The Purpose of the Study

The purpose of this pilot study was to determine whether students using a series of planned exercises designed to improve typewriter composition skills would be better able to compose at the typewriter than students in a control group. The study was also concerned with the effect that the use of the composition materials had on the basic typewriting skills of the students.

Four null-hypotheses were tested:

1. There is no significant difference in the basic typewriting skills between the experimental and control groups.
2. There is no significant difference in typewriter composition quality between the experimental and control groups.
3. There is no significant difference in typewriter composition errors between the experimental and control groups.
4. There is no significant difference in typewriter composition quantity between the experimental and control groups.
Procedures

The experimental sites were Oregon State University during the fall quarter 1977 and Portland Community College during the winter quarter 1978. Each experimental site chose a control class and an experimental class on the same level of typewriting instruction. Each class was given a pretest to determine basic typewriting skill (a standard five-minute timed writing) and beginning composition skill defined in terms of quality, percent of error, and quantity of material produced.

The experimental classes were exposed to a series of developed compositional exercises designed to increase the students' ability to produce typewriter compositions. At the end of the ten-week quarter, the students were administered posttests identical to the pretests. While the student population at the beginning of the study was 109, there were only 52 students eligible to be considered in the final analysis (26 control and 26 experimental). These student's papers were scored and subjected to an analysis of covariance. The analysis of covariance determined the adjusted mean score for each group, the F value, and the level of the significance of the F value. The critical significance of F was considered to be .05.

Results

1. While the adjusted mean score for the timed writings was larger for the experimental group, it was not larger to a significant degree. Therefore null-hypothesis 1 was retained.

2. The adjusted mean score for the composition quality ratings was slightly higher for the control group; however, it was not larger to a significant degree. Therefore null-hypothesis 2 was retained.
3. The adjusted mean score for the composition percent of error scores was larger for the experimental group; however, it was not larger to a significant degree. Therefore null-hypothesis 3 was retained.

4. The adjusted mean score for the composition quantity scores was larger for the experimental group. This score was significantly larger at the .05 level of confidence. Therefore null-hypothesis 4 was rejected.

Conclusions

For the purpose of this study, it may be concluded that the experimental group did increase their typewriting composition speed without significantly affecting the quality of their compositions or the percent of errors contained therein. The basic typewriting skill of the experimental group, as measured by five-minuted timed writings, was not significantly affected by the use of the experimental composition material. However, because of the restricted size of the sample, recommendation for further study was made.
A Pilot Study Concerning
the Measurement of the Typewriter Composition Skills
of Selected Postsecondary Students

by

Donald John Plagens

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A PILOT STUDY CONCERNING
THE MEASUREMENT OF THE TYPEWRITER COMPOSITION SKILLS
OF SELECTED POSTSECONDARY STUDENTS

I. INTRODUCTION

The ability to express developed and created thoughts in written terms has long been recognized as a valuable skill. From the time that man first recorded his thoughts on clay tablets, through the development of paper and the quill pen, to the era of the printing press, and into this modern technological age, man has searched for faster and more efficient means of recording his thoughts. He developed a shorthand system by which he could record another's thoughts. He invented voice recording devices into which he could dictate his ideas. And he developed a typewriter as an efficient means of finalizing his thoughts into written form. These inventions have been a great boon to man in developing his composition efficiency, but he has not used one of them—the typewriter—to his greatest advantage.

Since the advent of the typewriter, a great number of people have learned to use it with a remarkable degree of efficiency to copy material from a variety of original sources (transcription machines, shorthand notes, and longhand drafts). But few compose directly on the typewriter. It is difficult to understand why most simply will not use the typewriter as a valuable aid in composing and recording. The production of creative thoughts should not be hampered by tedious hand methods of recording.

In the past two decades, typewriting teachers began to realize that their students were really "missing out" by not using their
typerwriting skills as an aid in developing written compositions. Students were attaining typerwriting speeds of well over 60 words per minute, but they were still laboring over the preparation of longhand drafts of letters, reports, and manuscripts before copying them in final form.

Articles began to appear in the professional journals about the need to develop a typerwriting skill by which a student could record his ideas directly on the typerwriter. It appeared that the solution was to attain a typerwriting skill which would allow a student's fingers to keep up with his thoughts. Such a skill should promote efficient composition creativity, replacing the slow, tedious method of using a pen or pencil to develop original drafts of compositions.

Teachers began to experiment with various methods of developing this "composition skill" (as it came to be known in the field). The problem was one of taking a student from the stimulus-response level of typerwriting, where the stimulus was in the form of hard copy, to a level where the stimulus was merely a thought. The student would take this new form of stimulus and respond by the production of that thought into hard copy through the use of the typerwriter. These experiments were basically informal and some of the teachers shared their ideas and findings in several articles that appeared in the various professional journals. But these experiments were, at best, intermittent and fragmentary. They lacked cohesiveveness and direction. Educators continued to give lip service to the need for more materials to develop typerwriter composition skills, but none were forthcoming.
With the advent in this decade of highly sophisticated word processing machines that reproduce material faster than the eye can follow, the need for typewriting composition skills has become even greater. The word processing machine operator now has the opportunity to compose material at a typewriter keyboard, the results of which are visible on a television screen. The operator can then edit and correct the material before finally transferring it into a memory system for later use.

The typewriter has also become the means of "conversing" with the computer. This means that the computer terminal operator must be able to compose instantaneously, transferring his wishes through a typewriter keyboard into the computer. The more efficient the operator can become in developing his typewriter composition skill, the more time he will save at the computer terminal. This, in turn, may result in rather substantial cost savings.

In response to this growing demand for methods and materials that would aid in developing typewriter composition skills, the investigator developed a series of exercises designed to be integrated into post-secondary typewriting programs.

**Need for the Study**

Teachers of typewriting have for many years expressed a need for typewriter composition material that has been proven to be useful in developing typewriter composition skills. Those that have published articles in the professional journals about typewriter composition have
been unanimous on one point: Typewriter composition is an important skill. Levenson summarized their thoughts as follows:

It . . . stands to reason that until a student can sit down to a typewriter as a means of communication as effortlessly as he has learned to use his other skills of communication—talking and handwriting—he has not learned the skill of typewriting. (16:235)

Typewriter composition is a skill that needs to be taught and not left to happenstance. Typewriting teachers have been successful for years in training students to type material from hard copy, using the stimulus-response theory of learning. They have been able to take students from the slow task of responding to written stimuli letter by letter to the faster skill of responding to sets of letters and even whole words. Their major emphasis has been on reproducing material at high rates of speed within reasonable accuracy limits.

As more and more teachers realized that they needed to do more than just teach their students to be straight-copy typists, they searched for methods and materials by which to do this. Most teachers knew that to build a typewriter composition skill, more was needed than just turning a student loose at the typewriter. They knew that "the transition from the printed copy to original composition is difficult." (6:292)

Schramm summed it up by writing:

Composing at the typewriter isn't a skill that comes with a flash of lightning or with the sudden thought or desire to be able to compose at the typewriter; it takes time and effort to develop. (25:355)

The main thesis of these authors was that typewriting composition would save time. Murphy said that persons possessing a good typewriting
composition skill "would save themselves many hours and would have countless business and personal use applications." (22:21)

Mach emphasized the importance of "weaning" the student away from his hard-copy stimulus:

Building compositional skill is a tedious process. The students must be allowed enough time to build confidence in their ability to compose before being critically evaluated on English usage, structure, spelling, and so on. Critical evaluation too early in the building process will retard, or even halt, the creative process which is so necessary if the fullest compositional potential of the students is to be developed. (20:143)

The authors have not ignored the quality of material composed at the typewriter. They did, however, agree that quality should not be stressed until the end of the typewriter composition learning experience. All of the authors agreed that at the end of the learning process, final compositions (retyped from the original typed rough draft that had been corrected) should be checked for quality. Even in these early stages of checking for quality, Schramm warns that the penalty for imperfection not be "too severe . . . since it would hamper a student's desire and freedom to compose." (25:356) Zimpfer reminds the reader that all forms of "composition involves a working knowledge of mechanics plus having something to say." (32:15) In other words, it is assumed that all students coming into a typing program will have some degree of developed handwritten composition skill.

Zimpfer further suggests that as students progress into the final stages of their ability to compose at the typewriter, the teacher should "encourage students to become more and more cognizant of their errors in punctuation, capitalization, spelling, and grammar." (32:15)
Beyond the use of typewriter composition skill as a personal-use time saver and a valuable skill for the secretary, this type of skill is becoming important in other fields as well. In interviews with Harold C. Dorn and Robert H. Birdsall, professors of journalism at Oregon State University, the investigator discovered a need for trained typewriter composers in newspaper production. Both of these men stated that typewriter composition was a valuable skill for would-be journalists. In the words of Dorn, "If there were a course that taught students to compose at the typewriter, we would say 'Amen!'" He went on to state that this skill would allow students to produce their material faster, providing more time to develop their journalistic style of writing.

Fred Winger, Professor Emeritus, Oregon State University, indicated in a conference with the investigator that this type of project was long overdue and urged that the developed composition material become the basis for experimental study. Two sales representatives of South-Western Publishing Company have approached the investigator expressing an interest in the typewriting composition material. They both have stated that typewriting teachers are asking for materials that they can incorporate into their current programs to teach their students to compose at the typewriter.

The possibilities for using typewriter composition skill appear to be limitless in the language-skills areas. It takes little reflection to see its importance to students in English composition classes, for would-be authors and poets, and, indeed, for established authors, poets,
and journalists. The need for a proven set of material to be used in the teaching of typewriting composition is apparent.

Statement of the Problem

The problem of this pilot study was to determine whether students using a series of planned exercises designed to improve typewriter composition skills would be better able to compose at the typewriter than students in a control group. The study was also concerned with the effect that the use of the composition materials had on the basic typewriting skills of the students.

The materials were used as part of the regular typewriter instruction in experimental classes. This was accomplished by providing a complete set of developed typewriter composition materials to each instructor involved in the experiment with instructions on how to use them.

Four sites were selected for the experiment; eventually only two were used. The effects of applying the treatment were determined through pretest-posttest scores that were subjected to analysis of covariance. The resulting adjusted F values were then checked for significance.

Purpose of the Study

The purpose of this pilot study was to make recommendations to postsecondary business educators regarding further study of typewriter composition skills based on the findings of the experiment. The findings of the experiment were based on the testing of four null-hypotheses:
1. The use of the material would not affect the basic timed-writing skill of students using the materials. 2. The use of the material would not significantly affect the quality of material that a student would produce during a timed composition exercise. 3. The use of the material would not significantly affect the error rate in student compositions during a timed composition exercise. 4. The use of the material would not significantly affect the quantity of material that a student could produce during a timed composition exercise.

Definition of Terms

In order to insure clarity, it was considered imperative that certain terms be defined. It should be noted that these definitions are related to this study; it is assumed that one may find different definitions as they are used in other publications.

Composition Errors—errors in the composition: typographical, punctuation, grammar, spelling, and English usage.

Composition Percent of Error—total composition errors divided by total composition quantity.

Composition Quality—the quantification of composed material based on specific criteria determined by qualified business communications teachers. The material is subjectively rated on content: originality, clearness of thought, and creative effort.

Composition Quantity—gross words typed during a composition
(see Typewritten Word).
Developed Material—a series of exercises designed to develop typewriter composition skills. This material was developed by the investigator as part of a graduate course at Oregon State University entitled Practicum in Business Education, summer session, 1973.

Five-Minute Timed Writing—an exercise where a student copies material using a typewriter for five minutes. From this material a teacher is able to determine Gross Words Per Minute and Net Words Per Minute, basic determinants of typewriting skill.

Gross Words Per Minute—the number of five-stroke typewritten words produced divided by the time taken to produce these words.

Net Words Per Minute—the number of five-stroke typewritten words produced divided by the time taken to produce these words less one word for each typewritten error.

Typewriter Composition—the art of putting words and sentences together adhering to the rules of grammar using a typewriter to record these thoughts directly to paper. May be referred to as Composition at the Typewriter.

Typewritten Word—any series of five strokes at the typewriter (this definition is the standard accepted norm used in the typewriting instructional field).
Delimitations of the Study

Delimitations are limits or restrictions that the investigator places on the study. In order not to upset or disrupt the normal educational classroom processes and course objectives of the schools where the developed material was used, the following delimitations of this study are acknowledged:

1. The population of this study was limited to those students enrolled in the classes that constituted the control and experimental groups used to test the developed material.

2. No attempt was made to randomly assign the students to either the control or experimental groups.

3. No attempt was made to use the developed material as the basis for a separate course designed expressly to teach typewriting composition skills.

4. No attempt was made to use the developed material at post-secondary schools other than Oregon State University, Portland Community College, Rogue Community College, and Southwestern Oregon Community College (the latter two colleges were subsequently dropped from the study).

5. The use of the developed materials was limited to ten-week quarters.
Limitations of the Study

Limitations are those things over which the investigator has no control. The following limitations of this study are recognized:

1. This study was limited by the possibility that the teachers administering the developed materials may have differed slightly in methodology used in presenting the material.
2. This study was limited by the possibility that the students in the control and experimental groups may have practiced for varying amounts of time outside of class.
3. This study was limited by the assumption that the developed pretest-posttest device is a valid measure of typewriting composition skill in terms of quality, errors, and quantity.
4. This study was limited by the fact that some students did not complete all of the pretests and posttests and were thus eliminated from the study.

Statement of Hypotheses

The purpose of this study was to determine whether selected students using a series of planned exercises designed specifically to improve typewriter composition skills as part of their regular typewriting program would be better able to perform those skills than students in a control group. It was also the purpose of this study to determine the
effect that the use of the composition materials had on the basic type-
writing skills of the students in the experimental group.

In order to determine whether these goals were accomplished, the
following null-hypotheses were tested at the .05 level of confidence:

1. There is no significant difference in the basic typewriting
   skills between the experimental and control groups.

2. There is no significant difference in typewriter composition
   quality between the experimental and control groups.

3. There is no significant difference in typewriter composition
   errors between the experimental and control groups.

4. There is no significant difference in typewriter composition
   quantity between the experimental and control groups.
II. REVIEW OF RELATED LITERATURE AND INTERVIEWS

The historical perspective of formal research and articles written about composition at the typewriter is rather bleak. Since 1956 only 18 articles about typewriter composition have been written in the professional journals and only one related research project is listed in Dissertation Abstracts International. A summary of these articles is presented in chronological order below.

Historical Perspective

In 1956 Murphy reported that "the typewriter is . . . an efficient composing medium." (22:21) He went on to report, however, that many people, including typewriting teachers, often compose in longhand and then copy what they have written on the typewriter. He suggested that typewriter composition was a skill that could be taught, and he listed some exercises taking the student from the "simple to the complex" (22:21) to achieve this goal.

In 1960 Morrison wrote about what could be expected from students who have had planned composition experiences at the typewriter. She was encouraged in the progress that was made by D and E students (21:29) primarily in the areas of punctuation, capitalization, grammar, and the amount of writing produced. Later that year, Beckner (2) wrote that she had successfully used composition exercises in a junior high school situation, but did not give any planned approach as to how to teach the skill.
The only research project listed in Dissertation Abstracts International appears in 1961. Tootle (28) used the portable typewriter in the fifth grade on an experimental basis in teaching such activities as spelling, creative writing, social studies reports, and science reports. He rated students on handwriting speed, handwriting quality, spelling ability, creative writing ability, reading achievement, arithmetic, science achievement, social studies skills, and study skills. His study showed that the experimental group made significant gains in handwriting speeds, handwriting quality, and arithmetic achievement. Other gains, though not significant, were listed in the areas of spelling, creative writing, reading, science achievement, and social studies skill.

Schramm (25:355) stated in 1962 that typewriting teachers "should make it a definite objective of their typewriting course to develop the skill of composing at the typewriter." He listed a variety of drills that could be used to aid in the development of composition skills. He also stated that a valuable by-product of the typewriter composition exercises included improved skills in proofreading, using the dictionary to find spelling of words, applying punctuation and capitalization rules, and improving the ability of the student to listen.

In 1964 Levenson (16) not only gave some exercises to be used in developing composition skills, but listed some tips to aid the student in developing this skill. She concluded her article by stating that "students who can perform composition skills are the ones who will find and fill the highly paid executive secretarial positions that are waiting for them in business, industry, and the professions." (16:236)
In January of the following year Harrison, Lawson, and Lide (13) presented 15 exercises to develop the personal-use and vocational aspects of composing at the typewriter.

Leverenz (17) reported in 1966 that he used one class a week to teach students how to compose themes at the typewriter. He discovered that the results of this work could be "spectacular." (17:238)

In 1967 Bloom (4) contended that using the typewriter in a junior high "Typing-Com" class helped students discover errors in spelling, sentence structure, and punctuation. She also reported an improvement in the mechanics of grammar, spelling, proofreading, reading, and oral expression.

Three reports appeared in 1968. In January Mach (20) commented on his use of local newspapers as a basis for exercises to develop the composition skills of typewriting students at Wisconsin State University. This is the first mention of teaching composition skills beyond the high school level. In June Cook (7) wrote an article that gives the first mention and examples of visual stimuli to aid the development of composition skills. Many of the materials were developed by in-service and student teachers at Wayne State University. Bohnsack (5) published a November article on how to grade typewriter compositions in such a way that would encourage all students to improve their composition ability.

The inadequacy of textbook material for teaching composition at the typewriter first appeared in an article by Kaisershot (14) in 1969. He included in his article the first typewriter composition game that could be used with high school students.
"Student Success with Creative Composition" was published in November, 1970, by Handorf and Nelson (12) followed by "Developing Vocational Number Composition Skill" by Rowe (24) in May, 1972.

Wheeler (29) reviewed many of the previously published activities used to develop typewriting composition skill in an article published in 1973.

In 1974 Cash (6) presented an article containing more visual stimuli and related most of her material to meeting the student's desire to express personal needs, worries, habits, and/or problems. She also elaborated on the typing tips that Levenson (16) had suggested ten years earlier.

Winger starts a 1975 article with the following statement:

It is difficult to believe that so many people with good typewriting skills will labor over the preparation of longhand drafts of such things as manuscripts, reports, and letters before typing the finished copy. The ability to "think" and then "compose" at the typewriter has long been one of the most neglected, yet most valuable, skills to be developed in the typing classroom. (31:6)

He completed his article by giving 13 composition projects that had an occupational theme.

The latest article to appear on the subject was published by Zimpfer (32) in November of 1976. In it he admits that teachers are now giving some attention to typewriting composition, but that it is a cursory treatment at best. He calls for a specific plan that devotes some time each week to the development of writing at the typewriter. The article is extremely valuable in that it not only lists a rather complete "Synopsis of Teaching Procedures," but also "A Model for Teaching Composition at the Typewriter time sequence. (32:15)
Related Books

In 1954 Bliven published a book about the history of the typewriter. In it he quotes from a letter written on December 9, 1874, by Samuel Langhorn Clemens (Mark Twain) concerning his use of the typewriter. Clemens stated, "The machine has several virtues. I believe it will print faster than I can write." (3:61) Bliven discovered that Twain was the first author in history to use the typewriter for the final manuscript of a book. There is some confusion as to whether this was for *Tom Sawyer* in 1876 or *Life on the Mississippi* in 1883. (3:62) He was not able to determine, however, if Twain used the machine as a composition tool, even though many of his letters were typed.

There is also some indication that Count Lyof Nikolayevitch Tolstoy, author of *War and Peace*, may have dictated some of his works to his daughter who typed it directly on a typewriter. This early documentation of what may have been the beginning of typewriter composition is in the form of a photograph of Tolstoy and his daughter at work. (3:79)

Bliven's book also has a reproduction of an advertisement for a 1926 portable typewriter. It contains a sketch of a businessman in a study apparently composing at the typewriter. While there are papers scattered around the desk, the man is looking at his paper while he is typing, a standard typewriter composing technique. (3:165)
Related Interviews

The investigator had a number of informal discussions with educators both in the field of business education and those affected by business education during the development of the typewriter composition materials as well as during the preparation of this study. Four of these interviews were especially enlightening and are summarized here.

During the winter academic quarter of 1977, Fred Winger, Professor Emeritus, Oregon State University, had an informal discussion with the investigator about typewriter composition. During the discussion he stated that the typewriting composition material already developed by the investigator was valuable, and that it was the type of material that was needed as an aid to the many typewriting teachers who do not have time to develop their own materials. He encouraged the investigator to take the developed materials and test them in a classroom situation and to subsequently publish the results of the findings as well as the typewriting composition material itself.

Donald Beringson, Department Head of Business Education at Oregon State University, made a similar recommendation during a discussion on June 21, 1977. Beringson added that typewriter composition skill was becoming even more important in view of the advance of word processing and its related equipment into the business world.

On July 13, 1977, the investigator interviewed two Department of Journalism Professors at Oregon State University concerning their views on typewriter composition skills.
Harold C. Dorn stated that at one time the only requirement to becoming a journalism student was a command of the English language—especially grammar and spelling. Today, however, it is also required that students know how to type, as they only have 20 minutes to produce a story in class. The students do not receive any formal typewriter composition training. They are given the typewriter as a tool to use because it is more efficient than a pencil and paper. When asked for a reaction to a statement indicating the possibility of a system being developed that would teach typewriter composition, Dorn replied, "If there were a course that taught students to compose at the typewriter, [journalism educators] would say 'Amen!'" He continued by saying that this would allow journalism instructors more time to concentrate on developing journalistic writing styles and that they "wouldn't have to worry about these mechanical things."

Robert H. Birdsall gave the investigator an opportunity to view a cathode ray tube composer in operation. He stated that this device was used to publish the Oregon State University college newspaper, The Barometer, as well as the Gazette-Times, the local Corvallis, Oregon, city newspaper. During the interview he revealed that when students begin their journalism courses, only 10 percent of them will compose at the typewriter. The other 90 percent will first write their drafts in longhand. He believed that this was a waste of time, especially in light of the fact that they were able to use $25,000 cathode ray tube composers that were much more efficient in producing final copy. He went on to state that the Gazette-Times management had to
send their reporters back to school to develop their straight-copy typewriting speeds so that they could advantageously use the newspaper's new cathode ray tube machines. He added that there is also a newspaper in Texas that requires their reporters to have a straight-copy speed of at least 75 net words per minute. When asked for a reaction to the statement about developing typewriter composition skills that was put to Dorn, Birdsall stated, "For our students that would be extremely valuable."

Conclusions Based on the Readings and Interviews

All of the foregoing articles, the one book and research project, and the interviews pointed to the need for the development of comprehensive material to teach composition at the typewriter and the subsequent evaluation of the materials to test their worth.

The understatement of the past twenty years along these lines may have been made in 1956 when Murphy stated:

If typewriting instructors teach composition, they will equip their students with a time-saving and valuable skill. It is a skill that should not be overlooked in planning classroom instruction. (22:22)
III. DESIGN OF THE STUDY

This study was designed to determine whether students using a series of planned exercises designed to improve typewriter composition skills would be better able to compose at the typewriter than students in a control group. The study was also designed to determine the effect that the use of the composition materials had on the basic typewriting skills of the students. Four null-hypotheses were tested:

1. There is no significant difference in the basic typewriting skills between the experimental and control groups.
2. There is no significant difference in typewriter composition quality between the experimental and control groups.
3. There is no significant difference in typewriter composition errors between the experimental and control groups.
4. There is no significant difference in typewriter composition quantity between the experimental and control groups.

The developed material was designed so that it could be incorporated into existing typewriting and typewriting-related classes without disrupting the teaching of the usual material that must be covered in order to meet course objectives. The material was designed to take the student from simple exercises (one-word responses to questions or statements), through intermittent stages of short-answer responses to various visual and audio stimuli, and finally to a composition skill of producing more complex material at a comparatively high rate of speed with a minimum of visual or audio stimuli.
Improvement in typewriter composition skills was measured in terms of the quality of the material produced, the percent of error, and the quantity of the material produced.

The quality of the material produced was rated quantitatively by a qualified business teacher on criterion that was approved by three business teachers. The material was subjectively rated on content: originality, clearness of thought, and creative effort.

The composition percent of error was objectively determined by scoring the technical errors in each paper: typographical, punctuation, grammar, spelling, and English usage. This score was divided by the quantity score for the paper which produced the composition percent of error rate.

Basic typewriting skill was measured in terms of Net Words Per Minute, the accepted standard measure of basic typewriting skill.

Preparation of the Typewriter Composition Exercise Material

The material used in the experimental classes in the study was developed during the Summer Session, 1973, as the practical course work for Business Education 507, Practicum in Business Education, at Oregon State University. The investigator conducted a thorough search of the literature concerning typewriter composition, held related interviews and discussions with typewriting experts and teachers, and in consultation with the course instructor developed the materials.

The materials were specifically developed to be used in typewriting or typewriting-related classes at the postsecondary level. The literature revealed that teachers who had worked with the development of this skill agreed that to be effective the drills must take the student from
simple tasks to more complex tasks. A compilation of these articles revealed that the following general simple-to-complex steps should be taken in developing typewriter composition skills:

1. The first "composition" should consist of one-word responses to simple questions asked by the teacher (or other similar one-word response exercises).

2. The second set of exercises should require slightly longer answers, but not necessarily complete sentences.

3. The third set of exercises should require the typist to type complete sentences.

4. Projects at the fourth stage of development should require the composition of complete paragraphs.

5. The final stage of development is the production of complete letters, manuscripts, or other similar material by the student.

To meet Handorf and Nelson's criticism that many exercises of this type are "not very interesting" (12:10), it was the investigator's goal to compose a variety of exercises and to categorize them into logical families. Another goal was to develop a minimum of five items for each category so as to provide variety and selection for teachers using the material.

The completed material was packaged in such a way as to be flexible in nature, i.e., items could be easily removed, categories enlarged, and items changed without disrupting the general order of the completed package.

Six major areas were established for developed materials: (1) Word Response Exercises, (2) Short Response Exercises, (3) Sentence
Response Exercises, (4) Paragraph Response Exercises, (5) Letter Response Exercises, and (6) Essay Response Exercises. Each of these major areas was assigned a code number, which was further subdivided to provide a variety of exercises for each stage of development (see Appendix B for a complete set of the developed composition exercises).

General instructions for producing typewriter compositions were prepared as student handouts to be read and discussed before the initial compositions were attempted. Each exercise was prefaced with additional instructions for the specific use of the exercise by both the teacher and the student.

The material was evaluated by the Business Education 507 course instructor and by the students in the class. In a conference with the investigator, the instructor indicated that the material was worthy of testing and urged that it become the basis for a Doctor of Education Dissertation. The students in the class unanimously voted to reproduce the material so that they could use it in their respective typewriting classes.

The material was given a final review during the summer of 1977 to correct minor deficiencies.

Pretest and Posttest Preparation

The timed writing pretest was a standard timed writing that is used as part of South-Western Publishing Company's standardized testing program. It is recognized as a valid and reliable basis by which to determine students' straight copy timed writing speeds. Timed writing ability was determined in net words per minute for five minutes.
The typewriting composition pretest subject, "Roots," was suggested by a member of the investigator's Doctorial Committee. The method of scoring this test was developed through the cooperation of business communications teachers at Oregon State University and Cuyahoga Community College, Metropolitan Campus, Cleveland, Ohio.

The posttests for the timed writing and the typewriting composition were the same as the pretest. The length of time between the pretest and the posttest will reduce any possible carryover contamination to a negligible degree.

**Statistical Design of the Study**

The study was designed on the control group and experimental group principle. Individual performance was determined by the administration of pretest and posttest instruments.

The raw scores for all tests were determined and subjected to the analysis of covariance which produced the adjusted mean scores. The analysis of covariance computer program compensates for the differences in typing ability of the students at the beginning of the experiment as well as the difference in group sizes.

The analysis of covariance was also chosen as the statistical tool in this experimental design because it enabled the investigator to estimate the true regression of final on initial measures by use of the computer. The computer then uses this regression coefficient to correct or "adjust" the final method means so as to allow for differences in the initial measures.
Covariance analysis then allowed the investigator to test the significance of the differences remaining in the adjusted methods means. The F statistic was used for testing for significant differences between the adjusted mean scores at the .05 level of confidence.

Laying the Groundwork for the Experiment

The investigator decided to use the material at four postsecondary institutions in Oregon. The colleges were selected on the basis of the willingness of the faculty members in their respective business departments to use the material and to test the results.

The following postsecondary institutions were contacted, and an agreement was reached to use the material on an experimental basis during the fall and/or winter quarters of 1977:

1. Oregon State University, Business Education Department, Corvallis, Oregon.
4. Southwestern Oregon Community College, Coos Bay, Oregon.

On May 2, 1978, the investigator received a letter from Rogue Community College indicating that they would not be able to participate in the experiment because of staffing changes in the business department. At this time it also became evident that Southwestern Oregon Community College would not be able to participate, and these two colleges were dropped as experimental sites.
Procedures for Selecting Student Groups

For this study it was necessary to use intact groups of students as they enrolled for courses at each of the testing sites. In all of the colleges, students enrolled on a first-come, first-served basis and were free to choose course times that best fitted their individual schedules. This procedure resulted in groups of students that were presumed to be heterogeneous, i.e. composed of individuals with varied typewriting abilities.

Student Orientation

Students in all sections of the experiment were tested during the first week of the quarter for basic typewriting skill and typewriter composition skills. After initial testing, the students in the experimental groups were given specific written instructions, prepared by the investigator, that would help improve their ability to compose at the typewriter. Each teacher held a brief discussion with the experimental group on the objectives of learning to compose at the typewriter and a general outline of the simple-to-complex method to be used to aid in the development of these skills.

The control group received no information about typewriter composition. Both groups received the same typewriting and homework assignments that they would have normally received during the term. Neither group was told that they were part of an experiment until after the completion of the posttest activities.

The faculty members at each school selected exercises from the developed material within the guidelines set forth by the investigator.
A Teacher Evaluation Form was filled out for each exercise used. This form included room for the date the material was used, the time spent on the exercise, students that were absent, and room for teacher comments (if there were any).

Students who were absent for more than four periods when the composition material was being used were excluded entirely from the analysis, as were those students that were absent during either the pretest or the posttest. The posttests were administered during the last week of the course or during the final examination period.
IV. ANALYSIS OF DATA

The problem of this pilot study was to determine whether students using a series of planned exercises designed to improve typewriter composition skills would be better able to compose at the typewriter than students in a control group. The study was also concerned with the effect that the use of the composition materials had on the basic typewriting skills of the students.

Use of the Typewriter Composition Material

The investigator held an initial orientation session with the instructors that were to be involved in the experiment at Oregon State University during the 1977 summer session. Each experimental site was subsequently mailed a complete set of typewriter composition material. Each set consisted of:

1. A Teacher "Help Sheet"
2. A copy of How to Use Typewriter Composition Exercises
3. Copies of Student Guides for Typewriter Composition
4. Pretest/Posttest Activities information sheet
5. Several copies of the Teacher Evaluation Form
6. Copies of the 5-Minute Timed Writing

Copies of these materials are in Appendix A.

Each experimental site also received a complete set of Typewriter Composition Exercises. A copy of this material is in Appendix B. The material was used during the fall quarter 1977 at Oregon State University and during the winter quarter 1978 at Portland Community College.
Selection of Students

The selection of which classes were to be used as experimental and which as control was left to the instructor at each experimental site. At Oregon State University, the material was used during the fall quarter 1977 in Typewriting 122, the second quarter typing course. The Control Class met at 12:30 p.m. and the Experimental Class met at 9:30 a.m. Both classes met Monday through Thursday and were taught by the same instructor. The Control Class had an initial population of 23 students and the Experimental Class had 24 students.

At Portland Community College, the material was used during the winter quarter 1978 in Typewriting 122, the second quarter typing course. The Control Class met at 1 p.m. and had an initial population of 36 students. The Experimental Class met at 10 a.m. and had an enrollment of 26 students. Both classes met five days a week.

Administration of Pretests

The pretests for both the timed writings and the compositions were given to the Control and Experimental Classes on September 29, 1977, at Oregon State University, and on January 11, 1978, at Portland Community College. The timed writing pretest was a standard timed writing that is used as part of South-Western Publishing Company's standardized testing program and was given as a five-minute timed writing. The composition pretest consisted of students composing a theme at the typewriter based on their "Roots." Students were given eight minutes to compose, three minutes to proofread their drafts, and five minutes to type their final compositions.
Administration of the Treatment

The typewriter composition material was administered to the experimental class at Oregon State University as indicated in Table I.

TABLE I. ADMINISTRATION OF THE TREATMENT, OSU

(Time in Minutes)

<table>
<thead>
<tr>
<th>Date</th>
<th>Exercise Code No.</th>
<th>Composition Time</th>
<th>Proofreading Time</th>
<th>Final Draft</th>
<th>Total Time*</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/29</td>
<td>Pretest</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>10/4</td>
<td>104</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>10/7</td>
<td>113</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>10/11</td>
<td>132</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>10/18</td>
<td>143</td>
<td>2</td>
<td>2</td>
<td>1.5</td>
<td>5.5</td>
</tr>
<tr>
<td>10/24</td>
<td>201</td>
<td>8</td>
<td>OC**</td>
<td>OC**</td>
<td>8</td>
</tr>
<tr>
<td>10/31</td>
<td>210</td>
<td>3</td>
<td>1.5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>11/7</td>
<td>303</td>
<td>7</td>
<td>OC</td>
<td>OC</td>
<td>9</td>
</tr>
<tr>
<td>11/14</td>
<td>310</td>
<td>5</td>
<td>OC</td>
<td>OC</td>
<td>6</td>
</tr>
<tr>
<td>11/21</td>
<td>320</td>
<td>7</td>
<td>OC</td>
<td>OC</td>
<td>8</td>
</tr>
<tr>
<td>11/28</td>
<td>Posttest</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td>19</td>
</tr>
</tbody>
</table>

Total Class Time 103

*Total Time = time exercise began minus time exercise ended. This time includes teacher's verbal instruction time and student set up time; therefore, it may be greater than the total of Composition, Proofreading, and Final Draft times.

**Out of Class

The actual class time devoted to the use of the composition material as a teaching device, i.e. Total Time minus Pretest and Posttest time, was 59 minutes.
The typewriting composition material was administered to the experimental class at Portland Community College as indicated in Table II.

**TABLE II. ADMINISTRATION OF THE TREATMENT, PCC**  
(Time in Minutes)

<table>
<thead>
<tr>
<th>Date</th>
<th>Exercise Code No.</th>
<th>Composition Time</th>
<th>Proofreading Time</th>
<th>Final Draft Time</th>
<th>Total Time*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/11</td>
<td>Pretest</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>1/17</td>
<td>101</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>8</td>
</tr>
<tr>
<td>1/18</td>
<td>112</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>5</td>
</tr>
<tr>
<td>1/20</td>
<td>133</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>8</td>
</tr>
<tr>
<td>1/23</td>
<td>143</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>6</td>
</tr>
<tr>
<td>1/27</td>
<td>153</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2/3</td>
<td>173</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>15</td>
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<tr>
<td>2/10</td>
<td>203</td>
<td>4.5</td>
<td>3.5</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>2/17</td>
<td>212</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>2/24</td>
<td>304</td>
<td>6</td>
<td>OC**</td>
<td>OC**</td>
<td>6</td>
</tr>
<tr>
<td>3/1</td>
<td>313</td>
<td>4</td>
<td>2</td>
<td>OC</td>
<td>6</td>
</tr>
<tr>
<td>3/3</td>
<td>320</td>
<td>6</td>
<td>2</td>
<td>OC</td>
<td>8</td>
</tr>
<tr>
<td>3/8</td>
<td>402</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>3/10</td>
<td>Posttest</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td>20</td>
</tr>
</tbody>
</table>

Total Class Time: 163

*Total Time = time exercise began minus time exercise ended. This time includes teacher's verbal instruction time and student set up time; therefore, it may be greater than the total of Composition, Proofreading, and Final Draft times.

**Out of Class

The actual class time devoted to the use of the composition material as a teaching device was 116 minutes.
Administration of Posttests

The posttests for both the timed writings and the compositions were given to the control and experimental classes on November 28, 1977, at Oregon State University, and on March 10, 1978, at Portland Community College. The timed writing posttest was the same test used as the pretest, and the composition subject was the same, "Roots." Students were given eight minutes to compose, three minutes to proofread their drafts, and five minutes to type their final compositions.

Elimination of Students

As called for in the design of the study, students who were absent for more than four days from this study or who did not participate in every pretest or posttest were eliminated from the study. The results are given in Table III.

TABLE III. STUDENT POPULATION

<table>
<thead>
<tr>
<th>School</th>
<th>Beginning</th>
<th>Eliminated</th>
<th>Control Total</th>
<th>Experimental Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>23</td>
<td>7</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>24</td>
<td>5</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>PCC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>36</td>
<td>26</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>26</td>
<td>19</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>109</td>
<td>57</td>
<td>26</td>
<td>26</td>
</tr>
</tbody>
</table>
Scoring of Tests

As the tests were received by the investigator, they were given numerical codes and the names were deleted from the papers. This was done so that they could not be identified by the scorers as to person or as to being pretests or posttests.

The timed writings were scored by a professional checker at Cuyahoga Community College, and they were double checked by the investigator. The student scores for these tests are given in Tables IV, V, VI, and VII.

The quality scores for the compositions were determined by a qualified business education professor\(^1\) at Cuyahoga Community College. Compositions were first graded subjectively for content on the basis of a maximum score of 25 points. The quality grade was based on originality, clearness of thought, and the creative effort that the student put into the composition.

The compositions were then objectively checked for technical errors, i.e. typographical errors, punctuation, grammar, spelling, English usage, etc., and one point was scored for each error found. The final quality and error scores were confirmed by the professional checker and the investigator. The student scores for these tests are given in Tables VIII, IX, X, and XI.

The quantity scores for the compositions were determined objectively by the investigator by using a typewriter ruler to determine

\(^{1}\text{Emily Miklis, Associate Professor of Business, Cuyahoga Community College, Cleveland, Ohio.}\)
the number of words typed per line and the total words for each composition. The student scores for these tests are given in Tables VIII through XI.

The composition percent of errors were determined by dividing the individual errors on each composition by the quantity score for that paper. The results are given in Table XII.
# TABLE IV. OREGON STATE UNIVERSITY TIMED WRITINGS

## Control Group

<table>
<thead>
<tr>
<th>Student No.</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Net Gain/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GWAM</td>
<td>Error</td>
<td>NWAM</td>
</tr>
<tr>
<td>003</td>
<td>56</td>
<td>09</td>
<td>47</td>
</tr>
<tr>
<td>004</td>
<td>68</td>
<td>05</td>
<td>63</td>
</tr>
<tr>
<td>005</td>
<td>54</td>
<td>12</td>
<td>42</td>
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<td>007</td>
<td>62</td>
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<td>008</td>
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<td>10</td>
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<td>012</td>
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<tr>
<td>Student No.</td>
<td>Pretest</td>
<td>Posttest</td>
<td>Net Gain/Loss</td>
</tr>
<tr>
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<td>---------</td>
<td>----------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>GWAM</td>
<td>Error</td>
<td>NWAM</td>
</tr>
<tr>
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<td>39</td>
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<td>035</td>
<td>57</td>
<td>12</td>
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<td>037</td>
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Control Group

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| 052         | 19      | 23      | 4     | 8       | 5       | -3     | 110     | 157     | 47    |
| 053         | 19      | 23      | 4     | 8       | 14      | 6      | 089     | 163     | 74    |
| 055         | 19      | 20      | 1     | 5       | 4       | -1     | 066     | 057     | -09   |
| 057         | 21      | 19      | -2    | 9       | 2       | -7     | 163     | 080     | -83   |
| 058         | 19      | 21      | 2     | 12      | 5       | -7     | 048     | 061     | 13    |
| 061         | 21      | 23      | 2     | 2       | 0       | -2     | 121     | 111     | -10   |
| 070         | 22      | 24      | 2     | 3       | 0       | -3     | 194     | 148     | -46   |
| 074         | 20      | 23      | 3     | 1       | 4       | 3      | 092     | 175     | 83    |
| 077         | 20      | 20      | 0     | 5       | 5       | 0      | 129     | 141     | 12    |
| 083         | 18      | 21      | 3     | 7       | 15      | 8      | 070     | 201     | 131   |
### TABLE XI. PORTLAND COMMUNITY COLLEGE COMPOSITIONS

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Composition Quantity

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**TABLE XII. COMPOSITION PERCENT OF ERROR**

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*Composition Errors = Composition Percent of Error
Composition Quantity
Statistical Design--Covariance Analysis

The design used in this study was the Control-Experimental Class Design using unequal cell sizes. Data used in the investigation was based on pretest-posttest scores attained by the students in both groups. The student populations are presented in Table III, p. 33.

The following steps were used:

1. The two groups were pretested for timed writing speeds and typewritten composition ability prior to course instruction.
2. The experimental classes were exposed to the independent variable (Typewriter Composition Material) during the regular instructional periods during the quarters indicated. The control groups received no typewriter composition instruction.
3. Following the treatment, the four groups were given posttests to determine timed writing speeds and typewriter composition ability.
4. All tests were scored to determine timed writing NWAM and composition quality, errors, and quantity.
5. Data processing punch cards were prepared for each student containing the following information: student identification numbers, class identification numbers, student pretest and posttest scores for timed writings, and composition quality, errors, and quantity scores.
6. The data were subjected to an analysis of covariance at the Oregon State University Computer Center using the Vogelback Computing Center, Northwestern University, Statistical Package
for the Social Sciences (SPSS) program. The computer program is designed to compute the analysis of covariance with multiple covariates and unequal treatment group sizes.

7. Tests for significance of the computer-produced adjusted mean scores were made for the timed writings, composition quality scores, composition percent of error scores, and the composition quantity scores. These tests were conducted using the combined scores obtained from Oregon State University and Portland Community College. The same tests were run for each experimental site separately as well. The $F$ statistic and the significance of $F$ are scored by the computer.
V. RESULTS AND CONCLUSIONS

Chapter IV presents the statistical data obtained from the pre-test and posttest scores for timed writings and scores for composition quality, errors, and quantity. The data was analyzed using the analysis of covariance technique to determine if significant differences existed among group mean scores in terms of the effect of the treatment. The computer-generated F statistic was used for significance testing of differences between adjusted mean scores.

Statistical Analysis

The analysis of covariance was used in testing the four null-hypotheses based on the combined scores from Oregon State University and Portland Community College as well as the separate scores obtained at the two schools. The analysis of covariance utilizes both analysis of variance and regression procedures. The pretest scores were considered as the covariants (independent) factors and posttest scores were the dependent variables. If the computer-produced F value was found to be greater than the tabular F value at the .05 level of significance, the hypotheses were rejected. If the computed F value was found to be less than the tabular F value, the hypotheses were retained. The analysis of covariance results are shown in Tables XIII, XIV XV, and XVI. The adjusted mean scores are shown in Tables XVII, XVIII, XIX, and XX.
TABLE XIII. ANALYSIS OF COVARIANCE
ADJUSTED COMPUTED VALUES

Timed Writings

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
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<th>Mean Square</th>
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<th>Signif. of F**</th>
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*Degrees of Freedom

**Significance of F—Computer Generated
### TABLE XIV. ANALYSIS OF COVARIANCE
ADJUSTED COMPUTED VALUES

Composition Quality

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*Degrees of Freedom
**Significance of F--Computer Generated
### TABLE XV. ANALYSIS OF COVARIANCE
ADJUSTED COMPUTED VALUES

Composition Percent of Error***

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*Degrees of Freedom

**Significance of F—Computer Generated

*** Composition Errors = Composition Percent of Error

Composition Quantity
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*Degrees of Freedom

**Significance of F--Computer Generated
TABLE XVII. ADJUSTED MEAN SCORES
Timed Writings

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<th>Source of Mean</th>
<th>Control Group</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Groups</td>
<td>44.21</td>
<td>46.55</td>
</tr>
<tr>
<td>OSU</td>
<td>45.31</td>
<td>46.64</td>
</tr>
<tr>
<td>PCC</td>
<td>42.46</td>
<td>46.34</td>
</tr>
</tbody>
</table>

TABLE XVIII. ADJUSTED MEAN SCORES
Composition Quality

<table>
<thead>
<tr>
<th>Source of Mean</th>
<th>Control Group</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Groups</td>
<td>22.57</td>
<td>21.85</td>
</tr>
<tr>
<td>OSU</td>
<td>22.46</td>
<td>22.40</td>
</tr>
<tr>
<td>PCC</td>
<td>22.48</td>
<td>20.73</td>
</tr>
</tbody>
</table>
### TABLE XIX. ADJUSTED MEAN SCORES

Composition Percent of Error*

<table>
<thead>
<tr>
<th>Source of Mean</th>
<th>Control Group</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Groups</td>
<td>3.61%</td>
<td>4.91%</td>
</tr>
<tr>
<td>OSU</td>
<td>3.39%</td>
<td>4.61%</td>
</tr>
<tr>
<td>PCC</td>
<td>3.79%</td>
<td>6.00%</td>
</tr>
</tbody>
</table>

* Composition Errors = Composition Percent of Error

### TABLE XX. ADJUSTED MEAN SCORES

Composition Quantity

<table>
<thead>
<tr>
<th>Source of Mean</th>
<th>Control Group</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Groups</td>
<td>158.28</td>
<td>187.92</td>
</tr>
<tr>
<td>OSU</td>
<td>166.13</td>
<td>205.73</td>
</tr>
<tr>
<td>PCC</td>
<td>138.67</td>
<td>153.20</td>
</tr>
</tbody>
</table>
Results

The problem of this pilot study was to determine whether students using a series of planned exercises designed to improve typewriter composition skills would be better able to compose at the typewriter than students in a control group. The study was also concerned with the effect that the use of the composition materials had on the basic typewriting skills of the students. In order to determine whether or not this was accomplished, the following null-hypotheses were tested at the .05 level of confidence:

Null-Hypothesis 1

Null-Hypothesis 1 states that "There is no significant difference in the basic typewriting skills between the experimental and control groups."

Combined OSU and PCC computed F value generated by the analysis of covariance was determined to be 1.530 and the tabular F value at the .05 level of significance was 4.04. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.

Oregon State University computed F value generated by the analysis of covariance was determined to be .370 and the tabular F value at the .05 level of significance was 4.15. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.

Portland Community College computed F value generated by the analysis of covariance was determined to be 1.239 and the tabular F value at the .05 level of significance was 4.60. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.
The computer-generated significance of F values (Combined=.222, OSU=.547, PCC=.284) support these findings.

Null-Hypothesis 2

Null-Hypothesis 2 states that "There is no significant difference in typewriter composition quality between the experimental and control groups."

Combined OSU and PCC computed F value generated by the analysis of covariance was determined to be 3.655 and the tabular F value at the .05 level of significance was 4.04. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.

Oregon State University computed F value generated by the analysis of covariance was determined to be .017 and the tabular F value at the .05 level of significance was 4.15. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.

Portland Community College computed F value generated by the analysis of covariance was determined to be 2.653 and the tabular F value at the .05 level of significance was 4.60. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.

The computer-generated significance of F values (Combined=.062, OSU=.896, PCC=.126) support these findings.

Null-Hypothesis 3

Null-Hypothesis 3 states that "There is no significant difference in typewriter composition errors between the experimental and control groups."
Combined OSU and PCC computed F value generated by the analysis of covariance was determined to be 4.001 and the tabular F value at the .05 level of significance was 4.04. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.

Oregon State University computed F value generated by the analysis of covariance was determined to be 4.908 and the tabular F value at the .05 level of significance was 4.15. Because the computed F value was larger than the tabular F value, the null hypothesis was rejected.

Portland Community College computed F value generated by the analysis of covariance was determined to be 1.901 and the tabular F value at the .05 level of significance was 4.60. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.

The computer-generated significance of F values (Combined=.051, OSU=.034, PCC=.190) support these findings.

Null-Hypothesis 4

Null-Hypothesis 4 states that "There is no significant difference in typewriter composition quantity between the experimental and control groups."

Combined OSU and PCC computed F value generated by the analysis of covariance was determined to be 9.516 and the tabular F value at the .05 level of significance was 4.04. Because the computed F value was larger than the tabular F value, the null hypothesis was rejected.

Oregon State University computed F value generated by the analysis of covariance was determined to be 20.885 and the tabular F value at the
0.05 level of significance was 4.15. Because the computed F value was larger than the tabular F value, the null hypothesis was rejected.

Portland Community College computed F value generated by the analysis of covariance was determined to be 0.321 and the tabular F value at the 0.05 level of significance was 4.60. Because the computed F value was smaller than the tabular F value, the null hypothesis was retained.

The computer-generated significance of F values (Combined=.003, OSU=.001, PCC=.580) support these findings.

The null-hypotheses significance test results are given in tabular form in Table XXI.

**TABLE XXI. NULL-HYPOTHESES SIGNIFICANCE TEST RESULTS**

<table>
<thead>
<tr>
<th>Source of NH</th>
<th>Computed F</th>
<th>Critical F</th>
<th>Retained</th>
<th>Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined OSU and PCC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 1</td>
<td>1.530</td>
<td>4.04</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 2</td>
<td>3.655</td>
<td>4.04</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 3</td>
<td>4.001</td>
<td>4.04</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 4</td>
<td>9.516</td>
<td>4.04</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>OSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 1</td>
<td>.370</td>
<td>4.15</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 2</td>
<td>.017</td>
<td>4.15</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 3</td>
<td>4.908</td>
<td>4.15</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Null-Hypothesis 4</td>
<td>20.885</td>
<td>4.15</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>PCC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 1</td>
<td>1.239</td>
<td>4.60</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 2</td>
<td>2.653</td>
<td>4.60</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 3</td>
<td>1.901</td>
<td>4.60</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Null-Hypothesis 4</td>
<td>.321</td>
<td>4.60</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Conclusions

Based on the foregoing results, the following conclusions may be reached:

Combined OSU and PCC

The adjusted mean scores for the Timed Writings for the Control Group (44.21) and the Experimental Group (46.55) indicate that the Experimental Group increased their basic speed to a greater degree than the Control Group; however, this increase was not significant.

The adjusted mean scores for the Composition Quality ratings for the Control Group (22.57) and the Experimental Group (21.85) indicate that the Control Group attained a higher degree of quality in their writings than did the Experimental group; however, this increase was not significant.

The adjusted mean scores for the Composition Percent of Error for the Control Group (3.61%) and the Experimental Group (4.91%) indicate that the Control Group maintained a greater degree of control over composition errors than did the Experimental group; however, the differences in the degree of control was not significant.

The adjusted mean scores for the Composition Quantity ratings for the Control Group (158.28) and the Experimental Group (187.92) indicate that the Experimental Group increased the quantity of their compositions to a significant degree over the Control Group.

Oregon State University

The adjusted mean scores for the Timed Writings for the Control Group (45.31) and the Experimental Group (46.64) indicate that the
Experimental Group increased their basic speed to a greater degree than the Control Group; however, this increase was not significant.

The adjusted mean scores for the Composition Quality ratings for the Control Group (22.46) and the Experimental Group (22.40) indicate that the Control Group attained a slightly higher degree of quality in their writings than did the Experimental group. The increase was not significant.

The adjusted mean scores for the Composition Percent of Error for the Control Group (3.39%) and the Experimental Group (4.61%) indicate that the Control Group maintained a significantly greater degree of control over composition errors than did the Experimental group.

The adjusted mean scores for the Composition Quantity ratings for the Control Group (166.13) and the Experimental Group (205.73) indicate that the Experimental Group increased the quantity of their compositions to a significant degree over the Control Group.

Portland Community College

The adjusted mean scores for the Timed Writings for the Control Group (42.46) and the Experimental Group (46.34) indicate that the Experimental Group increased their basic speed to a greater degree than the Control Group; however, this increase was not significant.

The adjusted mean scores for the Composition Quality ratings for the Control Group (22.48) and the Experimental Group (22.40) indicate that the Control Group attained a slightly higher degree of
quality in their writings than did the Experimental group. The difference was not significant.

The adjusted mean scores for the Composition Percent of Error for the Control Group (3.79%) and the Experimental Group (6.00%) indicate that the Control Group maintained a greater degree of control over composition errors than did the Experimental Group; however, the degree of control was not significant.

The adjusted mean scores for the Composition Quantity ratings for the Control Group (138.67) and the Experimental Group (153.20) indicate that the Experimental Group increased the quantity of their compositions over the Control group; however, this increase was not significantly better.

**Summation**

In all instances the adjusted mean scores for the Timed Writings were larger for the Experimental Groups, but not to a significant degree.

In all instances the adjusted mean scores for the Composition Quality scores were larger for the Control Groups, but not to a significant degree.

In all instances the adjusted mean scores for the Composition Percent of Error was greater for the Experimental Groups, significantly so for the OSU Group.

In all instances the adjusted mean scores for the Composition Quantity scores were larger for the Experimental Groups, significantly so for the Combined Groups and for the OSU Group.
Discussion

The retention of Null-Hypothesis 1 supports the idea that the use of the developed composition material in the experimental classes did not interfere with development of the basic timed writing speeds of the students in those classes. Indeed, the higher adjusted means for the experimental classes (Combined = +2.34, OSU = +1.33, PCC = +3.88) may indicate that the treatment helped to increase their speeds. The first objective of the composition material used in the experimental classes was to get the students to react at an ever-increasing speed to stimuli.

The retention of Null-Hypothesis 2 supports the idea that the use of the developed composition material in the experimental classes did not significantly interfere with the quality of the student's compositions. While the Control Groups received higher adjusted mean scores in all instances, the differences were slight (Combined = +.72 OSU = +.06, PCC = +1.75). As the emphasis of all the exercises used in the experimental classes during this experiment was to increase composition speed, it is not surprising that there was not a significant differences in quality scores. Increasing composition quality is stressed in later exercises.

Null-Hypothesis 3 was retained for the Combined and the PCC Groups. It was rejected for the OSU Group. The adjusted mean percent of error increased in all cases in the experimental groups (Combined = +1.30% OSU = +1.22%, PCC = +2.24%). There may be several reasons for this. First of all, accuracy and technical correctness are not stressed
during the early stages of the typewriting composition development process. This appears to be a standard procedure for those teachers who have used typewriting composition drills in the past (see page 5 for a discussion of quality and technical accuracy of compositions). As in teaching the basic beginning typewriting skill, too much stress on errors at the early learning stage will hamper the student's development of this new skill. It is also well known among typewriting teachers that in order to increase basic typewriting speed, one must initially sacrifice accuracy to attain that higher speed. It is the investigator's belief that this is true with the teaching of typewriting composition as well.

Null-Hypothesis 4 was rejected for the Combined Groups and for OSU. While it was retained for PCC, the increase in composition speed in the experimental groups was rather impressive. The increases, based on the adjusted mean scores, are as follows: Combined Groups = +29.64 words; Oregon State University = +39.60 words; and Portland Community College = +14.53 words. These increased speeds indicate that the use of the developed composition materials in the experimental classes did contribute to increasing the students' composition speed at the typewriter.

Recommendations for Further Study

Based on the foregoing analysis of the data and the conclusions and discussion that followed, and because the final student population used in the study was so small, these recommendations are made:
1. The significant increase made in the composition quantity scores attained at Oregon State University call for further use and testing of the typewriting composition material at other similar postsecondary institutions to determine whether the same results will be forthcoming, especially with a larger student population.

2. As the typewriting composition material is designed to be used over a longer period of time than a ten-week quarter, it is recommended that use and testing of the material continue for longer periods of time, with frequent checks being made on student's progress. It is especially important to find out whether longer exposure to the composition exercises will eventually lead to an increase in the quality of the compositions and a decrease in technical errors.

3. Because of the retention of all four null-hypotheses at Portland Community College, it is recommended that further testing take place at the community college level with larger student populations in an attempt to discover if the results will be the same and, if so, why.

4. Because of the perceived need for this type of material at the secondary level, it is recommended that the typewriting composition exercises be suitably revised and made available to secondary teachers for experimental use.

5. Any further research should have more than one qualified person score the compositions independent of each other for the quality ratings. Also, it is recommended that close contact be maintained with the experimental sites in order to exercise a great deal of control over teaching methodology and use of the materials.
VI. SUMMARY

The purpose of this pilot study was to determine whether it was possible to improve typewriting composition ability by using a set of materials designed for this purpose without decreasing the student's basic typing skill. The design of the study called for the testing of the null-hypotheses through covariance analysis based on the adjusted mean scores obtained from the combined scores of the control and experimental classes of all the schools using the material.

While the results have been encouraging, further testing of the materials is needed. Teachers at all levels of education should be encouraged to use the materials as a basis for experimental study in developing typewriter composition ability.

Alma Sue George, the business education instructor who ran the experiment at Portland Community College, stated in a letter to the investigator dated May 17, 1978, the following:

The students were very enthusiastic about the materials—the response was markedly improved by the end of the term. I saw great improvement in spelling, speed in responding at the typewriter, and the rapidity with which they were able to correct rough drafts.

And this was from the teacher of the group that showed no significant increase in their composition ability!

Connie Palmer, the business teacher at Oregon State University who also used the typewriter composition material during the experiment, wrote in a letter to the investigator dated March 25, 1978, the following:
Your idea is great. This is such a neglected area of typewriting. It would be ideal in secondary school and would certainly provide a great deal of fun and motivation with the students.

As an illustration of how people not involved in the experiment have responded to the material, Alma George concluded her May 17 letter by saying, "If you publish these materials in a book, most of our teachers will be interested in . . . a copy."
SELECTED REFERENCES


TEACHER "HELP SHEET"

Welcome to THE GREAT TYPEWRITER COMPOSITION EXPERIMENT. Enclosed are the materials necessary for your part in the experiment. Please feel free to reproduce them as you see fit.

I have tried to make the use of the materials as easy and practical as possible. You will probably want to give the material an initial early cursory reading to get a "feeling for" teaching typewriter composition. You may wish to make marginal notations and/or underline pertinent passages for future reference.

In addition to the actual coded exercises, you will also find the following material:

1. How to Use Typewriter Composition Exercises
2. Introduction Section of Doctoral Dissertation
3. Review of Related Literature and Interviews Section of Doctoral Dissertation
4. Student Guides for Typewriter Composition (to be reproduced for students)
5. Pretest/Posttest Activities (related specifically to this experiment)
6. Teacher Evaluation Forms (specifically for this experiment)
7. Typewriter Composition Exercises Table of Contents

Here are some general guidelines to use during the experiment. By following these guidelines, you will aid me greatly when I critique the experiment.

1. Do not let the students know that they are involved in an experiment. If the students become aware that they are doing something different from the other section and question you about it, I urge you to use your discretion in the matter. While I do not expect you to "lie" to the students, a "little white fib" might be useful. I am sure they will understand if you apprise them of the situation after the final examination. It is okay to let students know about the experiment after the final examination in any case.
2. In order for the results of this experiment to be tested, it is necessary to use the developed material within the following guidelines. Please adhere to them as judiciously as possible. You may select any exercise within a series classification as indicated below:

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Series 100 - 109</th>
<th>5-10 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>Series 110 - 119</td>
<td>5-10 minutes</td>
</tr>
<tr>
<td>Week 2</td>
<td>Series 130 - 139</td>
<td>5-10 minutes</td>
</tr>
<tr>
<td>Week 3</td>
<td>Series 140 - 149</td>
<td>5-10 minutes</td>
</tr>
<tr>
<td>Week 3</td>
<td>Series 150 - 169</td>
<td>5-10 minutes</td>
</tr>
<tr>
<td>Week 4</td>
<td>Series 170 - 179</td>
<td>10-15 minutes</td>
</tr>
<tr>
<td>Week 5</td>
<td>Series 200 - 209</td>
<td>10-15 minutes</td>
</tr>
<tr>
<td>Week 6</td>
<td>Series 210 - 219</td>
<td>10-15 minutes</td>
</tr>
<tr>
<td>Week 7</td>
<td>Series 300 - 309</td>
<td>15-20 minutes</td>
</tr>
<tr>
<td>Week 8</td>
<td>Series 310 - 319</td>
<td>15-20 minutes</td>
</tr>
<tr>
<td>Week 9</td>
<td>Series 320 - 329</td>
<td>15-20 minutes</td>
</tr>
<tr>
<td>Week 10</td>
<td>Series 400 - 409</td>
<td>15-20 minutes</td>
</tr>
</tbody>
</table>

3. Fill out a Teacher Evaluation Form for each activity used. Also, fill out this form after the initial handing out of the Student Guide and for any subsequent discussion about typewriter composition; this will be considered as part of the total time that is used in developing typewriter composition skill.

Please keep track of any expenses (reproduction, mailing, etc.) you personally incur as part of this experiment. I shall reimburse you for all such expenses at the end of the experiment. If at any time you feel that it would be helpful to talk to me personally, please feel free to call me COLLECT at (216) 835-2531, my home phone. I am usually home evenings Monday through Thursday. If you prefer to dial direct, please do so and report the expense on your expense sheet.
The Business Education staff at Oregon State University and I feel that this material has merit. We all know that typewriter composition skills need to be developed in our students. It is my feeling (and I know from my brief talks with you that you share this feeling) that this is going to be the start of something big in the typewriting field.

Please be critical. It is the only way that I can develop this material further. The results should prove interesting. I will let you know how they turn out. My sincere thanks for your involvement in THE GREAT TYPEWRITER COMPOSITION EXPERIMENT.
HOW TO USE TYPEWRITER COMPOSITION EXERCISES

These materials were developed specifically to be used in typewriting or typewriting-related classes at the postsecondary level. The exercises are designed to take the student from simple tasks to more complex tasks. These tasks, in rank order from simple to complex, are (1) word response exercises, (2) short response exercises, (3) sentence response exercises, (4) paragraph response exercises, (5) letter response exercises, and (6) essay response exercises. The orderly arrangement of these titles with a subsequent variety of exercises is indicated in the Table of Contents.

It will be noted that some of the categories have been developed to a higher degree than others. The coding system was developed so as to allow for further development in these areas. The material is packaged in such a way as to provide flexibility. Items can easily be removed, categories enlarged, and items changed without disrupting the general order of the complete package.

Precomposition Indoctrination

Early in the course each student should be furnished with Student Guides for Typewriter Composition. After the students have read the handout, the teacher should lead a brief discussion on the objectives of typewriter composition and the merits of learning the skill. To aid the teacher in leading this discussion, the Introduction and Review of Related Literature and Interviews sections of a Doctoral Dissertation entitled A Measurement of the Performance Levels of Selected Oregon Postsecondary Students Using Composition Material in
Typewriting has been included with the materials. It is important to stress early in the course that these exercises are designed to help the student develop a skill that will prove useful for the rest of their lives, a skill that will remove the drudgery of pencil-and-paper composition forever. Not only will this skill be a valuable asset in their everyday personal correspondence, but it will prove even more valuable in the business world.

Teaching Procedures

In teaching students to think at the typewriter, proceed from the easy, fun-type activities to more difficult personal-use exercises. Make sure that the students feel confident in each activity level area before moving on to the next level of difficulty.

Make sure that all exercises are accomplished by using the typewriter. Discourage students from making pencil notations of any kind. Remind students that they are preparing rough drafts and that pencil corrections may be made before preparing the final copy.

It is important that students complete the following three steps starting with their very first exercise:

1. Type thoughts on paper quickly (refer to Student Guides)
2. Correct drafted copy using the dictionary where necessary
3. Type the final copy

The final step may be completed outside of class as a homework exercise. This will reserve more class time for actual composition where teacher supervision is more important.
A Word About Testing

You are helping students develop a rather complex skill, one that calls for both typewriting skill and composition skill. It is important that you "praise a lot and criticize little" in the early developmental stages. If testing is an absolute necessity, do it at the end of the course when the student's skill will be at his peak.

It is suggested that final compositions be graded based on content and technical construction. First, rate the paper for its originality of thought and the creative effort which has gone into the composition. This subjective rating should be assigned a quantitative number to reflect an A, B, C, D, or F grade. The next step is to check the paper for technical accuracy. Points should be subtracted for typographical errors (final copy only) as well as for errors in punctuation, grammar, spelling, and poor use of the English language.
APPENDIX A (Continued)

STUDENT GUIDES FOR TYPEWRITER COMPOSITION

Typewriter composition skill development may prove to be the most valuable communications skill you will acquire since you have learned to write. You will have the opportunity in this class to participate in a number of drills designed to aid you in building your typewriter composition skill. These exercises start with situations that call for simple, one-word responses. Soon you will be responding to exercises that call for more complete statements, and then you will move on to complete-sentence responses. Finally, you will have the ability to compose whole paragraphs at the typewriter. All of these exercises are designed to remove the drudgery of pencil and paper composition and replace it with a skill that will improve your writing efficiency.

Rough copy is usually the first product of typewriter composition. Read over the following tips. They will help you to make your rough copy "readable" in spite of needed corrections.
1. Don't worry about obvious misspellings—leave them for later correction.
2. Ignore typing errors.
3. Do not strike-over or cross out errors.

The object is to get your thoughts down on paper. These three steps will help you to keep your carriage moving forward. Now, here is what to do when you have a complete change of thought.
1. Space forward four or five spaces to indicate your change of thought.
2. Retype the last "clue" word (one that is easily identifiable) from the material you have written.
3. Continue typing the new thought.

When you are going over your draft, you can cross out with a pencil any unnecessary words. Here is an example:

Composition at the typewriter demands that the writer does not let does not tolerate interruption of the thought processes.
In fact, the typist should keep the typewriter moving forward as quickly as consistently as possible.

This sentence would be retyped in final copy as:

Composition at the typewriter demands that the writer does not tolerate interruption of the thought processes. In fact, the typist should keep the typewriter moving forward as consistently as possible.
PRETEST/POSTTEST ACTIVITIES

Just before using the first composition material, administer the following pre-tests to both the control and experimental groups. This may be done near the end of the first week of class to allow the students to develop a certain familiarity with their new typewriters.

**Five-minute Timed Writing**

Have the students set a 70-space line, double spacing, and a 5-space paragraph indentation in preparation for the timed writing. Next have the students place their name, the date, and some sort of section identification number (class time is okay) at the top of the paper at the left margin. This will make it easier for me to identify the control from the experimental groups and to make final comparisons at the end of the study.

Time the material for 5 minutes and then have the students circle their errors. It is not necessary for the student to figure his rate unless you desire it for your records. Collect the writings and combine them identifying them as control group pretests and experimental group pretests.

**Composition Exercise**

Announce to the students that they are to compose some biographical data for your use. They are to explain something about themselves and their families. In essence, they are to prepare a short "Roots" report on themselves. List the following time constraints on the chalkboard:

- A. Preparation of rough draft: 8 minutes
- B. Correction of rough draft: 3 minutes
- C. Preparation of final copy (erase errors): 5 minutes

Have all students use a 70-space line, double spacing and 5-space paragraph indentions (for consistency). Place the word "ROOTS" on the chalkboard to provide a focal point for the students’ thinking.
APPENDIX A (Continued)

Pretest/Posttest Activities

It is important that the time constraints be followed exactly, as this is necessary to establish validity for this test.

Have the students place their names, the date, and section identification in the upper left-hand corner of their papers. Staple the final copy on top of the rough draft, stapling them in the upper left-hand corner. Collect the compositions and combine them identifying them on a separate sheet of paper as control group pretests and experimental group pretests. Save all pretest materials for mailing with the posttests (similarly identified) at the end of the quarter.

POSTTESTS

After the administration of the last composition exercises at the end of the quarter, repeat the pretests as indicated below:

Five-minute Timed Writing

Use the same timed writing and directions that were used as the pretest. Collect the writings and identify them as posttests in the same manner as indicated above.

Composition Exercise

Announce to the students that they are again going to compose biographical data on themselves. They may repeat any information they previously gave and may add information as they see fit. Once again, place the word "ROOTS" and the time constraints on the chalkboard. Use the same machine set up and collection routine as for the pretest. Collect the compositions and identify them on a separate sheet of paper as to control or experimental posttests.

Combine all pretests and posttests into one package along with the teacher evaluation forms and mail them to: Donald J. Plagens
2364 Columbia Road
Westlake, OH 44145
### TEACHER EVALUATION FORM

<table>
<thead>
<tr>
<th>Date:</th>
<th>Exercise Code No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Constraints:</td>
<td>Composition Time (include dictation time if appropriate)</td>
</tr>
<tr>
<td></td>
<td>Proofreading Time</td>
</tr>
<tr>
<td></td>
<td>Final Draft Time (If final draft completed outside of class, indicate &quot;OC&quot;)</td>
</tr>
<tr>
<td></td>
<td>Total class time devoted to composition (need not necessarily be same as total of first three times as it may include explanation of directions, distribution of necessary materials, or discussion of the exercise)</td>
</tr>
</tbody>
</table>

**Students Absent**

**Teacher Comment on Exercise (if any)**
6A: 5-Minute Timed Writing

Directions: Use a 70-space line, double spacing, and a 5-space paragraph indentation. If you complete the paragraphs before time is called, start again at the beginning. When time is called, determine your gwam and errors; record the score in the appropriate block.

<table>
<thead>
<tr>
<th>gwam</th>
<th>errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>5' GWAM</td>
<td>3</td>
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<tr>
<td></td>
<td>5</td>
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<td></td>
<td>43</td>
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<tr>
<td></td>
<td>44</td>
</tr>
</tbody>
</table>

All letters are used.

A woman was surprised when her bank statement arrived, listing a balance that was more than the balance she had in her checkbook. She just assumed it meant she really had more money in the bank. Later she must have been shocked when she realized the reason she had the larger figure from the bank was because of outstanding checks.

An outstanding check is one that has been written by a depositor but has not been turned into the bank to be cashed. When the check is cashed by the bank the amount of the check is deducted from a depositor's bank balance. Imagine the rude awakening the woman must have had when she discovered that she did not possess more money after all.

It is really an easy task to take care of seeing that one's checkbook balance is equal to the bank statement balance. This task of checking is called reconciling the bank statement. The back of a bank statement usually tells how to reconcile the bank statement. Do plan to take time to learn how to reconcile the bank statement; then you won't find yourself in an odd spot as the woman did in the example above.
### APPENDIX B

**TYPEWRITER COMPOSITION EXERCISES**

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APPENDIX B (Continued)

Word Response--questions Code: 100

Instructions: Students are to type one-word responses to the questions. Do not worry about spelling or typing errors. Students may watch the paper as they type—-they may not watch their fingers.

Approximate time: 5-10 minutes

Questions:

1. Have you ever had a job?

2. Have you ever ridden on a train or the rapid transit?

3. Do you own your own typewriter?

4. What is the color of your hair?

5. What is your favorite hobby?

6. What is your favorite flower?

7. Which meal do you like best?

8. In which month is your birthday?

9. Which day of the week do you like best?

10. What is the name of a United States president?

Instructions: Make any pencil corrections you wish and look up any spelling words. Retype the list.
Instructions: Students are to type one-word responses to the questions. Do not worry about spelling or typing errors. Students may watch the paper as they type—they may not watch their fingers.

Approximate time: 5-10 minutes

Questions:

1. What is your first name?
2. What is your last name?
3. What is the name of the County in which you live?
4. What class do you have before this one?
5. What is your favorite class?
6. What class do you have after this one?
7. What is my last name?
8. What is the last name of the college president?
9. What City do you live in?
10. What State do you live in?

Instructions: Make any pencil corrections you wish and look up any spelling words. Retype your answers.
APPENDIX B (Continued)

Word Response—questions

Instructions: Students are to type one-word responses to the questions. Do not worry about spelling or typing errors. Students may watch the paper as they type—they may not watch their fingers.

Approximate time: 5-10 minutes

Questions:
1. What is your favorite color?
2. What is your favorite food?
3. What musical instrument do you like best?
4. What is your hobby?
5. What day is today?
6. What is your favorite holiday?
7. What month is this?
8. What color are your eyes?
9. Are you married?
10. What is the first name of your closest friend?

Instructions: Make any pencil corrections you wish and look up any spelling words. Retype your answers.
APPENDIX B (Continued)

Word Response--questions Code: 103

Instructions: Students are to type one-word responses to the following questions. Do not worry about spelling or typing errors. Students may watch the paper as they type--they may not watch their fingers.

Approximate time: 5-10 minutes

Questions:

1. What is the name of the lake Cleveland* is located on?
2. What is the last name of the mayor in your city?
3. What are the call letters of your favorite TV station?
4. In what direction would you travel to go to Japan?
5. In what direction would you travel to go to Mexico?
6. Name a state you would like to visit.
7. Do you now have a job?
8. In which building do you spend most of your time on campus?
9. What one word describes how you get to school?
10. What is your favorite sport?

Instructions: Make any pencil corrections you wish and look up any spelling words. Retype your answers.

*You may substitute a city name more familiar to your students that is on a lake.
Word Response--questions

Instructions: Students are to type one-word responses to the following questions. Do not worry about spelling or typing errors. Students may watch the paper as they type--they may not watch their fingers.

Approximate time: 5-10 minutes

Questions:

1. What is your favorite beverage?
2. What flavor ice cream do you like best?
3. What color do you like least?
4. What school subject do you like least?
5. What is the Department Chairman's last name?
6. Do you like to dance?
7. Name a kind of tree?
8. Name a brand of car you would buy?
9. Who are better drivers--men or women?
10. In one word, describe your present mood?

Instructions: Make pencil corrections; look up any words you wish in the dictionary. Retype your answers.
APPENDIX B (Continued)

Instructions: I will dictate a series of ten words. As soon as I dictate a word, type an antonym (a word that means the opposite of the word I dictate) for that word. For example, if I dictate "good," you might type "bad." You will be allowed (number depends upon level of class) seconds to type an answer. Don't worry about spelling or typing errors. Do not look at your fingers.

Approximate time: 5-10 minutes

Words:
1. east
2. girl
3. black
4. fat
5. tall
6. small
7. up
8. rich
9. lost
10. begin

Instructions: Make pencil corrections; use your dictionary if you must. Retype your answers.
APPENDIX B (Continued)

Word Response--antonyms

Instructions: I will dictate a series of ten words. As soon as I dictate a word, type an antonym (a word that means the opposite of the word I dictate) for that word. For example, if I dictate "good," you might type "bad." You will be allowed ___ seconds to type an answer. Don't worry about spelling or typing errors. Type the first word that comes to mind. Do not look at your fingers.

Approximate time: 5-10 minutes

Words:
1. healthy
2. basement
3. man
4. adult
5. start
6. read
7. empty
8. circle
9. alive
10. sad

Instructions: Make corrections; use your dictionary if you must. Retype your answers.
APPENDIX B (Continued)

Word Response—antonyms

Instructions: As I dictate the following words, type the antonym (opposite meaning) of that word. For example, if I dictate "girl," you might answer "boy." Don't worry about typing errors or spelling. Do not look at your fingers.

Approximate time: 5-10 minutes

Words:

1. floor
2. sit
3. open
4. hot
5. sell
6. hard
7. clean
8. find
9. sleep
10. whisper

Instructions: Make corrections. Use the dictionary to check spellings where necessary. Retype your list.
APPENDIX B (Continued)

Word Response--antonyms

Instructions: As I dictate the following words, type the antonym (word of opposite meaning) that comes to mind. For example, if I dictate "buy," you might type "sell." Your time will be limited, so type quickly. Do not look at your fingers or worry about errors.

Approximate time: 5-10 minutes

Words:
1. give
2. run
3. work
4. push
5. raise
6. fill
7. frown
8. dumb
9. midnight
10. laugh

Instructions: Make corrections in pencil. Look up words in the dictionary if you need to. Retype the list.
Word Response—antonyms

Instructions: I will dictate a list of words. For each word, type an appropriate antonym (word that means the opposite). For instance, if I dictate "happy," you might type "sad." Do not worry about mistakes. Do not watch your fingers.

Approximate time: 5-10 minutes

Words:
1. talk
2. wet
3. south
4. lead (as in "you lead someone around by the nose")
5. fast
6. old
7. evil
8. daughter
9. careless
10. joy

Instructions: Make corrections on your list, checking the dictionary for words you are not sure of. Retype your list.
APPENDIX B (Continued)

Word Response--first word

Instructions: I will dictate a word to you. Type immediately the first word that comes to your mind, no matter what it is. Do not worry about spelling or typing errors. Type rapidly, as the words will come rather quickly.

Approximate time: 5-10 minutes

Words:
1. sun
2. cat
3. food
4. television
5. building
6. car
7. school
8. melt
9. chicken
10. tree
11. camera
12. typewriter
13. Cleveland*
14. money
15. water

Instructions: Check your list making corrections in pencil. Use the dictionary if you must. Retype the list.

*You may substitute a name of a large city in your state.
APPENDIX B (Continued)

Word Response--first word

Instructions: As I dictate the following words, type the first word that comes to your mind very quickly, no matter what it is. Do not concern yourself with spelling or typing errors. Type rapidly as the words will come rather quickly.

Approximate time: 5-10 minutes

Words:
1. letter
2. ocean
3. Hawaii
4. Texas
5. Alaska
6. college
7. beer
8. banana
9. movie
10. coffee
11. dictionary
12. library
13. shoes
14. wheels
15. threads

Instructions: Check your list making corrections in pencil. Look up words in the dictionary if you must. Retype the list.
APPENDIX B (Continued)

Word Response--first word

Instructions: As I did a word, type the first word that comes to mind. Do not concern yourself with typing errors or spelling. Just type the word quickly, as the next word will come rather quickly.

Approximate time: 5-10 minutes

Words:

1. leather
2. cow
3. chicken
4. zoo
5. castle
6. California
7. Mexico
8. Canada
9. oil
10. heavy
11. fire
12. magician
13. teacher
14. plane
15. basketball

Instructions: Check your list making corrections in pencil. If you are not sure of the spelling of a word, use your dictionary. Retype the list.
APPENDIX B (Continued)

Word Response--first word

Instructions: As I dictate the following words, type the first word that comes to your mind. There are no right or wrong answers--just type a response quickly.

Approximate time: 5-10 minutes

Words:
1. insect
2. trash
3. government
4. student
5. union
6. central
7. lamp
8. closet
9. red
10. pool
11. New York
12. snow
13. rain
14. window
15. popcorn

Instructions: Go over your list making any corrections in pencil. If you are not sure of the spelling of a word, use your dictionary. Retype the list.
APPENDIX B (Continued)

Word Response--first word

Instructions: As I dictate the following words, type the first word that comes into your mind. There are no wrong or correct words. The main thing is to respond quickly. Do not look at your fingers as you type.

Approximate time: 5-10 minutes

Words:
1. Yellowstone
2. bright
3. camera
4. Halloween
5. deodorant
6. Halle's*
7. radio
8. pen
9. bag
10. Columbus
11. river
12. fly
13. green
14. war
15. cigarette

Instructions: Check your list for errors making corrections in pencil. Check the dictionary for words you have doubts about. Retype your list.

*You may substitute the name of a well-known store in your State.
APPENDIX B (Continued)

Word Response--rhymes  

Instructions: I will dictate a series of words. Type any word that rhymes with the one I dictate. Type quickly, as I will dictate the words at a rapid rate.

Approximate time: 5-10 minutes

1. age
2. host
3. fun
4. burn
5. drop
6. ache
7. hire
8. beach
9. cat
10. rent
11. book
12. bell
13. care
14. cord
15. bed

Instructions: Check your list for errors, making corrections in pencil. Check your spelling. Retype your list.
APPENDIX B (Continued)

Word Response—rhymes

Instructions: As I dictate the following words, type a word that rhymes with it. Type quickly, as I will dictate the words rather rapidly. Do not concern yourself with typing or spelling errors.

Approximate time: 5-10 minutes

Words:
1. ache
2. blur
3. cog
4. drab
5. ever
6. gag
7. host
8. in
9. judge
10. knock
11. let
12. main
13. nut
14. oar
15. nat

Instructions: Make corrections on your list in pencil. Use the dictionary if you must. Retype the list.
APPENDIX B (Continued)

Word Response--rhymes

Instructions: As I dictate the following words, type the first word that comes to mind that rhymes with the dictated word. As the words will be dictated rather quickly, do not hesitate. Do not worry about spelling or typing errors.

Approximate time: 5-10 minutes

Words:
1. quack
2. roll
3. sap
4. tub
5. us
6. very
7. way
8. yet
9. zeal
10. zip
11. yellow
12. wrung
13. vote
14. under
15. troop

Instructions: Proofread your work, making corrections in pencil. Use the dictionary if necessary. Retype the list.
APPENDIX B (Continued)

Word Response--rhymes

Instructions: As I dictate the following words, type the first word that you can think of that rhymes with it. Work quickly as words will be given rapidly. Do not worry about spelling or typing errors.

Approximate time: 5-10 minutes

Words:
1. swing
2. such
3. round
4. river
5. bunch
6. cost
7. other
8. old
9. noon
10. name
11. mock
12. mix
13. loss
14. lake
15. jump

Instructions: Correct your list in pencil, checking the dictionary for uncertain words. Retype the list.
APPENDIX B (Continued)

Word Response--rhymes

Instructions: Fifteen words will be dictated to you. You are to type the first word you can think of that rhymes with the dictated word. Work quickly, as the words will be given at a rather fast pace. Do not worry about spelling or typing errors.

Approximate time: 5-10 minutes

1. jeep
2. ire
3. ice
4. honey
5. heart
6. gift
7. gold
8. frost
9. foam
10. eye
11. erg
12. double
13. dandy
14. crib
15. blunder

Instructions: Correct the list in pencil, using the dictionary to check words you are unsure of. Retype the list.
APPENDIX B (Continued)

Word Response--listing

Instructions: Duplicate all the material below the line and pass out one sheet to each student. After he has made his listing, proofread for typing and spelling errors. Retype the list (centering each sport in advance classes). The object is to type as many sports as possible. Quantity is what is important.

Approximate time: 5-10 minutes

Americans are very sports minded. In the time allotted, type the names of as many sports as you can think of in the football below.
Instructions: Duplicate all the material below the line and pass out one sheet to each student. After he has made his listing, proofread for typing and spelling errors. Retype the list on a separate sheet of paper.

Approximate time: 5-10 minutes

Halloween is just around the corner. What things do you connect with Halloween? Type as many words or objects that you can think of in the time limit given by your teacher in the owl drawn below.
APPENDIX B (Continued)

Word Response--listing

Code: 152

Instructions: Duplicate all the material below the line and pass out one sheet to each student. After he has made his initial listing in the time given, proofread for typing and spelling errors. Retype the list on a separate sheet of paper.

Approximate time: 5-10 minutes

The holiday season is rapidly approaching. The Christmas and Hanukkah season has different meanings for each and every one of us. In the tree drawn below list as many things that are traditional to you at this time of year. Work quickly, as there will be a time limit as stated by your teacher.
Instructions: Duplicate all the material below the line and pass out one sheet to each student. After he has made his initial listing in the time given, proofread for typing and spelling (use dictionary if necessary) and have the students retype their lists on separate pieces of paper. Approximate time: 5-10 minutes

The Zoo is an exciting place to visit. List as many animals that you might find there in the time limit given. Do not worry about spelling or typing errors; the object is to list as many species as possible in the cage drawn below.
APPENDIX B (Continued)

Word Response--listing

Instructions: Duplicate all the material below the line and pass out one sheet to each student. After he has made his initial listing in the time given, proofread for typing and spelling errors. Retype the list on a separate piece of paper.

Approximate time: 5-10 minutes

There are fifty states. In the map of the United States reproduced below, list as many of these states as you can in the time allotted by your teacher.
Instructions: Duplicate all the material below the line and pass out one sheet to each student. After he has made his initial listing in the time given, proofread for typing and spelling errors. Retype the list on a separate piece of paper.

Approximate time: 5-10 minutes

Look about you in the typing room. In the outline of the typewriter drawn below, list as many items as you can that have been placed in this room in the time given by your instructor.
Instructions: Duplicate all the material below the line and pass out one sheet to each student. After he has made his initial listing in the time given, proofread for typing and spelling errors. Retype the list on a separate piece of paper.
Approximate time: 5-10 minutes

The Easter Season means many things to many people. In the outline of an egg given below list as many items as you can in the time limit given that Easter means to you.

When time is called, proofread your list for accuracy making corrections in pencil. Retype your list ranking the most important items first.
APPENDIX B (Continued)

Word Response--listing

Instructions: Duplicate all the material below the line and pass out one sheet to each student. After he has made his initial listing in the time given, proofread for typing and spelling errors. Retype the list on a separate piece of paper.

Approximate time: 5-10 minutes

In the circle given below, name all the things you can think of in the time limit given that are perfectly round.
APPENDIX B (Continued)

Word Response--listing

Instructions: Place the following words on the chalkboard at one-minute intervals. The student is to make as many words as he can out of each word listed in a minute's time. Letters may be only used as many times as they are given in the original word. Instruct students not to worry about typing errors.

Approximate time: 10-15 minutes

Words:

1. TYPEWRITER
2. COMPOSITION
3. CUYAHOGA (or the name of the county in which the school is located)
4. CLEVELAND (or the name of a large city in your state)
5. LAKE ERIE (or the name of a lake near your college)

Instructions: Retype the list using a five column tabulation using the base word as column headings.
APPENDIX B (Continued)

Word Response--listing

Instructions: Place the following words on the chalkboard at one-minute intervals. The students are to make as many words as they can out of each word listed in a minute's time. Letters may be used only as many times as they are given in the base word(s). Do not worry about typing errors.

Approximate time: 10-15 minutes

Words:
1. HALLOWEEN
2. GRAVE YARD
3. PUMPKIN PATCH
4. TRICK OR TREAT
5. WITCH, GHOST

Instructions: Retype the list using a five column tabulation with the base word serving as columnar headings.
Word Response--listing

Instructions: Place the following words on the chalkboard at one-minute intervals. The students are to make as many words as they can out of each word listed in a minute's time. Letters may be used only as many times as they are given in the base word(s). Do not worry about typing errors.

Approximate time: 10-15 minutes

Words:
1. CHRISTMAS
2. SANTA CLAUS
3. PRESENTS
4. HOLIDAY CHEER
5. PEACE ON EARTH

Instructions: Retype the list using a five-column tabulation with the base word(s) serving as columnar headings.
APPENDIX B (Continued)

Word Response--listing

Instructions: Place the following words on the chalkboard at one-minute intervals. The students are to make as many words as they can out of each word listed in a minute's time. Letters may be used only as many times as they are given in the base word(s). Do not worry about typing errors.

Approximate time: 10-15 minutes

Words:
1. VALENTINE
2. SWEETHEART
3. CUPID'S ARROW
4. CHOCOLATES
5. HEARTS, FLOWERS

Instructions: Retype the list using a five-column tabulation with the base word(s) serving as columnar headings.
APPENDIX B (Continued)

Word Response--listing  

Instructions: Place the following words on the chalkboard at one-minute intervals. The students are to make as many words as they can out of each word listed in a minute's time. Letters may be used only as many times as they are given in the base word(s). Do not worry about typing errors.

Approximate time: 10-15 minutes

Words:
1. WASHINGTON
2. BIRTHDAY
3. CHERRY TREE
4. GEORGE, MARTHA
5. FIRST PRESIDENT

Instructions: Retype the list using a five-column tabulation with the base word(s) serving as columnar headings.
Word Response--listing

Instructions: Place the following words on the chalkboard at one-minute intervals. The students are to make as many words as they can out of each word listed in a minute's time. Letters may be used only as many times as they are given in the base word(s). Do not worry about typing errors.

Approximate time: 10-15 minutes

Words:
1. EASTER SUNDAY
2. BUNNY RABBIT
3. COLORED EGGS
4. SUNRISE SERVICES
5. NEW BONNETS

Instructions: Retype the list using a five-column tabulation with the base word(s) serving as columnar headings.
APPENDIX B (Continued)

Word Response--miscellaneous  Code: 180

Instructions: Select a letter of the alphabet and give the students one minute to compose as many words as they can think of in that time. Do not erase or "X" out words.

Use five letters of the alphabet for each exercise. At the end of five minutes, have students look up words they were not sure of and correct spelling errors. Retype the list.

Approximate time: 5-10 minutes
APPENDIX B (Continued)

Short Responses--questions

Instructions: Students are to type short responses to the following questions. Do not worry about spelling or typing errors. Work quickly, as you will be allowed only 20 seconds to answer each question. Students may watch their papers as they type, but they may not watch their fingers.

Approximate time: 5-10 minutes

Questions:

1. What are the colors of the United States flag?
2. What is today's date?
3. What bar should you use to space between words?
4. Which two school subjects do you prefer?
5. What lever should you use when removing paper from your typewriter?
6. What is your favorite sport?
7. What are two items of furniture in this room?
8. What are the first names of two of your friends?
9. What is the contraction for cannot?
10. What symbol should you type for the word and?

Instructions: As I repeat the questions, type the answers in the form of complete sentences. Keep the sentences short as you will only have ___ seconds to type each answer.

Instructions: Proofread and correct errors in pencil. Retype the answers, numbering them from one to ten, and hand them in at the beginning of the next period.
APPENDIX B (Continued)

Short responses--questions  

Instructions: Students are to type short responses to the following questions. Do not worry about spelling or typing errors. Work quickly, as you will be allowed only 20 seconds to answer each question. Students may watch their papers as they type, but they may not watch their fingers.

Approximate time: 10-15 minutes

Questions:

1. What movie have you enjoyed in the last six months?
2. What is the title of your favorite song?
3. What class do you have just before typewriting?
4. What is the full name of this college?
5. What is your favorite time of year?
6. What street do you live on?
7. Where were you born, city and state?
8. What country would you most like to travel through?
9. When is your birthday?
10. Who is your favorite movie star?

Instructions: I will repeat the questions. This time, make your answers in the form of short declarative sentences. You will be allowed ___ seconds to answer.

Instructions: Proofread and correct errors in pencil. Retype the answers, numbering them from one to ten, and hand them in at the beginning of the next period.
APPENDIX B (Continued)

Short responses--questions

Instructions: Students are to type short responses to the following questions. Do not worry about spelling or typing errors. Work quickly, as you will be allowed only 20 seconds to answer each question. Students may watch their papers as they type, but they may not watch their fingers.

Approximate time: 10-15 minutes

Questions:

1. Type the first and last name of any president.
2. What is your full name?
3. What is your teacher's full name?
4. What is the name of a school you went to before this one?
5. What is your favorite breakfast cereal?
6. In what building on campus can you find the student health service?*
7. What is the name of a Cleveland newspaper?
8. What is the name of a Cleveland bank?
9. Who is the president of the college (first and last name)?
10. What is your favorite color combination?

Instructions: I will repeat the questions. This time, make your answers in the form of short declarative sentences. You will be allowed _ seconds to answer.

Instructions: Proofread and correct errors in pencil. Retype the answers, numbering them from one to ten, and hand them in at the beginning of the next period.

*Substitute local names if you wish.
Short responses--questions

Instructions: Students are to type short responses to the following questions. Do not worry about spelling or typing errors. Work quickly, as you will be allowed only 20 seconds to answer each question. Students may watch their papers as they type, but they may not watch their fingers.

Approximate time: 10-15 minutes

Questions:

1. What is something that you would like to be able to do better?
2. What is the name of the last book you read?
3. Who is someone you respect very much?
4. What is your favorite thing?
5. What is the name of a State and it's Capitol?
6. What does "U.S.A." stand for?
7. Name a continent that lies south of the equator.
8. What is the name of Cleveland's*"main street?"
9. Name a car you would buy and one you would not.
10. Who is (name the current Dean of Business)?

Instructions: I will repeat the questions. This time, make your answers in the form of short declarative sentences. You will be allowed _____ seconds to answer.

Instructions: Proofread and correct errors in pencil. Retype the answers, numbering them from one to ten, and hand them in at the beginning of the next period.

*Substitute a local city if you wish.
APPENDIX B (Continued)

Short responses--questions  

Code: 204

Instructions: Students are to type short responses to the following questions. Do not worry about spelling or typing errors. Work quickly, as you will be allowed only 20 seconds to answer each question. Students may watch their papers as they type, but they may not watch their fingers.

Approximate time: 10-15 minutes

Questions:

1. What is the first and last name of your favorite president?
2. Who, in your opinion, was our worst president?
3. Name any National Park.
4. What is a great lake other than Lake Erie?
5. What did you have for breakfast this morning?
6. What are two colors found in nature?
7. Two foods I can't stand are . . . ?
8. What are the names of two birds?
9. What is your favorite and least favorite season of the year?
10. If you could travel anywhere in the world, where would you go?

Instructions: I will repeat the questions. This time, make your answers in the form of short declarative sentences. You will be allowed 20 seconds to answer.

Instructions: Proofread and correct errors in pencil. Retype the answers, numbering them from one to ten and hand them in at the beginning of the next class period.
APPENDIX B (Continued)

Short Responses--completion  

Instructions: I will dictate the beginning of a sentence. Type the sentence as I dictate it (don't worry about spelling or typing errors) and finish it in your own words. Some will be familiar, some will not. Remember to work quickly as you will only have 15 seconds to complete each sentence.

Approximate time: 10-15 minutes

Statements:

1. Where there's smoke . . .
2. An apple a day . . .
3. A bird in the hand . . .
4. The early bird . . .
5. A stitch in time . . .
6. My typewriter is . . .
7. The game . . .
8. The keys . . .
9. Last Christmas I . . .
10. My first job . . .

Instructions: Proofread your sentences making corrections in typing, spelling, and sentence structure. Retype the sentences numbering them from one to ten.
APPENDIX B (Continued)

Short Responses--completion Code: 211

Instructions: I will dictate the beginning of a sentence. Type the sentence as I dictate it (don't worry about spelling or typing errors) and finish it in your own words. Some will be familiar, some will not. Remember to work quickly as you will only have 15 seconds to complete each sentence.

Approximate time: 10-15 minutes

Statements:

1. Still water . . .
2. Now is the time for all good men . . .
3. Do unto others . . .
4. Roses are red . . .
5. Star light, star bright . . .
6. Whenever I'm sad . . .
7. Yesterday was . . .
8. Tomorrow will be . . .
9. Thirty days has November . . .
10. Mary had a little . . .

Instructions: Proofread your sentences making corrections in typing, spelling, and sentence structure. Retype the sentences numbering them from one to ten.
APPENDIX B (Continued)

Short Responses--Completion

Instructions: As I dictate the beginning of some sentences, you are to type them from my dictation (don’t worry about spelling and typing errors). Finish each sentence in your own words. Remember to work quickly as you will only have 5 seconds to complete each sentence.

Approximate time: 10-15 minutes

Statements:
1. Roses are red . . .
2. You are my sunshine . . .
3. Cut along the . . .
4. I can’t believe I . . .
5. April showers bring . . .
6. Sticks and stones . . .
7. Sugar and spice and . . .
8. Sticks and snails . . .
10. The sun rises in the East and . . .

Instructions: Proofread your sentences making corrections in typing, spelling, and grammar. Retype the sentences numbering them from one to ten.
APPENDIX B (Continued)

Short Responses—Completion

Code: 213

Instructions: As I dictate the beginning of some sentences, you are to type them from my dictation (don't worry about spelling and typing errors). Finish each sentence in your own words. Remember to work quickly as you will only have 15 seconds to complete each sentence.

Approximate time: 10-15 minutes

Statements:

1. Drinking and driving . . .
2. Coke, its . . .
3. See the U.S.A. . . .
4. When better cars are built . . .
5. Oh, say, can you see . . .
6. Mine eyes have seen . . .
7. Remember, every cloud . . .
8. If everyone would light just one little candle . . .
9. Dr. Jeckle and . . .
10. Only you can . . .

Instructions: Proofread your sentences making corrections in typing, spelling, and grammar. Retype the sentences numbering them from one to ten.
APPENDIX B (Continued)

Short Responses--completion

Instructions: As I dictate the beginning of some sentences, you are to type from my dictation (don't worry about typing or spelling errors). Complete each sentence in your own words. Remember, work quickly as you will only have __________ seconds to complete each sentence.

Approximate time: 10-15 minutes

Statements:
1. Cleveland* is  . .
2. You can fool some of the people  . .
3. Down by the old mill stream  . .
4. In summer it rains  . .
5. I like to  . .
6. When I hear music, I  . .
7. I hate  . .
8. When class is over, I  . .
9. My best advice to you is  . .
10. Cuyahoga Community College* is  . .

Instructions: Proofread your sentences making corrections in typing, spelling, and grammar. Retype the sentences numbering them from one to ten.

*Substitute local names if you wish.
APPENDIX B (Continued)

Short Responses--numbers

Instructions: Each of the following ten questions is to be answered with a number typed as a numeral. Do not look at your fingers as you type; however, you may watch your paper. Number each answer, using the appropriate numeral followed by a period and two spaces.

Approximate time: 5-10 minutes

Questions:

1. How many days are there in a week?
2. How many months are there in a year?
3. How many subjects are you now taking?
4. How many rows of keys are there on your typewriter?
5. How many feet are there in a yard?
6. What number follows four?
7. Ten minus one equals what?
8. Three plus three equals what?
9. Two times four equals what?
10. How many dimes are there in a dollar?

Instructions: I will redictate the questions at a faster pace. Once again, number each answer.
APPENDIX B (Continued)

Short Responses--numbers  

Instructions: Each of the following ten questions is to be answered with a number typed as a numeral. Do not look at your fingers as you type; however, you may watch your paper. Number each answer, using the appropriate number followed by a period and two spaces.

Approximate time: 5-10 minutes

Questions:

1. How wide is a sheet of paper in inches?

2. How long is a sheet of typing paper in inches?

3. How many spaces are there across a sheet of typing paper on an elite typewriter?

4. How many spaces are there across a sheet of typing paper on a pica typewriter?

5. How many lines are there per vertical inch on an elite typewriter?

6. How many lines are there per vertical inch on a pica typewriter?

7. How many lines can be typed vertically on a full sheet of paper with elite type?

8. What is the left margin setting on an elite typewriter for a 70-space line?

9. How many spaces are there in a six-inch line on an elite typewriter?

Instructions: Go over the answers with the students, having them make corrections on their papers with pencil. Redictate the questions at a faster pace.
APPENDIX B (Continued)

Short Responses--numbers

Instructions: Each of the following ten questions is to be answered with a number typed as a numeral. Do not look at your fingers as you type; however, you may watch your paper. Number each answer, using the appropriate numeral followed by a period and two spaces.

Approximate time: 5-10 minutes

Questions:

1. What day of the month is today?
2. What year is this?
3. In what year were you born?
4. What is five times ten minus three?
5. How many inches are there in a yard?
6. How many States are there in the Union?
7. If you had four quarters, two dimes, and a nickel, how much would you have?
8. How many hours are there in a day?
9. What time do you go to bed at night?
10. What would you like your yearly income to be?

Instructions: Have the students insert a new piece of paper and redictate the above questions allowing less time for answers.
APPENDIX B (Continued)

Short Responses--numbers

Instructions: Each of the following ten questions is to be answered with a number typed as a numeral. Do not look at your fingers as you type; however, you may watch your paper. Number each answer, using the appropriate numeral followed by a period and two spaces.

Approximate time: 5-10 minutes

Questions:

1. What time do you usually get up in the morning?

2. What would you guess would be the average price of a new Cadillac?

3. What would you guess would be the average price of a new Volkswagen?

4. If you have 50 items, and give 10 away, what percent of the original 50 would you have left?

5. If you have three minutes to do something, how many seconds would you have?

6. How would you type the fraction seven fifteenths?

7. If you doubled your age and subtracted twelve, what number would you have?

8. What time is it right now?

9. How many Senators are there in the United States Senate?

10. If you have a gross of something, how many do you have?

Instructions: Have the students insert a new piece of paper and redictate the above questions allowing less time for their answers.
APPENDIX B (Continued)

Short Responses--numbers

Instructions: Each of the following ten questions is to be answered with a number typed as a numeral. Do not look at your fingers as you type; however, you may watch your paper. Number each answer, using the appropriate numeral followed by a period and two spaces.

Approximate time: 5-10 minutes

Questions:
1. If you have twelve dozen, how many do you have?
2. How many sheets of paper are there in a ream?
3. How many inches are there in a foot?
4. In 25 years what year will it be?
5. What is your street address number?
6. What is your home zip code?
7. Type a telephone number you have memorized.
8. What is your social security number?
9. How many hours of credit are you currently carrying?
10. How many inches are there in a foot and a half?

Instructions: Have the students insert a new piece of paper and redictate the above questions allowing less time for their answers.
APPENDIX B (Continued)

Sentence Responses--homonyms

Instructions: Homonyms are words that sound alike, but are spelled differently and have different meanings. I will write the correct spelling of a homonym on the board and tell you its meaning. You will then have 15 seconds to compose a sentence with that homonym in it. Number each sentence.

Approximate time: 10-20 minutes

Homonyms:

1. accept--means to receive something or agree to something
2. except--conveys the idea of excluding or omitting
3. advice--something given gratuitously as a favor
4. advise--the act of giving advice
5. allude--to refer to something by indirect means without naming it
6. elude--evading something
7. altar--a religious structure
8. alter--to change something
9. bare--naked; plain
10. bear--an animal; to carry

Instructions: For homework, check your answers with a dictionary to make sure you have used the word correctly. Retype the list and hand it in at the beginning of the next class meeting.
APPENDIX B (Continued)

Sentence Responses--homonyms

Instructions: Homonyms are words that sound alike, but are spelled differently and have different meanings. I will write the correct spelling of a homonym on the board and tell you its meaning. You will then have 15 seconds to compose a sentence with that homonym in it. Number each sentence. Do not erase or watch your fingers.

Approximate time: 10-20 minutes

Homonyms:

1. council--a gathering of persons
2. counsel--any advice, judgement, or recommendation; a lawyer
3. capital--chief, principal, capital letter, city that is seat of government, assets
4. capitol--the building where U.S. Congress meets or the State legislature meets
5. formally--in a formal manner
6. formerly--more early in time; heretofore
7. dessert--the final course of a meal, usually sweet
8. desert--a very dry place
9. principal--the most important, leader or chief
10. principle--fundamental truth; rule, law

Instructions: For homework, check your answers with a dictionary to make sure you have used the word correctly. Retype the list and hand it in at the beginning of the next class meeting.
APPENDIX B (Continued)

Sentence Responses--homonyms

Instructions: Homonyms are words that sound alike, but are spelled differently and have different meanings. I will write the correct spelling of a homonym on the board and tell you its meaning. You will then have 15 seconds to compose a sentence with that homonym in it. Number each sentence. Do not erase or watch your fingers.

Approximate time: 10-20 minutes

Homonyms:

1. stationary--not able to move
2. stationery--paper, pens, office supplies
3. two--a number
4. to--preposition used with a verb; i.e. to go, to see, to laugh
5. too--adverb always carries a sense of very or much (makes it intense) or often means more than enough; i.e. This is too high; the radio is too loud, you are too short. Can mean also or in addition to as well; i.e. May we go too?
6. wait--hold on; not right now
7. weight--heaviness
8. whether--usually used with "or not" of can be substituted with the word "if."
9. weather--atmospheric conditions
10. wood--a product of a tree
11. would--to express a condition; i.e. I would write if you would. to express a wish; i.e. I wish she would. To soften a request; i.e. Would you do this?

Instructions: For homework, check your answers with a dictionary to make sure you have used the word correctly. Retype the list and hand it in at the beginning of the next class meeting.
Instructions: Homonyms are words that sound alike, but are spelled differently and have different meanings. I will write the correct spelling of a homonym on the board and tell you its meaning. You will then have 15 seconds to compose a sentence with that homonym in it. Number each sentence. Do not erase or watch your fingers.

Approximate time: 10-20 minutes

Homonyms:

1. assistance--help or aid
2. assistants--persons who help or aid
3. it's--contraction of it is
4. its--possessive to it; belonging to
5. past--gone by; ended; background of a person
6. passed--going around a person; to sanction; judgment; cause to move past (passed in review); as in passing a test
7. their--possessive; belong to
8. there--at that place; in that matter; interjection
9. roll--to move; to wrap something; a register
10. role--an actor's part; a function of someone (advisory role)

Instructions: For homework, check your answers with a dictionary to make sure you have used the word correctly. Retype the list and hand it in at the beginning of the next class meeting.
APPENDIX B (Continued)

Sentence Responses--homonyms

Instructions: Homonyms are words that sound alike, but are spelled differently and have different meanings. I will write the correct spelling of a homonym on the board and tell you its meaning. You will then have 15 seconds to compose a sentence with that homonym in it. Number each sentence. Do not erase or watch your fingers.

Approximate time: 10-20 minutes

Homonyms:

1. board--a piece of wood; a group of administrators; to get on board
2. bored--to make a hole in; dull or monotonous
3. patients--those receiving medical care
4. patience--being patient; enduring without complaint
5. knot--made by tying two pieces of rope together; a bond of marriage; a hard lump on a tree
6. not--to no degree; expressing no
7. die--to stop living; either of a pair of dice; used in molding, stamping, shaping
8. dye--used to color something
9. write--to form words
10. right--correct; virtuous; the direction from a person's body

Instructions: For homework, check your answers with a dictionary to make sure you have used the word correctly. Retype the list and hand it in at the beginning of the next class meeting.
APPENDIX B (Continued)
Sentence Responses--homonyms

Instructions: Homonyms are words that sound alike, but are spelled differently and have different meanings. I will write the correct spelling of a homonym on the board and tell you its meaning. You will then have 15 seconds to compose a sentence with that homonym in it. Number each sentence. Do not erase or watch your fingers.

Approximate time: 10-20 minutes

Homonyms:

1. meet--to come across; to comply with; to come together; to oppose in battle
2. meat--food; flesh of animals; the substance or essence
3. might--something that may happen; great strength
4. mite--a very small sum of money; a small creature
5. tale--told or related; a story; a fiction
6. tail--appendage of animals body or anything like it (the tail of a comet)
7. steel--a hard metal
8. steal--to take dishonestly; to move stealthily; to gain a base in baseball; something gained at low cost.
9. team--two or more animals; groups working together
10. teem--abound; swarm (the pond teems with fish)

Instructions: For homework, check your answers with a dictionary to make sure you have used the word correctly. Retype the list and hand it in at the beginning of the next class meeting.
Instructions: Homonyms are words that sound alike, but are spelled differently and have different meanings. I will write the correct spelling of a homonym on the board and tell you its meaning. You will then have 15 seconds to compose a sentence with that homonym in it. Number each sentence. Do not erase or watch your fingers.

Approximate time: 10-20 minutes

Homonyms:
1. knead—to press and squeeze; to massage; to make by kneading
2. need—necessity; want; the lack of something
3. cite—to summon to appear before court; to quote
4. sight—a view; act of seeing; inspection; look; range of vision
5. site—a piece of land; the location of something
6. ant—an insect
7. aunt—a relative; the sister of one's mother or father
8. sail—used to catch the wind; to navigate a sailboat
9. sale—a selling; an opportunity to sell; an auction; special offering of goods at reduced price
10. hair—a fine, threadlike outgrowth from the skin of animals; an extremely small space
11. hare—a rabbit

Instructions: For homework, check your answers with a dictionary to be sure you have used the word correctly. Retype the list and hand it in at the beginning of the next class meeting.
Sentence Responses—homonyms

Instructions: Homonyms are words that sound alike, but are spelled differently and have different meanings. I will write the correct spelling of a homonym on the board and tell you its meaning. You will then have 15 seconds to compose a sentence with that homonym in it. Number each sentence. Do not erase or watch your fingers.

Approximate time: 10-20 minutes

Homonyms:
1. baste—to sew with long stitches; to moisten with butter, drippings, etc.
2. base—a place where one is stationed
3. soar—to fly in the air; to rise above ordinary levels
4. sore—giving pain; easily irritated or angered; filled with sadness or grief
5. hear—to become aware of sound by the ear; to listen and consider; to listen to formally
6. here—at this place; toward; at this point in action; now
7. bail—money deposited with the court; to remove water
8. bale—a large bundle compressed and bound
9. cash—money a person actually has; money paid at time of purchase
10. cache—a place in which stores of food, supplies, etc., are hidden; anything so stored or hidden

Instructions: Check your answers with a dictionary for homework. Retype the list and hand it in at the beginning of the next class meeting.
Instructions: We all have to deal with homonyms (words that sound alike, but are spelled differently and have different meanings). Common homonyms are their and there, to, two, and too. Less common are words like straight and strait.

The objective today is to list five sets of homonyms and then to use them correctly in sentences. You may use your dictionaries. Try for a perfect copy the first time. If you must, retype your list before handing it in.

Approximate time: 20-30 minutes

Instructions: If you have been doing homonym drills for one or two days, do not allow those to be used again. These could be listed on the chalkboard.
APPENDIX B (Continued)

Sentence Responses--questions

Instructions: Students are to answer the following questions with complete sentences only. They will be allowed 15 seconds for each answer. Number each answer as you type it. Do not look at your fingers.

Approximate time: 15-20 minutes

Questions:

1. How many spaces should there be after a period at the end of a typewritten sentence?
2. How many vertical lines can you type in an inch?
3. Is pica type larger or smaller than elite type?
4. What did you do during your last vacation?
5. How many pica spaces are there to an inch horizontally.
6. What is the size of a standard sheet of typing paper?
7. How many five-cent stamps can you buy with $1?
8. What is your home address?
9. How many vertical lines can you type on a standard sheet of typing paper?
10. What is the make of the typewriter you are using?

Instructions: Recheck your paper making any corrections in typing, spelling, and grammar in pencil. Retype the answers.
APPENDIX B (Continued)

Sentence Responses--Questions

Instructions: Students are to answer the following questions with complete sentences only. They will be allowed 15 seconds for each answer. Number each answer as you type it. Do not look at your fingers as you type.

Questions:

1. In what month is Thanksgiving?
2. Do you have a license to drive an automobile?
3. Why are you attending college?
4. Who is the mayor of Cleveland?*
5. What is your ultimate career goal?
6. What is your favorite dessert?
7. Who wrote "To be or not to be, that is the question"?
8. On a hot summer day, what is your favorite drink?
9. How do you get to college?
10. What day of the week do you like best and why?

Instructions: Recheck your paper making any corrections in typing, spelling, and grammar in pencil. Retype the answers.

*Substitute a local city name if you wish.
APPENDIX B (Continued)

Sentence Responses--Questions  

Instructions: Students are to answer the following questions with complete sentences only. They will be allowed 15 seconds for each answer. Number each answer as you type it. Do not look at your fingers as you type.

Approximate time: 15-20 minutes

Questions:

1. What is your favorite television program?
2. What class do you enjoy more than any others?
3. How many acres do you guess Tri-C Metro covers?
4. How many faculty members do you guess there at Tri-C (all campuses)?
5. What is your favorite current record hit?
6. Quickly describe your favorite piece of clothing you own?
7. In a short sentence, where do you live?
8. Why are you taking typewriting?
9. If you had to be a teacher, what would you teach?
10. How many students do you think attend Tri-C (all campuses)?

Instructions: Make any pencil corrections you wish and look up any spelling words. Retype the list.

*Substitute the name of your college.
APPENDIX B (Continued)

Sentence Responses—Questions Code: 313

Instructions: Students are to answer the following questions with complete sentences only. They will be allowed 15 seconds for each answer. Number each answer as you type it. Do not look at your fingers as you type.

Approximate time: 15-20 minutes

Questions:

1. Do you think hitchiking should be made illegal?
2. What do you think about food prices?
3. What is your opinion of abortion?
4. What is your physical build?
5. What country do you think is the United State's greatest enemy?
6. Should sex education be required of all high school graduates?
7. If you had a choice of a foreign country to visit, where would you like to go?
8. Why would you like to go to the country you picked as an answer to question 7?
9. What do you think the speed limit should be on super highways?
10. If you could pick any age to stay at forever, what age would you pick?

Instructions: Recheck your paper making any corrections in typing, spelling, and grammar in pencil. Retype the answers.
Instructions: Students are to answer the following questions with complete sentences only. They will be allowed 15 seconds for each answer. Number each answer as you type it. Do not look at your fingers as you type.

Approximate time: 15-20 minutes

Questions:

1. What do you think the legal drinking age should be?
2. What is your attitude toward "soft" drugs?
3. What is the major problem in the world today?
4. Will there ever be a Third World War?
5. If you were to buy a new television, what brand would you buy?
6. What is your opinion of the United Nations?
7. What do you think your teacher's yearly salary is?
8. If money was no barrier, what recreational activity would you like to pursue?
9. What do you think of the "Commuter"?
10. What do you think of the "Mundo Drum"?

Instructions: Recheck your paper making any corrections in typing, spelling, and grammar in pencil. Retype the answers.

*Substitute the name of the college newspaper.
**Substitute the name of a local newspaper.
APPENDIX B (Continued)

Sentence Responses--frequent words

Instructions: I will dictate ten words. After I dictate the word, you will be allowed five seconds to type it. I will then write it on the board--retyping the word if you typed it incorrectly the first time.

Approximate time: 15-20 minutes

Words:
1. addition
2. edition
3. quite
4. quiet
5. quit
6. merchandise
7. particular
8. responsible
9. foreign
10. until

Instructions: I will now redictate the words. You are to type a complete sentence using the word. You will be allowed 15 seconds to type each sentence.

Instructions: For homework, retype your sentences numbering them from one to ten. Be sure spelling, grammar, and typing are perfect.
APPENDIX B (Continued)

Sentence Responses--frequent words  Code: 321

Instructions: I will dictate ten words. After I dictate the word, you will be allowed five seconds to type it. I will then write it on the board--retype the word if you typed it incorrectly the first time.

Approximate time: 15-20 minutes

Words:
1. accept
2. acknowledge
3. convenience
4. correspond
5. immediate
6. prompt
7. receive
8. referred
9. remittance
10. separate

Instructions: I will now redictate the words. You are to type a complete sentence using the word. You will be allowed 15 seconds to type each sentence.

Instructions: For homework, retype your sentences numbering them from one to ten. Be sure spelling, grammar, and typing are perfect.
APPENDIX B (Continued)

Sentence Response--frequent words

Instructions: I will dictate ten words. After I dictate the word, you will be allowed five seconds to type it. I will then write it on the board--retype the word if you typed it incorrectly the first time.

Approximate time: 15-20 Minutes

Words:

1. different
2. testimony
3. government
4. evidence
5. individual
6. learn
7. teach
8. manuscript
9. percent
10. phone

Instructions: I will now redictate the words. You are to type a complete sentence using the word. You will be allowed 15 seconds to type each sentence.

Instructions: For homework, retype your sentences numbering them from one to ten. Be sure spelling, grammar, and typing are perfect.
Instructions: I will dictate ten words. After I dictate the word, you will be allowed five seconds to type it. I will then write it on the board—retype the word if you typed it incorrectly the first time.

Approximate time: 15-20 minutes

Words:
1. receipt
2. practical
3. preceding
4. pretty
5. quantity
6. radical
7. remittance
8. respectfully
9. similar
10. abbreviate

Instructions: I will now redictate the words. You are to type a complete sentence using the word. You will be allowed 15 seconds to type each sentence.

Instructions: For homework, retype your sentences numbering them from one to ten. Be sure spelling, grammar, and typing are perfect.
APPENDIX B (Continued)

Sentence Response--frequent words  

Instructions: I will dictate ten words. After I dictate each word, you will be allowed five seconds to type it. I will then write it on the board--retyping the word if you typed it incorrectly the first time.

Approximate time: 15-20 minutes

Words:

1. environment
2. legislature
3. acceptable
4. achievement
5. attack
6. business
7. especially
8. extravagant
9. friendly
10. healthy

Instructions: I will now redictate the words. You are to type a complete sentence using the word. You will be allowed 15 seconds to type each sentence.

Instructions: For homework, retype your sentences numbering them from one to ten. Be sure spelling, grammar, and typing are perfect.
APPENDIX B (Continued)
Sentence Response--frequent words

Instructions: I will dictate ten words. After I dictate each word, you will be allowed five seconds to type it. I will then write it on the board--retypes the word if you typed it incorrectly the first time.

Approximate time: 15-20 minutes

Words:
1. illegal
2. management
3. neighborhood
4. overbearing
5. opinion
6. patient
7. permanent
8. reimburse
9. understanding
10. yield

Instructions: I will now redictate the words. You are to type a complete sentence using the word. You will be allowed 15 seconds to type each sentence.

Instructions: For homework, retype your sentences numbering them from one to ten. Be sure spelling, grammar, and typing are perfect.
APPENDIX B (Continued)

Sentence response--vocabulary

Instructions: I will dictate ten words that may be new to you. Attempt to spell the word correctly on the first dictation, even if you do not know what the word means. I will then write the word on the board; tab to the center and copy the word from the board (even if your first spelling was correct). I will then explain the meaning of the word (after they have all been dictated), and you are to use them in sentences on a separate sheet of paper numbering them from one to ten. Try for a perfect copy the first time (there will be time to erase). If you must, retype the sentences for homework if you don't finish in class.

Approximate time: 15-25 minutes

Words:

1. bravura--brilliance; daring; dash (the director's display of bravura)

2. engrossing--absorbing; totally holding the attention (an engrossing mystery)

3. foible--personal weakness: slight, excusable fault; failing (an affectionate view of man's foibles)

4. mayhem--injury by violence; mutilation; crippling (an unpleasant amount of mayhem)

5. veritable--authentic; actual; real; true (a veritable masterpiece)

6. annihilate--to destroy completely; ruin the substance, force or effect of (to annihilate the original story)

7. evocation--imaginative re-creation; act of summoning up; (a nostalgic evocation of boyhood)

8. portrayal--representation; depiction; an acting out (a credible portrayal of homespun philosophy)

9. eerie--weird; frightening because mysterious or unnatural (an eerie, disquieting episode)

10. documentary--film based on factual, documented material (a in-depth documentary of the rock singer)
Instructions: I will dictate ten words that may be new to you. Attempt to spell the word correctly on the first dictation, even if you do not know what the word means. I will then write the word on the board; tab to the center and copy the word from the board (even if your first spelling was correct).

Remove the paper from the machine and reinsert a clean sheet. I will explain each word in the order given. You are to use each word in a sentence trying for a perfect copy the first time (there will be time to erase). If you obtain a perfect copy the first time through, hand in your paper today. If you must, retype the paper for homework and hand it in at the next class meeting.

Approximate time: 15-25 minutes

Words:

1. buff—enthusiast; fan (a movie buff)
2. elliptical—cryptic; deliberately puzzling or obscure (an absurd story not helped by an elliptical script)
3. cacophonous—discordant; harsh-sounding (a cacophonous sound track)
4. agglomeration—jumbled collection; heap or cluster of dissimilar items (an agglomeration of seven tales)
5. abstruse—hard to comprehend or understand; deep; profound (an abstruse exploration of the distressed psyches of four women)
6. zany—crazy; ridiculous; irrationally ludicrous (utterly zany sight and sound gags)
7. potent—powerful; strong; having force or influence (a potent and searing work)
8. satirical—sarcastic; holding up follies, vices or shortcomings to derision or ridicule (a satirical comment on the 1960's)
9. concoct—to make up or prepare from unlikely materials; devise; fabricate (to concoct a lurid plot by combining three horror stories)
10. eminently—outstandingly; supremely; notably (to be eminently qualified for the role)
Instructions: I will dictate ten words that may be new to you. Attempt to spell the word correctly on the first dictation, even if you do not know what the word means. I will then write the word on the board; tab to the center and copy the word from the board (even if your first spelling was correct).

Remove the paper from the machine and insert a new sheet of paper. I will explain each word in the order dictated. You are to use each word in a sentence trying for a perfect copy the first time (there will be time to erase if you work quickly). If you have a perfect copy the first time, hand in your paper today. If you must, retype the paper for homework and hand it in at the next class meeting.

Approximate time: 15-25 minutes

Words:

1. abandon--quit; forsake, leave (if I do not succeed, I will abandon the project)

2. begrudge--to envy the possession of; to give with ill will or reluctance (he begrudges her every cent)

3. captivity--the state of being a captive; imprisonment; bondage (she will be held in captivity for three months)

4. dilapidated--fall to pieces; broken down; shabby and neglected (the house is in a dilapidated condition)

5. erroneous--containing or based on error; mistaken; wrong (you are erroneous in your assumption)

6. fictitious--imaginary; not real; false; assumed for deception (Johnny Apple Seed was a fictitious character)

7. gimmick--a trick device; any gadget used as a deceptive device (the wheel of fortune was controlled by some gimmick)

8. hypothesis--an unproved theory tentatively accepted to explain certain facts; use to provide basis for further study (Columbus believed in the hypothesis that the world was round)

9. inopportune--not at a good opportunity; coming or happening at a poor or bad time; not appropriate (The disclosure came at an inopportune time in the election campaign)

10. jeopardy--a game with even chances; risk; danger; peril (you are in jeopardy of being discovered)
Instructions: I will dictate ten words that may be new to you. Attempt to spell the word correctly on the first dictation, even if you do not know what the word means. I will then write the word on the board; tab to the center and copy the word from the board (even if your first spelling was correct).

Remove the paper from the machine and insert a new sheet of paper. I will explain each word in the order dictated. You are to use each word in a sentence trying for a perfect copy the first time (there will be time for you to erase if you work quickly). If you have a perfect copy the first time, hand in your paper today. If you must, retype the paper for homework and hand it in at the next class meeting.

Approximate time: 15-25 minutes

Words:

1. liability--anything for which a person is liable; a debt; something that works to one's disadvantage (his gruff manner is his greatest liability)

2. mediocre--of middle quality, neither very good nor very bad; ordinary; average; commonplace (The $5 wine was really quite mediocre for the price)

3. nestle--settle down comfortably; to press close for comfort and affection; to lie sheltered or partly hidden (The house was pleasantly nestled in the trees)

4. opulent--wealthy; rich; abundant (The king was blessed with an opulent belly)

5. paltry--trifling; worthless; petty (He received a paltry 35¢ for his efforts)

6. propriety--quality of being proper; fitness; conformity; accepted standards of society (I questioned the propriety of not wearing shoes into the restaurant)

7. query--a question; inquiry; to ask (There has been no answer to the query on taxes)

8. remorse--a deep sense of guilt; pity (There was no remorse on the part of the criminal for his acts)

9. secluded--kept apart from others; isolated; withdrawn (The house was so well secluded that no one could find it)

10. terminate--to form the conclusion; limit; put an end to; stop; cease; to come to an end (I will terminate this discussion the next time you contradict me)
APPENDIX B (Continued)

Sentence response--vocabulary

Instructions: I will dictate ten words that may be new to you. Attempt to spell the word correctly on the first dictation. I will then write the word on the board. Tabulate to the center of your paper and retype it, even if it was correct on the first try.

Remove the paper from the machine. Insert a clean sheet. As I explain each word, compose a sentence that illustrates its meaning. Try for a perfect copy the first time. There will be time to erase, if you work quickly. If you have a perfect copy today, hand it in. If you must, retype the paper for homework and hand it in at the next class meeting.

Approximate time: 15-25 minutes

Words:

1. urbane--polite and suave; smooth and polished in manner (The president was urbane in his presentation)

2. vindicate--to clear from criticism, suspicion, or blame; to defend against opposition; to justify (I cannot vindicate the witness on his testimony)

3. wield--to handle and use; to exercise power, control, influence (He had to wield a great amount of power to vindicate the witness)

4. yearn--to be filled with longing or desire (I yearn for the day when men and women will wield the same influence of family decisions)

5. zealous--full of zeal; fervent; enthusiastic (He was a bit too zealous for my liking)

6. repress--hold back; subdue; to prevent natural development (Do not repress any evidence; give it all)

7. pinnacle--the highest point; a small turret or spire (He reached the pinnacle of his career at 41)

8. odious--hateful; disgusting; offensive (Hitler was truly an odious person)

9. inverse--inverted; reversed in order; directly opposite (Love is the inverse of hate)

10. delete--to take out; cross out (Delete the last word and you will have a perfect sentence)
Paragraph Response--pictures

Instructions: Set your typewriter for a 70-space line and double spacing. You will be given 5 minutes to describe what you see in the following picture. Do not worry about errors. At the end of 5 minutes, you will be given time to check your paragraph for errors in typing and spelling. You will then have a few minutes to retype your essay in final form.

Approximate time: 15-20 minutes
APPENDIX B (Continued)

Paragraph Response--pictures  

Instructions: Set your typewriter for a 70-space line and double spacing. You will be given 5 minutes to describe what the cartoon means to you. Do not worry about errors. At the end of 5 minutes, you will be given time to check your paragraph for errors in typing, spelling, and grammar. You will then have a few minutes to prepare your essay in final form. Give a title to your final copy.

Approximate time: 15-20 minutes

Standby pump

CONGRESS

ENERGY PROGRAM

GAS RATIONING
APPENDIX B (Continued)

Paragraph Response--pictures

Instructions: Set your typewriters for a 70-space line and double spacing. You will be given 5 minutes to describe the story that the following two pictures tell. Hint: there are two teams involved. Title your story. At the end of 5 minutes, you will be given time to check your paragraph for errors in typing, spelling, and grammar. You will then have a few more minutes to prepare your essay in final form.

Approximate time: 15-20 minutes
APPENDIX B (Continued)

Paragraph Response--pictures

Instructions: Set your typewriter for a 70-space line and double spacing. You will be given five minutes to type a paragraph describing the following graph. Do not worry about errors; type your thoughts quickly. At the end of five minutes you will be given time to proofread and correct your rough draft. Then prepare a final copy.

Approximate time: 15-20 minutes

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**POPULARITY HIGHS AND LOWS**

Percentage of people polled by Gallup who approved of the way the President handled his job

- TRUMAN
  - Assumes office: July 45
  - Percentage: 87%
- EISENHOWER
  - Assumes office: Nov. '51
  - Percentage: 79%
  - Geneva Summit
- KENNEDY
  - Assumes office: Apr. '61
  - Percentage: 68%
  - After Bay of Pigs
  - Recession
  - Civil rights
- JOHNSON
  - Assumes office: Oct. '63
  - Percentage: 80%
  - Peace settlement
  - Viet Nam War
- NIXON
  - Assumes office: Jan. '64
  - Percentage: 40%
  - Watergate

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Instructions: I am going to tell you a short story. Be sure to listen carefully, for at the end of the story, you are going to type it to the best of your recollection. Try for a perfect copy the first time.

Approximate time: 10-15 minutes

Story:

My brother-in-law, who was raised in Chicago and hardly ever saw a horse, visited my father and mother on their ranch in Oklahoma. He was riding one of my father's horses one day, when suddenly it broke and ran. "I was okay," he reported afterward, "until that horse just suddenly stopped. Then I went right over the hood!"
Instructions: I am going to tell you a short story. Be sure to listen carefully, for at the end of the story, you are going to type it to the best of your recollection. Try for a perfect copy the first time.

Approximate time: 10-15 minutes

Story:

Members of a local veterans organization, composed mainly of World War II men, were asked to bring "war souvenirs" to a meeting. Prizes would be awarded for the smallest and the largest items. Winner in the "smallest" category was a miniature Nazi army label button. Winner in the "largest" category was an object 5'8" tall and weighing 140 pounds—a member's British war bride.
Instructions: I am going to tell you a short story. Be sure to listen carefully, for at the end of the story, you are going to be asked to type it to the best of your recollection. Try for a perfect copy the first time.

Approximate time: 10-15 minutes

Story:

After an efficiency expert received his check for services rendered, he noticed that it was one cent short. A stickler for detail, he called his client and insisted that the difference be paid. When the check for a penny arrived, he took it to his bank. The teller carefully studied the check, then leaned forward and whispered confidentially to the expert: "How would you like it--heads or tails?"
APPENDIX B (Continued)

Paragraph Responses--repeating stories

Code: \( \text{413} \)

Instructions: I am going to tell you a short story. Be sure to listen carefully, for at the end of the story, you are going to be asked to type it to the best of your recollection. Try for a perfect copy the first time.

Approximate time: 10-15 minutes

Story:

The owner of a small public-relations agency stated to me one day that his secretary couldn't type, that her shorthand was terrible, and that she sasses him back. "Why in the world is she still around," I asked incredulously. "Well," he replied, "if she wasn't so nice to the kids, I'd divorce her."
Instructions: I am going to tell you a short story. Be sure to listen carefully, for at the end of the story, you are going to be asked to type it to the best of your recollection. Try for a perfect copy the first time.

Approximate time: 10-15 minutes

Story:

The Department of Fisheries in the State of Washington tags salmon in order to learn more about their migratory habits. It pays three dollars for the return of each tag with information as to where it was found. John Smith of Cleveland dutifully returned a tag with this explanatory note: "Enclosed is a tag that came off a salmon. I found it when I bit into my sandwich. It came to me in a can of salmon. Please send the $3."
APPENDIX B (Continued)

Paragraph Responses--repeating stories

Instructions: I am going to tell you a short story. Be sure to listen carefully, for at the end of the story, you are going to be asked to type it to the best of your recollection. Try for a perfect copy the first time.

Approximate time: 10-15 minutes

Story:

In Cleveland, Ohio, the Reverend John Peoples is pastor of the First Baptist Church; his brother, the Reverend Robert Peoples, is the United Methodist minister. Two women were discussing their ministers in front of the college the other day. One confused woman asked the other, "Which Reverend Peoples do you mean?" "You know," came the reply, "John--the Baptist."
APPENDIX B (Continued)

Paragraph Responses--topics

Instructions: You will be allowed 5 minutes to type in rough-draft form a paragraph on one of the following suggested topics. Use a 70-space line and double spacing. Do not worry about typing errors. At the end of five minutes, read over your paragraph making pencil corrections. Retype the paragraph in good form.

Approximate time: 15-20 minutes

Topics:
1. An Ideal Boss
2. Fads
3. Individual Differences
4. College
5. Popularity
6. Pockets
Paragraph Responses--topics

Instructions: You will be allowed 5 minutes to type in rough-draft form a paragraph on one of the following suggested topics. Use a 70-space line and double spacing. Do not worry about typing errors. At the end of five minutes, read over your paragraph making pencil corrections. Retype the paragraph in good form.

Approximate time: 15-20 minutes

Topics:

1. Clothing
2. Automobiles
3. Television
4. Student Government
5. Teachers
6. The Environment
APPENDIX B (Continued)

Paragraph Responses--topics

Instructions: You will be allowed 5 minutes to type in rough-draft form a paragraph on one of the following suggested topics. Use a 70-space line and double spacing. Do not worry about typing errors. At the end of five minutes, read over your paragraph making pencil corrections. Retype the paragraph in good form.

Approximate time: 15-20 minutes

Topics:
1. Government
2. Lake Erie
3. My Favorite Person
4. Sports
5. My hobby
6. Vacations
APPENDIX B (Continued)

Paragraph Responses—topics

Instructions: You will be allowed 5 minutes to type in rough-draft form a paragraph on one of the following suggested topics. Use a 70-space line and double spacing. Do not worry about typing errors. At the end of 5 minutes, read over your paragraph making pencil corrections. Retype the paragraph in good form.

Approximate time: 15-20

Topics:

1. Advancing Technology
2. Food Prices
3. July Fourth
4. Equal Rights
5. Travel
6. Winter
APPENDIX B (Continued)

Paragraph Responses--topics

Instructions: You will be allowed 5 minutes to type in rough-draft form a paragraph on one of the following suggested topics. Use a 70-space line and double spacing. Do not worry about typing errors. At the end of 5 minutes, read over your paragraph making pencil corrections. Retype the paragraph in good form.

Approximate time: 15-20 minutes

Topics:
1. Free Medical Care
2. Pollution
3. Zero Population Growth
4. Hitchhiking
5. The Military Draft
6. Drugs
Instructions: Duplicate the material below the line and pass out a sheet to each student.

Approximate time: 10 minutes

Compose at least a four-line birthday greeting in the cake drawn below. You are trying for a good copy on your first try, so erase and correct errors.
APPENDIX R (Continued)
Paragraph Responses—greeting cards

Instructions: Duplicate the material below the line and pass out a sheet to each student.
Approximate time: 10 minutes

Compose at least a four-line get-well card in the cast drawn below. You are trying for a good copy on your first try, so erase and correct errors.
APPENDIX B (Continued)
Paragraph Responses--greeting cards

Instructions: Duplicate the material below the line and pass out a sheet to each student.
Approximate time: 10 minutes

Compose at least a four-line graduation greeting card in the mortarboard drawn below. You are trying for a good copy on your first try, so erase and correct errors.
Instructions: Duplicate the material below the line and pass out a sheet to each student.

Approximate time: 10 minutes

Compose at least a four-line St. Patrick's Day greeting card in the four-leaf clover drawn below. You are trying for a good copy on your first try, so erase and correct errors.
Instructions: Duplicate the material below the line and pass out a sheet to each student.
Approximate time: 10 minutes

Compose at least a four-line Valentine's Day greeting card in the heart drawn below. You are trying for a good copy on your first try, so erase and correct errors.
APPENDIX B (Continued)

Paragraph Responses--miscellaneous Code: 480

Instructions: Have students select a newspaper or magazine article on a subject in which they are interested (minimum of 500 words long) and bring it to class. In class, have the students abstract the article into a paragraph. Collect both the article and the abstract to check its completeness.

Approximate time: 20-30 minutes
APPENDIX B (Continued)

Paragraph Responses--miscellaneous

Instructions: Select a newspaper or magazine article on a topic of general current interest. Have it duplicated and hand it out to students with instructions to prepare a one-paragraph abstract. Hint: Use two or three articles and give the students a choice of one.

Approximate time: 25-35 minutes
APPENDIX B (Continued)

Letter Responses--personal letters  

Instructions: Students are to select one of the following advertisements from last Sunday’s Sunday Oregonian and write a letter expressing interest in the position. Students are to assume that they are now living in Cleveland, but will be moving to Portland in two weeks and will be available for an appointment after that time. All addresses are Portland, Oregon and the ZIP Code is 97230. Work for a mailable letter on the first try.

Approximate time: 30 minutes
APPENDIX B (Continued)

Letter Responses--personal letters

Instructions: Students are to select one of the following advertisements found in last Sunday's Sunday Oregonian in the travel section and make a reservation OR ask for more information. Students are to assume that they are living in Portland, Oregon, at 35701 Southwest 119th Street, Phone 754-3321. Work for a mailable letter on the first try.

Approximate time: 30 minutes
APPENDIX B (Continued)

Letter Responses--personal letters

Code: 502

Instructions: Students are to select one of the following advertisements found in last Sunday's Sunday Oregonian and either ask for more information or make a purchase. Work for a mailable letter on the first try.

Approximate time: 30 minutes

QUALITY HOME GREENHOUSES

THE FINEST, MOST BEAUTIFUL GREENHOUSES YOU CAN BUY.

- Redwood—last a lifetime—warm—beautiful.
- Wide variety of modern architectural styles to blend with your home.
- Sizes and prices to fit your needs.
- Shipped in prefabricated sections for easy erection.

SEND FOR FREE COLOR CATALOG

Sturdi-Built Mfg. Co. (0)
11304 S.W. Boones Ferry Rd.
Portland, Oregon 97219

244-4100

SAVE 50% OR MORE

Perennial Plants

With Burpee Seeds

All 5 packets of these Favorite Varieties

$2.70 Value. Now only $1

How dozens of plants of each kind for less than it costs to buy one plant of each! It's Easy, It's Fun, and You Tell Your Time In Days, Weeks...

Giant Pacific Delphiniums

Tall giants, 4-5 ft. spikes, blue, violet, white, mixed. 65 ft.

Excelsior Giant Foxgloves

1 ft. tall. Gay mixed colors. 50 ft.

Super Giant Carnations

Rage, double, fragrant flowers, 18 to 24 in. stems. All colors. 50 ft.

Giant Oriental Poppies

Very red, salmon, orange and pink flowers. May and June. 3 ft. 150 per.

Huge McKana Columbines

Medal winning 4 in. flowers, very longspurs. All colors. 75 per.

All kinds, $2.70 value. Send...

W. ATLEE BURPEE CO.
3624 Burpee Bldg., Riverside, Cal. 92507

LISTEN TO LEARN
Learn to Listen
Listening training on cassettes
for business, profession education
Write for free brochure

CLARION
10 Drake Rd.
Rend, Ore. 97701
APPENDIX B (Continued)

Letter Responses--personal letters Code: 503

Instructions: Students are to select a friend or relative and write a personal letter to them. The letter must be at least one page in length using a 60-space line. The letters will not be read by the instructor, unless so requested by the student. Type an envelope for the letter. Try for a mailable copy on the first try. If the student finishes before his time is up, check the chalkboard for further instructions.

Approximate time: 30 minutes
APPENDIX B (Continued)

Letter Responses--personal letters

Instructions: Students are to write to the Director of Admissions of CCC asking that a transcript of their grades be sent to a company of their choice. The cost is $2, and the student should enclose a check or money order for that amount with the letter. Work for a mailable copy on the first try. Address an envelope. This assignment will be collected.

Approximate time: 30 minutes
APPENDIX B (Continued)
Letter Responses--business letters

Code: 510

Instructions: Students are to type a letter using the following information. They are to try for a mailable letter on the first try. Address an envelope and make one carbon copy.

Approximate time: 30 minutes

Situation:
You are typing a personal business letter for your instructor using plain paper and the college address as the return address.

Write a letter to the Olde House Motel Chalet, Box 735, Burnham, Michigan 48068 and make a reservation for the last Friday night of next month.

Specifications: single room
television
confirm rate of $14 per night
check what checkout time is
check if restaurant in motel or close by
check if there is a pool
may wish to stay on Saturday night (will inform management upon arrival)
APPENDIX B (Continued)

Letter Responses--business letters

Instructions: Students are to type a letter using the following information. They are to try for a mailable letter on the first try. Address an envelope and make one carbon copy.

Approximate time: 30 minutes

Situation:

You are typing a personal business letter for your instructor using plain paper and the college address as the return address. Business Phone is 754-9321.

Write a letter to Salem Travel Agency, 39888 Chicago Street, Detroit, Michigan 47330 and make an airlines reservation as follows:

Want to leave Detroit via United Air Lines flight 604 at 11:45 a.m. on August 18 arriving in New York at 1:09 p.m. From New York, want to catch Air New England's flight 1624 to New Bedford, Mass. It leaves New York at 1:50 p.m. and arrives in Massachusetts at 2:45 p.m.

How do they wish me to pay for the tickets?

I want the tickets either sent to me or can pick them up at Detroit Metropolitan Airport before departure.

What is check-in time at airport?

I want the most inexpensive form of ticket.
APPENDIX B (Continued)

Letter Responses--business letters

Instructions: Students are to type a letter using the follow-
ing information. They are to try for a mailable letter on
the first try. Address an envelope and make one carbon copy.

Approximate time: 30 minutes

Situation:

You are the secretary in the following letter:

September 3, 19--

Your Name, Secretary
Jones Wholesale Furniture Company
577 Hill Street
Dallas, Texas  69950

Dear Mr., Miss, Mrs. Student

I need some information before purchasing some desk lamps.
Please check the inventory file and write me the number of
desk lamps we now have. It will also be helpful if you will
indicate the date of our last order for these lamps.

Next week I shall be in New York. Send the information to
me there. My address will be Jackson Hotel, 191 Madison
Avenue, New York, New York  09960.

Yours truly

Robert K. Jones, President
Jones Wholesale Furniture Company

djp

Instructions: Students are to compose a letter in answer
to the one above from his boss. Try for a mailable letter
on your first try. The inventory indicates that there 115
desk lamps in stock and that the date of the last purchase
was July 3, 19--.
Essay Responses--topics  

Instructions: Students are to spend 15 minutes composing at the typewriter an essay in rough-draft form (use a 70-space line and double spacing). Select a topic from the following list.

Approximate time: 30 minutes

Topics:
1. Elections
2. Foreign Cars
3. What I Can Do for My Country
4. Education
5. Fishing
6. Current Fashions

Instructions: At the end of fifteen minutes, proofread and make corrections in your rough draft. Students will be allowed a maximum of 15 minutes to make such corrections and type a final copy for the instructor.