<td>CHANGE:</td>
<td>- .70$^*$</td>
</tr>
</tbody>
</table>

* Significant at p $\geq .05$
score on the process essay of 6.35, compared to the control class's average score of 5.25, a difference of more than one full point.* Similarly, the ninth grade experimental class outperformed their controls on the compare essay, scoring an average of 6.29 compared to the controls' 5.50, a difference of .79.* In a larger replication of this study it would be useful to take into account difference in initial ability of students by using pretest scores as an independent variable in analyzing performance on the posttest. This would help researchers determine whether the success of the materials depends in part on the initial ability of students, as is suggested by our analysis below of the difference in outcomes between ninth and eleventh grades.

**Holistic Scores**

The ninth grade classes, both control and experimental, performed less well on the posttests of both essays, the compare essay and the process essay, than they had on the pretests. These classes had been taken over by a substitute teacher for several weeks before the test, and the substitute administered the test. Since students knew that their scores were not part of course grades, we assume that the motivation for performance at posttest time was quite low for ninth graders. As we can see from Table Two, the ninth grade experimental class scores did not drop as far as those of the control class, although the differences in the amount of change from pretest to posttest for these two classes is not statistically significant.

The eleventh grade classes present a different story. Although these students, too, knew the test essays would have no effect on their course grades, the classroom condition was stable at the time of both pretesting and posttesting. The teacher briefly explained the research study on both occasions, and reminded both

*Statistically significant at p = .05.

40
experimental and control classes that one of the researchers had been invited to visit the school at the end of the year to discuss the nature and purpose of the study. (This fact was not announced at either testing of ninth graders.)

As shown in Table Two, the control class of eleventh graders improved equally in their performance on both essays, with mean gain scores of .39 points, or about one quarter standard deviation. This gain is statistically significant.* This might be considered a fair achievement by any teacher or any class in ten weeks of work. The experimental group, on the other hand, made no gain on the imposter essay (actually registering a slight loss of 0.04 points—not statistically significant), while making a striking gain on the compare essay of .60 points, or greater than one third standard deviation. This gain is statistically significant. The difference between experimental and control gains on this essay is not statistically significant, although it could be educationally significant if these results are replicable, since one group moves a full one third standard deviation rather than one fourth standard deviation.

**Analysis of Compare Essays**

To what extent may we attribute the differences between experimental and control group performance on the compare essay to factors in the experimental treatment?

---

**Analysis of Comparing Words and Phrases**

The training materials instruct students in ways to make "integrated" comparisons rather than describing each item separately and then stating a preference. Comparisons of this sort require word changes or new words and phrases which describe the relation between the two items: e.g., prettier, better, more, less, as, similar, both, however, in contrast, whereas, etc. In counting -ER and AS words and phrases, we found that results for the eleventh graders were consistent with other findings for these students.

*\( p \geq .05 \), for the compare essay only using a Dunn/Bonneferroni one-tailed t-test.
(See Tables Three and Four.) While the eleventh grade control group appeared to hold steady their proportion of such words

**TABLE THREE**
Ratio of -ER Adverbs and Adjectives to Total Words in Compare Essay

<table>
<thead>
<tr>
<th>Group:</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>$\bar{x}$</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>25</td>
<td>.0116</td>
</tr>
<tr>
<td>9th Grade</td>
<td>17</td>
<td>.0151</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>25</td>
<td>.0154</td>
</tr>
<tr>
<td>9th Grade</td>
<td>17</td>
<td>.0117</td>
</tr>
<tr>
<td>Gain Scores:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td></td>
<td>.0038</td>
</tr>
<tr>
<td>9th Grade</td>
<td></td>
<td>-.0031</td>
</tr>
</tbody>
</table>

11th grade experimental group up .0038 or 1/3 SD. * Control group showed no change.
9th grade experimental group down .0031 or 1/5 SD. * Control group showed no change.

* Significant at $p \geq .05$

**TABLE FOUR**
Ratio of AS Words and Phrases to Total Words in Compare Essay

<table>
<thead>
<tr>
<th>Group:</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>$\bar{x}$</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>25</td>
<td>.0153</td>
</tr>
<tr>
<td>9th Grade</td>
<td>17</td>
<td>.0149</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>28</td>
<td>.0233</td>
</tr>
<tr>
<td>9th Grade</td>
<td>17</td>
<td>.0294</td>
</tr>
<tr>
<td>Gain Scores:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td></td>
<td>.008</td>
</tr>
<tr>
<td>9th Grade</td>
<td></td>
<td>.015</td>
</tr>
</tbody>
</table>

11th grade experimental group up .008 or over 1/2 SD. * Control group showed no change.
9th grade experimental group up .015 or almost a full SD. * Control group up .015 or 1 2 SD

* Significant at $p \geq .05$
and phrases, the experimental group increased the mean proportion of -ER words by one third standard deviation, while the ratio of AS words to total words increased by .008, or over one half standard deviation.*

For ninth graders the picture is less clear. As with eleventh graders, the ninth grade control group has similar counts of -ER words in both pretests and posttests, but the experimental group appears to decrease slightly their use of -ER terms. On the other hand, both ninth grade classes increased their use of AS words, with the experimental group ratio increasing by .015, or nearly a full standard deviation, while the control group ratio increased by .017, or about one half standard deviation.*

A close reading of ninth grade papers would be required to allow us to speculate about why, by our measure, gains are greater for AS terms than for -ER words, in both ninth grade groups. We might speculate that while comparative adverbs and adjectives—prettier, longer, faster, better, more, less—are probably well established in the speaking and writing of most ninth graders, the more elaborate terms for comparing—whereas, on the other hand, however, as...as—may represent a more sophisticated level of development. In some cases, these are inter-sentence connectors, and require the writer to be aware of his audience's need for guidance through a maze of facts. It may be that ninth graders in general are ready to learn to take their audience's perspective to a greater extent than they have previously been able to do, and that the work done in both ninth grade classes encouraged the development of this ability, as it is intended to do, but that the experimental group work heightens this growth even further by calling attention to the particular vocabulary available for making transitions in discourse that compares.

In short, the chapter on "compare and contrast" in the learning packets seems to have had striking effects at both grade levels, introducing students to the use of inter-sentence

*Statistically significant at p > .05.
connectors, and other context clues which clarify and emphasize the comparison being made. Experimental students at both ninth and eleventh grade levels found these terms sufficiently useful to increase their use significantly from pretest to posttest, while the control groups either held steady (eleventh grade) or increased by a lesser proportion. Increase was greater in ninth grade than eleventh, perhaps because of natural maturation of ninth graders as evidenced by changes in the control group.

Analysis of Combining Sentences

For purposes of analysis, the number of compound and complex sentences making comparisons were added for each student. These were called combining sentences. The ratio of these sentences to total sentences in the essay was then determined. Table Five shows the average ratio of combining sentences with standard deviations, by group. We can see that the eleventh grade experimental class, using the materials which encourage syntactically

TABLE FIVE

Ratio of Combining Sentences+ to Total Sentences in Compare Essay

<table>
<thead>
<tr>
<th>Group:</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>1. Pretest .0759 (.107)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>25</td>
<td>.1000</td>
</tr>
<tr>
<td>9th Grade</td>
<td>17</td>
<td>.0725</td>
</tr>
<tr>
<td>2. Posttest .1470 (.1428)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>25</td>
<td>.1589</td>
</tr>
<tr>
<td>9th Grade</td>
<td>17</td>
<td>.2401</td>
</tr>
</tbody>
</table>

11th grade experimental group up .06 or 1/2 SD.* Control group up .02 or 1/6 SD.*
9th grade experimental group up .14—more than 1 SD.* Control group up .06 or 1/2 SD.*

* Combining sentences are sentences in which the student uses coordinate or subordinate clauses to make a comparison between two items.
* Significant at p ≥ .05.

integrated comparisons, increased their ratio of combined sentences by .06, or one half standard deviation, while the control group increased only .02, or one sixth standard deviation.

The results for the ninth graders are even more striking.
The experimental group increased their ratio of combined sentences by .14 or more than a full standard deviation, while the control group increased almost one half standard deviation. This data suggests that ninth graders are generally likely to acquire these new sentence strategies during the course of the year, but that the experimental materials have a heightening effect on students' tendency to use the new structures.

Methods of Organization for Compare Essays

One of the most striking results of the study is the strong effect of the teaching materials on students' methods of organizing their compare essays. What is most interesting perhaps, is that the marked changes in ninth and eleventh grade experimental students' methods of organization occurred in opposite directions. This is immediately apparent in Table Six which shows the average organization ratings for each group before and after instruction (see following page). Recall that Type One organization is the simplest, although it involves integrated comparisons, while Type Two, by separating the two items of comparison, allows fuller elaboration of each. Types Three and Four represent increasingly complex ways of combining both elaboration of the separate items and integrated comparison. All classes began the year with similar mean ratings, Type Two being the most common method of organization. After instruction, eleventh graders improved dramatically, moving as a group more than one full point on the scale, a gain greater than one full standard deviation, while enough ninth graders tended to revert to the simple form of organization that this experimental group's average rating after instruction was almost one half standard deviation lower than before. At both grade levels, control students held fairly constant, indicating that organization was not affected by other aspects of the curriculum or by natural maturation of students. Clearly the materials have had different effects at the two grade levels—and at both grade levels these effects are strong enough to appear both statistically and educationally significant.

To fully understand the differences at the two grade levels
### TABLE SIX
Mean Ratings for Organization in Compare Essay

<table>
<thead>
<tr>
<th>Group</th>
<th>11th Grade</th>
<th></th>
<th></th>
<th></th>
<th>9th Grade</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>11th</td>
<td></td>
<td>9th</td>
<td>N</td>
<td>X</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Pretest</td>
<td>Experimental</td>
<td>24</td>
<td>2.17</td>
<td>(1.17)</td>
<td>28</td>
<td>2.61</td>
<td>(1.05)</td>
<td>17</td>
</tr>
<tr>
<td>Posttest</td>
<td>Experimental</td>
<td>24</td>
<td>3.38</td>
<td>(.92)</td>
<td>28</td>
<td>2.79</td>
<td>(.99)</td>
<td>17</td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td></td>
<td>1.21*</td>
<td>.18</td>
<td></td>
<td>- .71*</td>
<td>.11</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at \( p = 0.05 \)
and the extent to which this finding suggests that the organization rating scale actually describes a sequence of skills from simpler to more difficult, it is necessary to examine the patterns of organization typical in each group before and after instruction. Table Seven offers the distribution of organization ratings by class. In the pretest, we see eleventh graders typically

**TABLE SEVEN**

Distribution of Organization Rating by Group in Compare Essay

<table>
<thead>
<tr>
<th>Organization Rating</th>
<th>11th Grade</th>
<th>9th Grade</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experiment</td>
<td>Control</td>
<td>Experiment</td>
</tr>
<tr>
<td>0</td>
<td>N</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>4.2</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>20.8</td>
<td>10.7</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>52.9</td>
<td>42.9</td>
</tr>
<tr>
<td>3</td>
<td>N</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>12.5</td>
<td>28.5</td>
</tr>
<tr>
<td>4</td>
<td>N</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>12.5</td>
<td>17.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>

**Posttest**

<table>
<thead>
<tr>
<th>Organization Rating</th>
<th>11th Grade</th>
<th>9th Grade</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experiment</td>
<td>Control</td>
<td>Experiment</td>
</tr>
<tr>
<td>0</td>
<td>N</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>0</td>
<td>3.6</td>
</tr>
<tr>
<td>1</td>
<td>N</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>4.2</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>16.7</td>
<td>35.7</td>
</tr>
<tr>
<td>3</td>
<td>N</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>16.7</td>
<td>42.9</td>
</tr>
<tr>
<td>4</td>
<td>N</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>62.5</td>
<td>17.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>
choosing Type Two organization, or bi-polar comparisons, with some Type Three, using integrated or combining sentences to introduce or conclude the essays. The control class which scored slightly higher on other pretest measures of verbal ability shows a slightly greater tendency to use Type Three, the more mature method of organization.

In the ninth grade, a larger number of students wrote Type One essays than any other type, as might be expected, with some students writing Type Two and a few students in the experimental class writing Type Three. (Among ninth graders the experimental group generally performed better on other pretest measures of ability.)

Across all groups the largest proportion of students used Type Two organization on the pretest, with a few better writers producing Type Three, the more elaborate version of Type Two. Only among eleventh graders do we find any examples of Type Four on the pretest and here only around 15 percent of the students attempted this kind of organization. Almost no students were rated as having "no organization." This clustering around a few ratings partly explains the low correlation of organization with pretest scores on the comparative essay \( r = .36^* \), a correlation that improves on the posttest, where larger numbers of students are represented in the upper ratings of organization \( r = .57^* \).

Table Seven also shows frequencies of posttest distribution of organization types for compare essays. The most marked change occurs in the eleventh grade experimental class. The incidence of Type Four, a kind of organization made easier and even preferable once the sentence skills of Chapter IV are taught, has risen from 12 percent to 62 percent of the class. In the control group, the same number of students (17 percent) who chose this method for the pretest also chose it for the posttest. This striking difference can only be attributed to the special instruction in writing compare/contrast essays received by the experimental group.

\(^*\text{Significant at } p < .01\).
We can see that for both eleventh grade classes, general improvement in skills and maturity has almost eradicated use of Type One organization. For the control group, this means an increase in Type Three (to 42.9 percent), which generally proved to be a highly successful method of solving the comparison problem, and accounted for as many top scores as did Type Four. Ten control students, however, or 35.7 percent, did not move beyond Type Two organization, while in the experimental group, only four students (16.7 percent) produced papers in this category on the posttest.

Comparing eleventh grade with ninth grade changes in distribution of organization ratings, however, we see that use of the experimental program does not necessarily result in successful advancement to Type Four organization for all students. At the ninth grade level, increased tendency to make "integrated" comparisons resulted in more Type One papers, with only two students managing to produce Type Four. While a check revealed that five of the experimental students who wrote Type Two essays on the pretest continued to write Type Two, basic bi-polar, the three students who wrote successful Type Three papers on the pretest have either improved to Type Four or reverted to Type One.

Reading these papers, it is not hard to understand the difficulties a student might encounter once he leaves the relatively safe ground of the bi-polar comparison. When he describes the terms of comparison one at a time, he may add any number of details to elaborate a single-term abstraction. He may write imaginatively about the beauties of Christmas, using familiar skills of narration or description, before turning his attention to Thanksgiving or July Fourth celebrations. Before he can write an integrated comparison, however, he is forced to think about points of similarity and difference. Each point made about one holiday must call forth a comparative description of the other. What results may be a two-term abstraction which may seem more difficult to elaborate:
Example: I prefer Frank's to Ron's because people who work at Frank's have better communication with their customers.

or: Another difference between the two holidays is that at Christmas people give gifts.

or a random set of concrete details which seem to suggest no necessary abstraction:

Example: Fry's has better meat, but you have to wait a long time in line. Safeway is not so far away, but it is not in walking range. The prices are about the same.

It becomes harder to see how development or movement of the entire essay should occur. In Appendix A we have included more Type Four essays than other categories to demonstrate the complexity and variety of solutions using this type of organization.

Analysis of Process Essays

In general, the analytic measures applied to the process essays did not reveal the strong patterns of difference found by our analysis of compare essays. Many fewer essays were analyzed because of limited time and funds, which may explain in large part our failure to find meaningful patterns of performance or statistical differences on various measures.

The topics were intended to elicit process papers, inviting students to give instructions to someone who was to take their place either at home or at school. The stylistic devices taught in the experimental materials included adverbal clauses and appositives, both appropriate for condensing information about events or processes. Unlike the compare essay, however, the topic given did not elicit use of the stylistic structures in a way that clearly differentiated experimental from control students. The failure to find clear differences could result from several factors:

a. A small number of papers was analyzed (total of 52).

b. Students learned new sentence devices but did not use them on the test for unknown reasons.

c. The topic was less specific in its demands for certain kinds of writing, so experimental...
students were not especially keyed to use these specific skills on this test.

d. The measures used were not adequate to register stylistic differences.

e. Students using the materials did not actually learn new writing skills.

In addition, the instructional program did not have so obvious an effect on methods of organizing information as it did with the compare essay, although interesting differences in organization emerged across groups. So few appositives were found for any group, pretest or posttest, that this measure was dropped.

Syntax

Adverbial clauses were found in a number of papers, but differences between groups in ratio of adverbial clauses to total sentences are not statistically significant, and the directions of differences are not easily explained (see Table Eight). A further close reading of the papers will be necessary to generate meaningful hypotheses about the use of adverbial clauses, and the extent to which students who use more adverbial clauses are actually finding better solutions to the problems of relating events in time. It is true that the adverbial clauses taught in the experimental program are an improvement over stringing together simple sentences with "first...then...then." But it is also true that participial phrases are equally if not more

**TABLE EIGHT**

Ratio of Adverbial Clauses to Total Sentences in Imposter (Process) Essay

<table>
<thead>
<tr>
<th>Group</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>X</td>
</tr>
<tr>
<td><strong>Pretest:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>15</td>
<td>.1607</td>
</tr>
<tr>
<td>9th Grade</td>
<td>7</td>
<td>.0530</td>
</tr>
<tr>
<td><strong>Posttest:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>15</td>
<td>.1852</td>
</tr>
<tr>
<td>9th Grade</td>
<td>7</td>
<td>.1491</td>
</tr>
</tbody>
</table>
effective. Compare:

° First you have to open the can of catfood. Then find the cat's dish. Then fill the dish. Then call the cat.

+ After you open the can of catfood, you may find and fill the dish while you call the cat.

# After opening the can of catfood, find and fill the dish while calling the cat.

Unfortunately, because of the specific aims of the instructional program, our count separated sentences of Type Two from all other kinds of sentences, which tended to lump worse solutions (Type One) together with better solutions (Type Three). In the future, teachers who wish to examine the effects of instruction are encouraged to distinguish among all three types of solution to giving sequential directions in process description and note which solutions appear at different ability levels.

Organization

There appear to be four distinguishable approaches to organizing a response to the "imposter" essay. Most papers are a mix of several organization styles, but some clear examples of each type exist. These have been included in Appendix B and are marked as "listing," "narrative," "process descriptive," or "hierarchical" organizations. Students writing about home chores often simply listed chores, with varying degrees of development as they described each item on the list, but with no particular ordering of items. Many students writing about home or school frequently simply narrated a typical chain of events, almost without qualifying explanations. "Listing" and "narrative" were by far the most common methods of organizing these essays. A third group of students concentrated on one or two particular chores or school classes and gave explicit and detailed directions

° Before instruction.
+ Suggested by instruction in experimental program.
# Suggested by instruction in sentence-combining given in all classes, and representing a stylistic solution at least as complex and mature as the solution suggested by the experimental materials.
for how to accomplish or endure them. This kind of organization is the way writing teachers expect students to organize a paper in which the student aims to provide his reader with enough information to successfully duplicate a particular process. This is the one type of organization which might be said to be encouraged by the materials, and is identified as "process description." It may be that the test topic was simply not focused enough to make this kind of response more common among experimental students. Finally, a very few students used a hierarchical arrangement of ideas, making almost explicit the reasons for clustering certain items, or for arranging points in a certain order. This organizing strategy tended to appear only in papers which earned top holistic scores.

Generalization is difficult because too few papers were analyzed to reveal any patterns of difference among groups, and too few papers occurred of Types Three and Four, process papers and hierarchical organization. Reading the papers, it becomes clear that the simple informative list and the free-wheeling personal narrative are popular and effective ways to handle the given topic. The more demanding approaches do not necessarily produce results that are better enough to justify the effort, at least for this simple, thirty-minute essay. In general, the type of organization did not seem to be as strongly associated with the success or failure of a piece as other factors such as quality of detail or apparent awareness of self or audience.

SUMMARY OF RESULTS

This study found dramatic improvement on several measures for eleventh graders in the experimental program as compared to eleventh graders who did not use the materials. Examining holistic scores on pretest and posttest essays reveals that eleventh graders in both experimental and control classes wrote better at the end of ten weeks' instruction than at the beginning; however, a careful look at several features of these essays showed marked effects of
the program materials on the writing of the experimental group, especially on the methods students used to organize a compare and contrast essay.

The outcome of pre and posttesting at the ninth grade level was more problematical. Ninth graders in both the experimental group and the comparison group wrote less well at the second testing than they had at the beginning of the year. We believe that this result may have occurred because the posttesting of ninth graders in both classes was plagued by factors which lowered students' motivation to perform, resulting in a lower average holistic score for both groups on essays written at the end of instruction than on those written at the beginning.

A more complex explanation is also possible. The process of learning to write, like all learning processes, is uneven, requiring periods of disequilibrium when students are attempting to assimilate new information or master new skills. Their attention to methods of writing only recently acquired may cause students temporarily to rely less on familiar methods which might have yielded smoother or more successful results in the short range. The new methods will ultimately help students write more effectively, but temporarily the attempt to improve may affect performance in negative ways, especially on timed tests where the writer is not allowed or encouraged to revise or re-read. We do have evidence that ninth graders in the study, in both classes, made large gains in the use of a certain kind of vocabulary appropriate for more mature forms of compare/contrast exposition, so they have not simply failed to apply any new knowledge gained in their ninth grade English class. And yet their holistic scores went down. More research based on closer analysis of content, style, and kinds of errors in these essays might uncover other indications of growth among these students. Research on the composing process of these students might suggest reasons for their lower scores on the later essays. Longitudinal studies which would trace the progress of these students beyond their ninth grade year to look for long term effects of the program as
well as to discover what happens to these new skills on later holistic tests when they have become old familiar skills would also be helpful. While one may conclude on the basis of our findings that use of the program can be beneficial to eleventh graders in important ways, one should not interpret the absence of similar strong findings for ninth graders to mean that the program is not beneficial at this level. Further studies are needed to understand fully the effects of the training on ninth grade performance. In addition, the important question of the extent to which initial differences between individuals interact with the teaching materials to make striking differences in outcomes should be explored in a larger study which allows direct comparison across groups of students who are at different age and ability levels. Because we conducted this study as two independent mini-studies, we were unable to statistically compare students at ninth and eleventh grades using pretest performance as an independent variable. Another study is needed to test the hypothesis suggested by the results above that in order to move to the highest forms of organization in writing a compare/contrast essay as a result of special instruction, students may need to be at a certain point developmentally, and that students who have not reached a certain level of development, or who are preoccupied with developing related skills such as the use of comparing words, may respond to the materials by reverting to the lowest form of organization.

CONCLUSIONS

These mixed results may seem disappointing to teachers who expect clear and overwhelming gains from new classroom materials, but such results are typical of all comparative methods studies. Although the study does not provide a blanket validation of the program, it does suggest that the materials can have a powerful positive effect on some students' writing abilities and can add to a good teacher's storehouse of resources. We believe that all
teaching materials should be tested in this way not to prove that they are better than all others but to help us understand just what their effects are likely to be with different students at different ability levels. The general principles of Writing From Given Information should be adopted and applied with variations in content and stylistic lessons to fit the interests, needs, and abilities of different groups of students. Meanwhile, by revealing measurable differences in how students learn to organize material for making comparisons and contrasts, the experimental study suggests new directions for research in the development of writing abilities. We hope other teachers using these or other materials will develop topics appropriate for their students and create additional analytic measures that will reveal more about how students progress from one level to another on their way to becoming capable and effective writers.
References


Appendix A

Sample Compare Essays

Sample papers from the compare topic are arranged by type of organization. Holistic scores are included: papers a - c illustrate low range, d, e, i are middle range, and f, d, h, j, k are top range. More top score papers using Type Four organization have been included to show the variety of these solutions, and because this kind of paper is harder to imagine. Students using organization Types One and Two generally produced papers which are strikingly similar to the models offered here.

a) Ninth Grade, Experimental Group, Pretest
Type 0 Organization
Holiday Topic
Christmas and my Thanksgiving are the ones we celebrate the best.
I like Christmas and Thanksgiving because we get to see or whole family during these special holidays. Christmas, I like the best because of the feeling that I get around that time. It is a special feeling caring more about somebody than usual. Then when you see your whole family only once or twice a year, that makes you feel good.
Thanksgiving is the second best because the food, I like to eat on that day & Christmas day.
Watching the parades get you in the mood for all of these special Holidays.
On Thanksgiving morning I wake up and I don't wake up from somebody yelling or something like that, The aroma from the Big Bird and all of the goodies inside the Birds wakes one up. That's why those Special Holidays I like the best.
b) Ninth Grade, Control Group, Pretest
Type One Organization

Store Topic Holistic Score: 1 + 1 = 2

Fry's Food stores and Safeway. Fry's has better meat for the cost but you have to wait a long time in line. Safeway is not so far away, but it is not in walking range. Safeway's aisles are set up better so it's easier to shop in. Safeway's serves you faster and better. I like Safeway better. The prices are about the same. Safeway is in a better location.

c) Ninth Grade, Control Group, Pretest
Type One Organization

Store Topic Holistic Score: 1 + 1 = 2

Safeway and Lucky's is a similar store it has most of the same items and is almost or the same size of store. Lucky's Prices are a little lower but the items are the same. Safeway and lucky's have different floor designs.

d) Ninth Grade, Control Group, Posttest
Type One Organization

Store Topic Holistic Score: 1 + 2 = 3

The two stores which I am comparing is Ron's and Frank's markets. Frank's prices are lower than Ron's prices. I prefer Franks because the people who work there has good communications with their customers. Ron's employes only care about making a buck. Franks is in a nice atmosphere and the customers are nice too. Ron's is not in a nice atmosphere and tends to draw more shoplifters than Franks. It also has a larger selection than Ron's. That's why I like to go to Franks.

e) Eleventh Grade, Experimental Group, Pretest
Type Two Organization

Holiday Topic Holistic Score: 2 + 3 = 5

One of the special holidays in our house is Christmas. At Christmas the whole family is together just sitting back and resting. Our family isn't very close, we hardly ever have the family together. Someone is always on the run. It's sort of fun getting the troops together and settle down for a quiet evening.
For Christmas we have all kinds of food everything from cheeze-its to a 40 lb. turkey. We're usually by ourselves on Christmas, and like I said before we relax, but some years relatives come over and we do all kinds of activities like play pool, ping-pong, cards, watch TV. The atmosphere is always a good cheerful one. The best part of Christmas is opening presents.

My other special holiday is my birthday. In which I get presents too. It's not to special to anyone else though as theirs isn't to me. It's not the most special day, things do go wrong! As like in any other day things could be perfect but I still like my birthday over any regular day. Because on my birthday I've aged another year and soon I'll be old enough to do what I want.

I prefer my birthday over Christmas because I feel special on my birthday.

f) Ninth Grade, Experimental Group, Pretest
Type Two Organization
Holistic Score: 3 + 3 = 6

Christmas is a special holiday in my family. We as a group consists of six members. First of all dad usually goes out and buys the largest tree possible. We always end up trimming the top off because it's too tall. Then the decorating begins. We all pitch in putting bulbs, lights, and different kinds of ornaments on the tree. Finally the tree stands tall, and shows pride and resembles meaning. Christmas morning is the great thriller. The presents lay around the tree all neatly stacked. Then we all are anxious to get started. One by one we begin ripping and tearing the wrapping off of our designated packages. Excitement permeates the room and dad takes several pictures. Christmas is looked forward to all year long, and when December 25th rolls around it becomes a reality.

Thanksgiving is a very important holiday for all the American citizens. My family and I enjoy the celebrations Thanksgiving night. Mom prepares several vegetables, and pastries, but nothing heats the smell of that turkey cooking in the oven. At the head of the table dad sits there and stares at all of the food scattered across the table's top. He usually keeps the bottle right next to him. Grace is said and we begin passing the food in all directions. After we finish we're usually all stuffed to the rim. Everyone relaxes and starts digesting their meal.

I prefer Christmas over Thanksgiving because the atmosphere is much more filled with excitement.
g) Eleventh Grade, Experimental Group, Pretest
Type Two Organization
Store Topic Holistic Score: 3 + 2 = 5

There are 2 stores in Walnut Creek that I know that sell similar items and I have been going to one of them for years.

One is TG & Y. Its a five & dime store that sells just about everything. The store seems very disorganized, and the people that run it are very unfreindly. I'm very uncomfortable in it because the atmosphere is bad; its gloomy & just has shelves with merchandise on them.

The other is Sprouse Reitz. Its closer and the people are friendly. It has the same merchandise, maybe even a little more. Ive been going to Sprouse Reitz since I was six years old to get bubble gum & kites, etc...The store holds alot of memories. I definately prefer it to TG & Y.

h) Eleventh Grade, Control Group, Posttest
Type Three Organization
Store Topic Holistic Score: 4 + 4 = 8

I have found that I prefer some stores over others. The stores I am going to compare are game stores. Trading Post is the one of my preference, it has quite a few good qualities. Gambit is also a very good game store but for certain reasons it is not quite as appealing as the other.

The Trading Post in all senses is the best for me. It is located in Concord, just about a 10 minute drive from where I live. The sales people are low keyed and if you need help they alvays give it their best. They are also very well stocked with all the latest merchandise, and most items are reasonably priced.

On the other hand Gambit is located in San Francisco, a good one to two hours away from my house. It is also well stocked, but the prices are considerably higher. And if that isn't enough they have one thing that I can hardly tolerate, high pressure sales people. These sales people also have little habits of sighing when you can't make up your mind and sometimes they come right out and say "Are you going to spend all day looking?"

These things agrivate me, so you can see why I would prefere Trading Post. I have been to Gambit a few times but the Trading Post gets most of my business. The helpful people good location and reasonable prices are best qualities. They keep me coming back.
The business district in Walnut Creek hosts a variety of stores. They range from national chain stores to very individual novelty shops. Contained within this range are two pet stores which are on the same street: Steff's Tropical Pet Garden and Gloria's Pet Shop. Having the same amount of pedestrian traffic and similar overhead they have equal chances for success, but Steff's is a much better and more popular shop.

Comparing Steff's Tropical Pet Garden to Gloria's Pet Shop is like comparing Le Cordon Bleu to McDonald. The difference is that great. Steff's based their success on attracting the pedestrian traffic into the store. They effectively did this by making the building they were in very modern and by utilizing varied and attractive window display. I prefer Steff's to Gloria's because once you are inside the door you are hooked. Beautiful birds, stunning splendid fish and hundreds of accessories fill the large room. The air conditioning cools you why you are helped by a very knowledgable salespeople. The immediate feeling everyone gets is of undeniable serenity.

On the opposite end of the spectrum is Gloria's Pet Shop. Being a few shops away, it takes only a minute to get there. As you come upon it from the street all you see is the foil covered windows and very delapidated sign. Entering the door, you are overcome by the humidity. The small room is crammed with unkept fish tanks. The window is covered, so you walk down the narrow aisle in darkness and the bell you rang as you entered brings a "Can I help you?" from a back room. Depression overtakes you as you see the same products as in Steff's strewn about.

It is very easy to see why I prefer Steff's Tropical Pet Garden to Gloria's Pet Shop. Because they sell the same products, the difference is atmosphere. I know that most of my friends and I prefer serenity to depression.
Eleventh Grade, Experimental Group, Posttest
Type Three Organization
Holiday Topic

Holistic Score: 5 + 5 = 10

I come from a Catholic family, and during the year we celebrate several Christian holidays. Two of the most important holidays, and the most festive, are Easter and Christmas. Though I enjoy both occasions fully, I believe Easter is my favorite of the two.

I love the decorations of Christmas: trees, lights, ornaments, candles, and wreaths. There is always an air of excitement around the house, and the decorations and presents give the house warmth and cheer. The last week preceding Christmas is always very hectic as everyone does last minute shopping, and my mother and grandmother struggle to get the Christmas dinner planned. Christmas day, of course, is exciting in itself. Everyone rushes off to Mass in their finery, looking forward to the presents waiting under the tree. A mad race begins when we arrive home to see who can open their gifts the fastest. At dinner we all overeat, and climb into bed exhausted at the end of the day.

Easter has a different atmosphere altogether. It is never hectic, but always peaceful. Whereas Christmas is a time bomb which explodes on December 25, Easter is gentle and flowing like a river. We have few decorations around the house, except for a few colored eggs. There is no hectic race to finish anything the last few days before Easter Sunday. On that day, we all attend Mass in new colorful spring clothes, and celebrate the Resurrection. We come home in a happy but mellow mood, and enjoy each other's company. Easter is a spring holiday, a renewal of life, which is fitting for the meaning of Easter. At the end of the day we retire sleepy but peaceful.

Though both holidays are undoubtedly enjoyable, Easter has a relaxed atmosphere that does not accompany Christmas. Christmas gifts tend to distract our attention; however, Easter has no such gifts, allowing us to be more aware of each other, and why we celebrate the day. Easter, the most important Christian holiday, is a mellower and more religious experience, making it the holiday I most enjoy.
It is strange when you think about how many things you subconsciously analyze when you go to decide which store you would rather go to. We all walked in to many hundreds of stores, but rarely do we consciously analyze the positive and negative aspects of it. When I think about it there are two stores which come to mind. They sell generally the product, prices, but still I would much rather go into one of the stores than the other.

These two stores both sell stereo equipment. They carry basically the same lines of equipment. One store generally has a slightly lower price than the other, but the location is bad, the service rough and the atmosphere usually brings about tension. On the other hand the other store has a convenient location, good quick service and a relaxing atmosphere.

The question is why would I rather go and pay more money for the same product. Businessmen have been trying to answer this question ever since days of bartering. I feel that the secret to success in business is having the right answer to this question. It is a combination of a relaxing atmosphere, good courtesy service and prices that aren't too much higher than the guy with the lousy service and bad location. So all in all I think I would rather go to Pacific Stereo than West Coast Stereo.

Of the many holidays celebrated at our home, the two most outstanding would have to be Christmas and Thanksgiving. Both of these holidays are celebrated in similar ways:

For dinner, there is always a plump juicy roast or turkey, (depending on which is cheaper!) freshly ground cranberry sauce, amount of mashed potatoes, rice bread dressing, and always a bottle of Andre Cold duck.

The atmosphere and behaviors of the family at home at both these times are also very similar. People are happy and jovial not caring about what
may or may not happen in the future or what was
happened in the past, they live for that moment,
and only that moment. But being for two different
causes these holidays also have their differences.
At Christmas, there is generally a scotch pine
garnished with bright shiny balls and glowing
colored lights. Stockings are hung over the fire-
place, and a banner saying "Noel" is spread on
the door.

On the other hand, the Thanksgiving holiday
has none of these decorations.

Instead, pyracantha berries and bright red
flowers are placed meticulous about the main room,
giving it the feeling of warmth and happiness.

Another difference between these two holidays
is the fact that during Christmas people give other
people gifts to express freindship and brotherhood.

At Thanksgiving however, no gifts are given
except the thanks to the lord for giving us the
good and wealth we now have.

So as you see, in our family there are many
similarities and contrasts between Christmas and
Thanksgiving.

m) Eleventh Grade, Experimental Group, Posttest
Type Four Organization
Holiday Topic Holistic Score: 5 + 4 = 9

Two annual holidays that are quite different
are, Christmas vacation, & Summer vacation. For
starters, Christmas is in the winter and obviously
the other's in the summer.

I personally prefer Summer vacation, because
unlike Christmas you have a chance to relax, take
things easy, and let all past worries escape your
mind. Summer time is slower paced. Where as at
Christmas, the stores are all crowded, and people
rush around from place to place, looking for gifts
in the rain. In the summer, time seems to be in
your own hands, given to you, to do with it as you
please. In contrast, Christmas time is organized
around family. You almost need to keep a schedule
to organize what hour you're spending with Aunt
Mable, and what day you're spending shopping for
cousin Chris. It's hectic and worrisome.

In the summer, the weather is hot and you can
relax in your backyard, or jump through the waves
at the beach, both places getting tan. Christmas, however, is cold and damp, no time for sitting outside in a bikini.

I'm a summer person. I prefer the sun to the rain, relaxation to the rushing crowds & having no worries about finishing shopping in time. Oh, and of course summer vacation you relax away from school for three months where as Christmas you only have two weeks of a tight schedule to fulfill before taking a big exam on the first monday back to school.
Appendix B

Sample "Imposter" Essays

Samples of the process essay are arranged roughly by holistic score, but in some cases both pretest and posttest essays of the same student are included. In the case of ninth graders particularly, this allows examination of the ways in which these students failed to improve their holistic scores on the posttest. Papers include low, middle and high examples from both topics, and organization ratings for each are indicated. It is clear that adverbial clauses are elicited by the topic but appear at all levels of holistic score. The qualities that distinguish the upper score levels seem to be completeness, level of detail, and voice, especially as this is apparent in the writer's awareness of his "imposter" audience, Lee or Pat.

a) Ninth Grade, Control Group, Pretest - Student A
   Organization: listing
   Home Imposter Topic                 Holistic Score: 1 + 2 = 3
   Pat get up at 6:30 and get ready to go to school. Leave at 7:15 and you'll arrive at school at 7:30. After school go straight home and do the chores in this order.
   1. Take out garbage  2. put dishes away  3. do Homework  4. clean room  5. Catch guinea pigs
   After you do those chores you can watch T.V. but remember to go to bed at 9:30

b) Ninth Grade, Control Group, Posttest - Student A
   Organization: narrative/process
   School Imposter Topic                Holistic Score: 1 + 3 = 4
   Lee in the classroom keep quiet and try not to talk as much as possible in I.S.S. There are three guys talking to you all the time, one is directly behind your left side, and the other is directly behind him. During lunch time I usually go to the snack bar & watch them play football. After Lunch I go to Spanish, that is really hard Mr. Cruz is allways in a bad mood he asks so many questions but that class goes by fast. I will meet you
in Front of the school after spanish.

**c) Ninth Grade, Experimental Group, Pretest - Student B**

Organization: process description

Home Imposter Topic Holistic Score: 2 + 2 = 4

Dear Pat,

If you were me this is what you'de do in washing dishes, clear off all the dirty dishes off the table then go over to the sink & take the soap & water & wash all of the dishes then put them in the red plastic container for drying. While their drying take the cloth in the sink & wipe off the crummy table with warm water. Next take the towel & dry the dishes completely & stack them in the cubbard.

**d) Ninth Grade, Control Group, Pretest - Student C**

Organization: narrative/process

Home Imposter Topic Holistic Score: 2 + 2 = 4

When you get up in the morning, bitching about my little sister screaming in the kitchin, which is just off your room. You finally get out of bed when my mom starts scream at you to get up or you will be late. Then you stumble into the kitchin and pick up my little sister. You carry her into the living room, where you turn on the T.V. to chanell 2. you go back in my room and get dressed. After you are dressed you go back in the living room and bitch at my brother Mike, for being in a good mood. When it's time to go you look around for a pen. You can't find one so you steel one of my brothers. You are now late, so you have to run to school. You just make on time. Your class is English, good luck.

(NB: The poor handwriting of this student may have contributed to the low score.)

**e) Ninth Grade, Experimental Group, Posttest - Student D**

Organization: narrative/process

School Imposter Topic Holistic Score: 3 + 2 = 5

When you go to typing all you have to do is pretend your typing, you might have to look at the keys alot. Wood is a lot harder you might have to help a lot of people with there work but that's normal. You might have to fool Randall and Kevin but
once you do that is alright. In Math you won't have
no problem all you do is sit and do some simple
problems to make the teacher happy, while your at it
do a lot of them to make me happy. P.E. is even easier
all you do is sit and do nothing. U.S. Gov't. is
going to be hard you will be several different names
you might have to respond to all of them. the teacher
will almost always call you Marvin Jones so be carfull.
if he does he will pay you some money. You will have
a hard time fooling the rest of the class so don't
say nothing.

Dear Pat,

During your stay with my family, your going to
have to go to work for me. I work at a French
restaurant. You have to be there by 6:00 P.M., so
start getting ready by at least 5:30. Your going to
have to wear a formal skirt and a blouse to match.
It's being required by the owner. When your ready,
tell my mom to drive you. If she tells you to wait
a minute, go and sit in the car. That trick always
works to make her hurry. You should get to the
restaurant by 6:00. Be sure and greet the cook as
you walk into the kitchen from the back door. Ask
him where to sign in. When your done signing in,
ask the waiter, who you'll be working with, if there's
a customer that needs help. As soon as someone comes
into the restaurant, grab a small, wood bread board
(you will see it by the refrigerator) and fix the
customer their bread. First, get a small loaf of
bread from the counter next to the refrigerator and
put it on the bread board. Then, open the refrig-
erator. There will be a lot of little bowls. Take
one that has butter pats in it and on that's filled
with pâte. (Greenish-brown mashed liver made into
a spread). Put those on the board, also. You will
see a container of bread knifes near the loafs of
bread. Put a knife on the board with the bread,
butter and pâte. As soon as the waiter takes the
customers order, take the bread board out to them.
Come back to the kitchen and get the ceramic jug
of water out. Take it and pour the customers
water. This is all you will be doing except for
clearing the tables as the customer leaves. You do
this by getting a tray (the cook will tell you
where.) Put all the dishes on it and bring back, as you come back into the kitchen, you'll see the dishwasher put the dishes onto the counter in front of the diswasher. The waiter will change the table cloth and reset the table. You should be watching for new customers during any spare time. And one last thing, make sure everyone has full water glasses.

g) Ninth Grade, Control Group, Posttest - Student E
Organization: narrative/process
School Imposter Topic Holistic Score: 3 + 3 = 6

Dear Lee,

Tomorrow at school you're going to have to follow these directions closely in order to pass as me. During first period, math, you should sit in the front row, third desk from the left and watch Mr. Smith closely. When he tries to make a joke, but sure to laugh or at least try, no matter how foul it is. You should have the homework from the night before ready and answer Mr. Smith's questions as often as possible. For second period, Spanish, you should sit in the back row, next to Heather. Heather will see you as soon as she comes in and will sit next to you. You should cut-up on Mr. Gonzales, the teacher, whenever you can; however, be quiet or else he will begin to throw things at you.

h) Ninth Grade, Experimental Group, Pretest - Student F
Organization: process
Home Imposter Topic Holistic Score: 4 + 3 = 7

Dear Pat,

To get through the dinner hour you must prepare yourself.

First of all, Mom will ask you to feed the baby. The baby doesn't know how to eat very well, so if you end up with food on your face, treat the matter patiently.

When you sit down at dinner to eat, place your napkin on your lap and don't jabber. My parents get very annoyed if you talk too much. Chicken may be eaten with your fingers. When you want to excuse yourself from the table; ask.

As soon as everyone is done, quickly clear the table and wash the dishes.

You have just gotten through the dinner hour.
i) Ninth Grade, Experimental Group, Posttest - Student F
Organization: listing/narrative/process
School Imposter Topic Holistic Score: 2 + 3 = 5

Dear Lee,

My name is Lee too, so you won't get confused when your (my) name is called. I'll give you my (your) schedule in the morning. In first period ask Paula to take roll. (She has dark curly hair). 2nd period you must be shy, but pay attention, so Mr. Hoyle doesn't yell at you. 3rd period is boring. all you have to do is listen. During break and lunch find Nan (she'll come to you) and play "frisbee" in the courtyard. In P.E. were doing track and field, so be a track star, O.K. 6th period is dull and don't volunteer to say anything!

j) Ninth Grade, Control Group, Pretest - Student G
Organization: narrative/process
Home Imposter Topic Holistic Score: 3 + 4 = 7

O.K. Pat,

In the morning don't wake up too early and do not cut on the T.V. because mom will get upset. (Especially if it wakes her up). Make sure you keep away from Markita (my sister) because she will try to get you into as much trouble as possible. When you do get up clean up your room very well. Sweep the floor, Wash the windows, Make up the bed as neat as possible. Mom would like it better if you changed the room around because she likes to see people put effort into something they do. When you sweep the floor make sure you sweep under the beds and behind the dressers because those are the first two places she looks. When you wash the windows in the bedroom clean the frame around the window too because when it gets dirty it looks awful. To clean them you get a bottle of Windex and spray it on the Window. Wipe it off with a rag. until the windows are clean.
k) Ninth Grade, Control Group, Posttest - Student G
Organization: listing
School Imposter Topic

Holistic Score: 2 + 2 = 4

Lee,

In the spanish class second period when you go into the class you must sit on the side away from the window and sort of close to a tall, good-looking blonde haired girl. you must also know you spanish very well too. you must talk to the teacher about track and field all of the time because he's a coach. You must also say "How's it going Sterling." Find someone who will answer pretty good Eugene. ('My Middle Name is Eugent) Also you must answer at least 3 of the questions that the teacher asks. If you do that you could pass for me easily.

Your Truly,
MN

1) Ninth Grade, Control Group, Posttest - Student H
Organization: process
School Imposter Topic

Holistic Score: 4 + 4 = 8

As I've mentioned before, be extra careful in my Govt class. My teacher is Mr. S. He's an old man of sixty-seven. When you walked into that class, smile and I mean smile. Show your teeth as you do so. Now, you are to sit by 3 girls. One of them is 3 to 3 1/2 inches smaller than you. She has black curly hair and wears a warm friendly laugh everytime she says something. Her name is Sara.

The second friend, Ethyl, will be almost right next to you on your left. She will have bluish green eyes, with dirty blond hair. Her face has a light complexion. What I want you to do is to flirt with her. For example wink your eyes at her or just say "Hey baby" and put your arms around her. But, don't do it too much.

Now, the third should be in front of you on your left side. Her name will be Yvette she has shiny, soft brownish black hair. Her facial structure will be sort of pointy. She has dark eyebrows, and she wears braces.

I forgot to mention that when you walk in look for a good sturdy desk. Walk around the room. This is my daily routine. Now you have to talk mainly to those 3 girls I've mentioned. Occassionally, make
a joke or two. I hope you know your government. Oh, one more thing, don't talk out unless you're pretty much comfortable of what subject the class is talking about when class begins. Good Luck!

m) Eleventh Grade, Control Group, Posttest - Student I
Organization: hierarchical
Home Imposter Topic Holistic Score: 4 + 4 = 8

Dear Pat,

Hi, I just thought I'd write you a letter to let you know some of my duties and responsibilities around the house and give you some advice on how to carry them out.

First of all, keeping my room clean is the most important. Every morning as soon as you get up make the bed and put the pillows on top. Make sure there aren't any clothes lying around the room. Every Saturday I dust, vacuum, and straighten up my room. There is a huge shelf unit in my room, you have to take everything off of it and dust. Be careful, because a lot of the trinkets are fragile and breakable. Also each Saturday I water the plants in my room. Don't fill them to full, or water will drip on the carpeting.

After dinner my mom and I do the dishes and clean up the kitchen. It really doesn't take that long. If you both work together you'll get the job done a lot faster.

When my mom cleans the house, she will expect you to help. She likes to have a thorough job done so don't take any short cuts. She will tell you how she wants everything done so don't worry.

The last thing that you will be expected to do is watch my sister when my parents aren't home. She is really good. When she goes outside make sure she tells you where she's going. It's a good idea to check on her every once in awhile.

Have a Good Summer

n) Ninth Grade, Experimental Group, Posttest - Student J
Organization: narrative/process
Home Imposter Topic Holistic Score: 5 + 5 = 10

It's morning now. If you wake up early just stay in bed as long as possible. When you do get up, be sure to complain about the noises made that
wake you. Be sure to tell how you didn't get enough sleep and how people hanging around in the morning doesn't help you any. Sit yourself stupidly in front of the t.v. and grumble about not being able to watch the cartoons you like.

When you get hungry, make sure everyone knows about it. Complain bitterly about the hunger pains you have and hint mildly about how nice it would be to have someone make your breakfast. Now if someone does make your breakfast, don't let them know that you really appreciate it, just be cool about it and say, "It was O.K., thanks." But if no one makes your breakfast, sigh heavily and slowly stumble to the kitchen. Pour the cereal into the bowl so that it overflows and spills on the floor. When you add the milk, smash the cereal until it becomes a mush, open putting the sugar on, dump it liberally over the cereal and if any gets on the floor, complain about how slobbish little sisters are. Eat loudly and lean over bowl

Eleventh Grade, Control Group, Posttest - Student K
Organization: process
Home Imposter Topic Holistic Score: 5 + 5 = 10

Pat,

I really appreciate what you're doing for me. You're a godsend. One job which will be difficult to execute exactly as I do, will be cleaning the backyard. I'll warn you now, it's one hell of a long, boring and frustrating task.

First, put on some grubby clothes and some thongs. Start at the side yard and work around the house to the front. Pick up any papers and litter on the ground. As you are walking, stub your toe on one of the dog's bones. Swear. Pick up the bone and throw it over the fence. Continue this way until you reach the front yard and the flower bed. Now comes the real fun, weeding!

To begin, sit on the dirt with a paper bag open beside you. Start picking the weeds and deposit them in the bag. Scoot along to make the picking easier. Continue like this until you knock the half-full bag over. Swear. Leave the bag and the spilled pile of weeds as they are. Next, go into the house for lunch and tell yourself you'll pick it up after lunch. Remember if you want to do it just like I do, never go pick up the bag.
As you can see taking my place won't be too exhausting a job, but try to enjoy yourself.

Thanks again,
Fred

p) Eleventh Grade, Experimental Group, Pretest - Student L
Organisation: process
School Imposter Topic Holistic Score: 5 + 5 = 10

Dear Lee,

I feel the hardest part of the day for you to get through will be P.E., so I'll explain in detail of how to deal with this period. It begins about 11:43 AM and I'm always there on time. First thing when you walk in you go to the mirror, comb your hair, put on some lip gloss, and after looking at your face these couple of minutes you know it's useless so you give up and walk to your locker. It is in the first row #49. You sit down on the bench, open your locker and begin taking off your socks and shoes. While undressing talk to the girl who is to the right of you. She has a long black hair, tan and about 5'6", her name is Ethyl S. You main topic of conversation is your boyfriends, and I've already told you all there is to know about Fred. Now, when you take off your pants you must have white skinny legs to really pull off this gag. Then, you put on my horrible P.E. clothes which consist of white shorts, a light blue green top, dark green socks, and blue and yellow tennis shoes. Now you're ready to go. I'm taking tennis this unit and if you are a pro at it you have to take being extremely lousy. My teacher is Goosey Loosey and you must report to her for roll call up at the courts with your tennis racket. After roll call, you and Ethyl get up and get a court to play on. Now, I have a certain technique of playing. I can't serve the ball worth beans, I can't hit the ball worth beans, most of the time I don't even see the ball so, you just have to run around the court looking like an ungraceful swan. Oh, and once in a while hit yourself accidently with the racket. The catch is Goosey Loosey might ask you and Ethyl to work with the ball machine. This is the joke of the year. The ball machine shoots balls to you and you have to hit them with your forehand and backhand. This shouldn't be too hard because when the balls are shot out most of them hit you and when you hit backhand, you drop your racket on the floor. Everyone laughs at you, but just ignore it and laugh with them.
At 12:30 you have to leave to work in the cafeteria. You take your racket and bruised body back down to the gym, get dressed, look at your face, give up hope and walk to the cafeteria. Lots of luck Lee.

Sincerely,
Doris Clutzz

Dear Pat,

Thank you very much for offering to take over my duties while I am away this summer. I think you will enjoy your stay at the house, especially the swimming pool, but unfortunately it takes a great deal of special care. For the most part the pool equipment does most of the work. The filter and pool shed is in the sideyard by the master bedroom, and this is where you will find all of the tools needed to clean the pool: brush, skimmer, water tester, and chemicals. The pool filtration system takes care of sweeping the bottom, so all you will have to do is give the sides a light sweeping, and skim the leaves off the surface to take care of the unwanted debris that finds its way into the water. Finally in order to keep the water crystal clear and sparkling, without making it unbearable to your eyes, you have to keep the chemicals properly balanced. This is also a fairly easy chore, but it has to be done with care. In order to find out whether or not you have to add chemicals--chlorine or acid--you use the test kit in the pool shed. If you follow the directions inside the kit it will tell you exactly how much chlorine to add to the water and whether or not it needs acid. If you make a mistake and put too much chlorine in the pool the water will make your eyes burn while on the other hand if you don't put enough in the water will get murky. The kit will also tell you if the pool needs acid and if you have to put some in, be very careful and follow the instructions on the bottle. I hope you have a good time with the pool, and if you have any questions just ask my dad.

Sincerely Grateful,

Eleventh Grade, Control Group, Posttest - Student N
Organization: hierarchical
Holistic Score: 5 + 5 = 10

Being that you are the one who will be staying with my family in my place while I'm away, I would like to tell
you about the role I play in the family and the general behaviors of my family.

I am going to tell you a little about my personality so you'll understand why I do certain things. I tend to be a rather bossy person & often times I really order everyone around. I am also sensitive to everyone's feelings and I like to help everyone out. Inside of me I have something that always pushes me to want to work and never be idle.

Now that you know some of my stronger characteristics I'll tell you what I do for my family and what they've grown to expect from me. I do most of the cooking: I fix dinner almost everynight, I fix a nice breakfast for the family every sunny morning, and I am in charge of making lunches for everyone. I hate to see a dirty house, so in my spare time I do as much house cleaning as possible. Whenever my parents are worried about something I usually try to consol them by taking what ever burdens of their backs that I can.

My family is an extremely active one. Someone is always having to go someplace so soon you will probably feel like the family chauffer. I want to tell you a little about each of my family members. My father is a rather quiet man but also very stubborn at times. My mother loves to sew and is always working on some sort of craft. She can get rather tired and short-tempered though, so you'll just have to patiently hear through it. My sister is very sweet but she gets lazy and doesn't like to help out all the time so sometimes you may have to ask quite a few times before she'll do anything. Steve and I don't usually get along very well because we are both short tempered. He can be very stubborn & hard to deal with, Randy is the "baby" of the family & he is very quiet and sweet & I think you'll really enjoy him.

I think I'm making it sound like you're not going to have any fun at all, but this is not true. Our family is a very close family and we have alot of good times together. You'll probably be doing a lot of water-skiing this summer because it is our family's favorite sport. The best advice I can give you is be helpful but also just be yourself.