

A STUDY TO DETERMINE THE EFFECTS OF
THE MOVING, VISUAL PRESENTATION OF
SHORTHAND PRACTICE MATERIAL AT
FORCING SPEEDS ON THEORY MASTERY
AND DICTATION-TAKING ABILITY

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY

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1970



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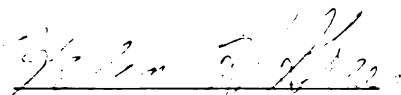
A STUDY TO DETERMINE THE EFFECTS OF THE MOVING,
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MATERIAL AT FORCING SPEEDS ON THEORY
MASTERY AND DICTATION-TAKING ABILITY

presented by

Jay L. Fennell

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education


Major professor

Date Jan 24 1951

ABSTRACT

A STUDY TO DETERMINE THE EFFECTS OF THE MOVING, VISUAL PRESENTATION OF SHORTHAND PRACTICE MATERIAL AT FORCING SPEEDS ON THEORY MASTERY AND DICTATION-TAKING ABILITY

by Jay L. Fennell

The purposes of this study were to test, under controlled experimental conditions, a new approach to learning beginning Gregg shorthand in which classroom, teacher-dictation practice was replaced with a visual presentation of dictation practice material at forcing speeds through the employment of moving shorthand plates to determine: (1) Whether the visual presentation of shorthand dictation practice material at forcing speeds, together with self-dictation at these speeds, would result in higher levels of achievement in theory mastery and dictation-taking ability for transcription from new matter than shorthand instruction involving teacher-dictation practice. (2) The attitudes of students relative to using the newly developed visual-presentation machine utilized in this approach to learning Gregg shorthand. (3) The effect of using the visual-presentation machine on the shorthand dropout and failure problem.

Two college-level groups of beginning Gregg shorthand students at Lansing Community College, Lansing, Michigan, were involved in this study. One group (experimental) was taught utilizing the newly developed visual-presentation

machine to present the shorthand practice material, and the other group (control) was taught in the traditional manner with an instructor dictating the practice material to the students.

Data on the performance of the two groups was obtained from the administration of many theory and dictation-transcription tests throughout the experimental period of two college quarters. The study was conducted during the period in which the students were learning the theory for Gregg shorthand, Diamond Jubilee series.

Major Findings

The moving, visual-presentation approach to learning beginning Gregg shorthand: (1) Resulted in greater achievement in transcription from shorthand outlines on shorthand theory tests than did the teacher-directed approach. (2) Resulted in greater achievement in writing theoretically correct shorthand outlines on shorthand theory tests than did the teacher-directed approach. (3) Did not result in higher speed level attainment on three-minute, dictation-transcription tests than did the teacher-directed approach. (4) Did not result in greater achievement in the number of correctly transcribed words produced on three-minute, dictation-transcription tests than did the teacher-directed approach. (5) Resulted, generally, in faster attainment of particular speed level goals in dictation-transcription, as this relates to time in a linear sense, than did the teacher-directed approach. (6) Resulted in the production of a greater number of acceptable three-minute dictation

transcripts than did the teacher-directed approach. (7) Resulted, generally, in requiring fewer trials in order to achieve speed level goals in dictation-transcription than did the teacher-directed approach. (8) Did not result in a lower attrition rate in shorthand than did the teacher-directed approach. (9) Elicited a positive response from students as an acceptable method of learning beginning Gregg shorthand.

Recommendations

The following recommendations were made: (1) That further research be carried on with this moving, visual-presentation approach to learning beginning Gregg shorthand to determine the most efficient and effective methods of utilizing the approach in an instructional program. (2) That further research be carried on to determine what levels of instruction in shorthand other than the beginning level might benefit from this approach. (3) That further research be carried on over a greater span of time, with larger groups of students, and with groups of high school students. (4) That particular research be carried on in which a recorded audio presentation of the practice material is presented simultaneously with the visual presentation in order to fully utilize the hearing and seeing senses of the students in the learning situation. (5) That particular research be carried on utilizing this approach in programs of out-of-class practice work and self-instruction. (6) That particular research be carried on to determine quite specifically the effects of this method, as it relates to time

in a linear sense, as a factor in achieving vocational-level competency in shorthand. (7) That particular research be carried on with this moving, visual-presentation approach to determine its fit as a method of learning in relation to the learning habits and patterns of students who are judged to be bright, average, and dull.

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Jay L. Fennell

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Business and Distributive Education

1970

ACKNOWLEDGMENTS

The writer is indebted to his wife, Margene, for her constant support and patience; to his four young children who somehow seemed to understand the importance of what their dad was doing; to Dr. Helen H. Green, thesis committee chairman, for her continual encouragement and counsel during the preparation of this research; to Dr. Peter Haines, doctoral program committee chairman, for his guidance and support; and to Drs. Robert Poland and Fred Vescolani, program and thesis committees, Dr. Clessen Martin, thesis committee, and Dr. Elaine Uthe, program committee, for their helpful comments and direction.

Special acknowledgments go to Dr. Ron Edwards, Lansing Community College, inventor of the visual-presentation machine, for his cooperation and help in conducting this research; to the Business Law and Office Administration Department of the College of Business, Michigan State University, for the use of some of their dictation materials; to the Gregg Division of McGraw-Hill Book Company for allowing the duplication of some of their materials; and to Mrs. Vickie Bunch who typed and proofread the entire study.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	v
Chapter	
I. INTRODUCTION AND STATEMENT OF THE PROBLEM .	1
Purposes of the Study	2
Hypotheses.	4
Definition of Terms Used	5
Delimitations of the Study	7
Limitations of the Study	7
II. REVIEW OF LITERATURE AND PILOT STUDY . . .	9
Visual Methods of Learning Applied to Shorthand Skill Development	9
Early Introduction of New-Matter Dictation for Transcription	25
Criteria for Predicting Shorthand Success .	28
The Relationship Between Shorthand Theory Mastery and Transcription.	31
III. INSTRUCTIONAL PROCEDURE	35
Course Scheduling	35
Student Selection of Class	35
Student Potential for Shorthand Success .	36
Definition and Control of Essential Variables	36
Profile of Students.	41
Course Standards and Organization	42
Measurement of Skill	43
Factors Kept Constant in the Two Groups .	46
Factors Not Held Constant in the Two Groups	51
IV. FINDINGS	56
Comparative Analyses of the Two Groups on Certain Criteria Used in Equating These Groups	56
Comparative Analyses of the Achievement of the Two Groups in Shorthand Theory. . .	59

	Page
Comparative Analyses of the Achievement of the Two Groups in Dictation- Transcription.	71
Comparison of the Two Groups on Feelings of Tension and Frustration Experienced in the Development of Skill	83
Report on the Feelings and Opinions of the Experimental Group Relative to Using the Visual-Presentation Machine in the Development of Skill	86
Report on the Dropout and Failure Problem Experienced in Both Groups	91
Summary of the Findings	94
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS .	97
Hypotheses Under Test	97
Purposes of the Study	98
Delimitations and Limitations of the Study .	99
Summary of the Procedures.	100
Findings	101
Conclusions	103
Recommendations	105
APPENDIX	109
BIBLIOGRAPHY	198

LIST OF TABLES

Table	Page
1. Comprehensive Theory Final Exam (Pilot Study) .	23
2. Dictation-Transcription Achievement (Pilot Study)	24
3. Profile of Students--Experimental Group . . .	41
4. Profile of Students--Control Group.	42
5. Summary of Raw Scores and Grade-Point Averages Used to Equate the Control and Experimental Groups for Probable Success in Shorthand (Experimental Group).	57
6. Summary of Raw Scores and Grade-Point Averages Used to Equate the Control and Experimental Groups for Probable Success in Shorthand (Control Group)	58
7. Applications of "t" Tests to Data (Equating of Control and Experimental Groups). . . .	58
8. A Summary of the Means and Standard Deviations of Both Groups for the Variables Associated with Probable Success in Shorthand	59
9. A Comparison of the Achievement of the Two Groups Based Upon the Transcript Section of the Theory Tests	60
10. A Comparison of the Achievement of the Two Groups Based Upon the Shorthand Outline Section of the Theory Tests	61
11. A Comparison of the Achievement of the Two Groups Based Upon the Number of Correctly Written Shorthand Outlines on the Theory Final Exam	62
12. A Comparison Over Time of the Achievement of the Two Groups Based Upon the Transcript Section of the Theory Tests	65

Table		Page
13.	A Comparison Over Time of the Achievement of the Two Groups Based Upon the Shorthand Outline Section of the Theory Tests. . . .	66
14.	A Comparison Over Time of the Achievement of the Control Group Based Upon the Transcript and Outline Sections of the Theory Tests . .	68
15.	A Comparison Over Time of the Achievement of the Experimental Group Based Upon the Transcript and Outline Sections of the Theory Tests	69
16.	A Comparison of the Achievement of the Control Group Based Upon the Transcript and Outline Sections of the Theory Tests	70
17.	A Comparison of the Achievement of the Experimental Group Based Upon the Transcript and Outline Sections of the Theory Tests . .	71
18.	A Comparison of the Number of Students in Each Group Who Attained Particular Three-Minute, Dictation-Transcription Speeds	72
19.	A Comparison of the Number of Students in Each Group Who Attained Particular Three-Minute, Dictation-Transcription Speeds on the Final Exam	73
20.	A Comparison of the Total Number of Three-Minute Dictation Transcripts Produced in Both Groups.	75
21.	A Comparison of the Achievement of the Two Groups Based Upon the Total Number of Correctly Transcribed Words on the Best Two, Three-Minute Dictation Transcripts	76
22.	A Comparison of the Achievement of the Two Groups Based Upon the Highest Number of Correctly Transcribed Words Produced on Two, Three-Minute Dictation Transcripts . .	77
23.	A Comparison of the Achievement of the Two Groups Based Upon the Total Number of Correctly Transcribed Words on the Three-Minute, Dictation-Transcription Final Exam .	78
24.	A Summary of the Means and Standard Deviations of Both Groups for the Various Dependent Variables	79

Table	Page
25. A Comparison Over Time of the Number of Students in Both Groups Who Attained the Goal of Two, Three-Minute Dictation Transcripts and the Particular Weeks of Attainment	80
26. A Comparison of the Number of Trials Required by Students to Attain Two, Three-Minute Dictation Transcripts at Particular Speed Levels in Both Groups	82
27. A Comparison of the Degree of Tension Felt by Both Groups in the Classroom Situation. . .	85
28. A Comparison of the Degree of Frustration Felt by Both Groups in the Classroom Situation. .	85
29. Results Over Time of the Opinions Reported by the Experimental Group on the Degree of Like Versus Dislike in Using the Visual-Presentation Machine to Develop Shorthand Skill.	87
30. Results Over Time of the Opinions Reported by the Experimental Group Students on the Degree to Which They Thought the Visual-Presentation Machine Helped Increase Their Shorthand Writing Speed.	88
31. Results Over Time of the Opinions Reported by the Experimental Group Students on the Degree to Which They Thought the Visual-Presentation Machine Helped Develop Shorthand Theory Mastery	89
32. Selected Student Comments on the Likes and Dislikes of Using the Visual-Presentation Machine	90
33. Reasons Given by Experimental Group Students for Dropping Out of the Shorthand Class During or at the End of the Fall and Winter Terms	92
34. Reasons Given by Control Group Students for Dropping Out of the Shorthand Class During or at the End of the Fall and Winter Terms .	92
35. Number of Absences Accrued by Members of Both Groups.	193

36.	Reported Number of Hours Per Week Members of Both Groups Spent Studying Shorthand Out of Class	194
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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

The process of learning shorthand and developing the speed necessary to offer it as a marketable skill is long and tedious. And the history of shorthand instruction is filled with experiences of high failures and dropouts among the students, especially in the early stages of instruction.

The introduction of the functional method (language arts approach) to shorthand instruction in 1934 by Dr. Louis Leslie has led to greater success in shorthand achievement, but the possibility for even greater improvement remains. For example, Frink¹ reported that only 11-20 percent of those students completing one year of shorthand instruction in the secondary school were capable of producing mailable transcripts from material dictated at 60 words a minute.

Shorthand tape laboratories have been utilized in recent years in an attempt to further improve shorthand achievement and to make shorthand instruction more efficient. However, sound research does not exist at this time that indicates significant improvement in shorthand achievement in the early stages of learning as a result of using shorthand tape labs.

¹Inez Frink, "Shorthand and Transcription: Some Research Findings and Observations," Business Education Forum, (October, 1961), p. 14.

In contrast to the lack of improved shorthand success associated with the use of the audio-stimuli approach to shorthand learning represented by shorthand tape labs, visual stimuli have been shown to increase the dictation-transcription ability of shorthand learners. In a study using a controlled reader to force shorthand reading speeds, Nixdorf² found that speed in dictation taking on new matter was increased approximately 25 percent.

Leslie³ has stated that the shorthand learner forms unverbilized generalizations from a great deal of good writing and reading practice, and this leads to correct and rapid writing.

As a result of considering the possible applications in instructional programs of statements such as the one made by Leslie, reviewing the successes and failures of presently constituted instructional programs in shorthand, and hypothesizing about new applications of visual methods in shorthand, this research study was conceived.

Purposes of the Study

This problem was designed to identify the differences in achievement, if any, between two groups of beginning Gregg

²Marion E. Nixdorf, "A Study to Determine the Effects of Using the Skill-Builder Controlled Reader in the Teaching of Shorthand," (unpublished Master's thesis, University of Wisconsin, 1962), p. 37.

³Louis A. Leslie, Methods of Teaching Gregg Shorthand, Gregg Publishing Division, McGraw-Hill Book Company, Inc., New York, 1953, p. 46.

shorthand students as measured by shorthand theory and transcription tests. A moving, visual presentation of shorthand text practice material to force faster writing and to develop greater accuracy in writing was used with an experimental group to replace the teacher dictation part of class activity used with a control group.

The moving, visual presentation of shorthand text practice material was designed to give the student intensive practice in reading and copying from expertly written shorthand at speeds that promote rapid writing skills.

The purposes of this study were to test, under controlled experimental conditions, a new approach to learning beginning Gregg shorthand in which classroom, teacher-dictation practice was replaced with a visual presentation of dictation practice material at forcing speeds through the employment of moving shorthand plates to determine:

1. Whether the visual presentation of shorthand dictation practice material at forcing speeds, together with self-dictation at these speeds, would result in a higher level of achievement in theory mastery than shorthand instruction involving teacher-dictation practice.

2. Whether the visual presentation of shorthand dictation practice material at forcing speeds, together with self-dictation at these speeds, would result in higher levels of dictation-taking ability for transcription from new matter than shorthand instruction involving teacher-dictation practice.

Four substudies were carried on concurrently with the research related to the two major purposes of this study. These substudies were designed to seek answers to the following questions:

1. What is the correlation between group raw scores on the accuracy of the shorthand outline section and the accuracy of the transcript section of the theory tests administered within the control and experimental groups?
2. What are the attitudes of students relative to using the visual-presentation machine in working with shorthand practice material?
3. What effect will the use of the visual-presentation machine in an experimental group have on the shorthand drop-out and failure rate?
4. What effect will the use of the visual-presentation machine in an experimental group have on the feelings of tension and frustration usually experienced by students in developing skill?

Hypotheses

The research hypotheses tested were:

1. There will be a significant difference between the achievement levels of the two groups of learners in beginning Gregg shorthand in theory mastery as measured by theory tests when one of the groups (experimental) receives writing practice through the moving, visual presentation of text practice at forcing speeds.

2. There will be a significant difference between the achievement levels of two groups of learners in beginning Gregg shorthand in dictation-taking ability for transcription from new matter as measured by transcription tests when one of the groups (experimental) is forced to faster writing through the moving, visual presentation of text practice material.

Definition of Terms Used

Gregg shorthand.--Shorthand system developed by John Robert Gregg and published in 1889. The series of the system taught in this experiment was titled Diamond Jubilee.

Beginning shorthand.--Course designed to teach Gregg shorthand theory, Diamond Jubilee Series, and to provide for the development of skills in transcription from dictated material.

The functional or "language arts" method.--The teaching of shorthand as an art rather than as a science. The emphasis is on the students being taught to automatize correct shorthand responses without verbalizing or consciously knowing the generalizations or rules. This method is characterized by intensive training in reading and spelling early in the instruction, and the omission of rule teaching, word lists, and penmanship drills.

Visual-presentation machine.--A custom-built machine which presented the shorthand practice material to the student. This machine enabled the student and/or the instructor to regulate the speed at which the material was presented.

Moving shorthand plates.--Shorthand text material that had been printed on paper rolls, similar to adding machine rolls, and which was fed through the visual-presentation machine at speeds that forced rapid reading and writing.

New matter.--Dictation material (connected matter) which had not been used previously in the instructional program for practice or testing purposes.

Theory tests.--Timed dictation of individual words (unconnected matter) which students wrote in shorthand and then transcribed into longhand when the dictation was completed. Each test consisted of twenty-five theory words with one word being dictated every five seconds. Scores were obtained on the accuracy of the shorthand outlines and the transcripts.

Transcription tests.--Timed dictation of new matter in the form of business letters (connected matter) which students wrote in shorthand and then transcribed into longhand when the dictation was completed. Scores were obtained on the number of correctly transcribed words from the dictation. Transcription tests were three minutes long and were grouped in speed categories beginning with 50 words per minute and increasing to 60, 80, and 100 words per minute as the student's skill increased.

Researcher, Instructor.--Used interchangeably throughout the study to designate the person who taught the two groups of shorthand students and who conducted the study.

Correctly transcribed words.--Words that were transcribed from shorthand outlines exactly as dictated.

Correct shorthand outlines.--Outlines that were theoretically correct according to Gregg theory.

Delimitations of the Study

This study was limited to two separate classes in beginning Gregg shorthand taught in two succeeding terms at Lansing Community College, Lansing, Michigan, during the school year 1968-69.

The study contained one independent variable, that being the moving, visual presentation of practice material at forcing speeds used with the experimental group.

The differences between the achievement levels of the two groups were limited to measurement by theory and transcription tests.

Limitations of the Study

This study did not attempt to make judgments or generalizations about other shorthand instructional programs or the potential success of any other group of beginning shorthand students using this particular instructional program, although the results may have implications for other groups and programs.

The study was not concerned with factors such as cultural background, interest, or motivation of the students involved in the study.

The study did not involve measuring achievement levels of the two groups by any other means than shorthand theory and transcription tests.

Because there were a limited number of the visual-presentation machines built, the study could not involve multiple control and experimental classes.

CHAPTER II

REVIEW OF LITERATURE AND PILOT STUDY

This portion of the study was devoted to a review of the literature as it pertained to visual methods of learning applied to shorthand skill development, the early introduction of new-matter dictation for transcription, criteria for predicting shorthand success, and the relationship between shorthand theory mastery and transcription. This review involved an examination of professional literature, theses, and dissertations covering, for the most part, the period from 1950 to 1969.

Also included in this portion of the study was a thorough review of the small pilot study conducted at Lansing Community College involving the initial test of the visual-presentation machine in the shorthand instruction program.

Visual Methods of Learning Applied to Shorthand Skill Development

A thorough search of professional literature, theses, and dissertations revealed that very little experimental work had been done in applying visual methods to shorthand learning. Therefore, this section of the study reports in some detail the work that has been done.

Ruegg Article¹

Ruegg reported on the application of reading instruments (visual-presentation machines) to the teaching of business skill subjects. The reading instrument discussed was the Educational Development Laboratories' Skill-Builder Controlled Reader. This instrument allows an instructor to pace skill-building materials at speeds which allow time for student reaction to the reading stimulus.

In shorthand, the student would follow the reading activity with a prelearned response, such as transferring written shorthand outlines into spoken words. The reading activity is thus used as the stimulus which sets activity into motion to produce a response.

The controlled reader automatically presents material at a predetermined, continuous, rhythmic pace which is measured in lines a minute. Projection may be set in a left-to-right moving slot motion which covers and uncovers print as it moves across each line. Left-to-right movement develops the directional attack of the respondent while substantially reducing regressions. Projection may also be set in an open slot motion which exposes an entire line of print at one time. With either motion setting, new lines of material move into view at a continuous, preset pace. The controlled reader develops the ability to respond rapidly, accurately, and regularly through presentation of material at a variety of continuous speeds.²

Ruegg stated that with the use of the controlled reader greater emphasis may be placed on shorthand transcription as

¹Robert J. Ruegg, "Skill Building Through Reading Instruments," Selected Readings in Business and Office Occupations, National Business Education Yearbook, Number 5 (Washington, D.C.: National Business Education Association, 1967), pp. 252-259.

²Ibid., p. 254.

a skill. In beginning shorthand, for example, oral transcription--reading aloud in a group or individually--from shorthand outlines may be speeded up through projection of outlines at teacher-controlled speeds.

The following benefits of instrument training were presented by Ruegg³:

Basic Benefits of Instrument Training

1. Pacing may be controlled at speeds above, equal to, or below student ability. ". . . in the beginning, the typist's motions are awkward, excessive, and diffuse. By increasing the pace--the rate at which the typist responds--some awkward components drop out."
2. Concentration is maintained at a high pitch.
3. Motivation is increased. "A motivated learner will acquire a skill more rapidly than a less motivated one. Active participation by the learner will keep motivation at a higher level than will passive reception. . ."
4. A wide variety of drills are possible through use of left-to-right and open-frame projection.
5. Projection may take place in a room with light so that a variety of activities may take place at one time.
6. The teacher may move about the room during projection instruction to observe students by watching and listening.
7. The instrument may be operated by students in groups or individually.
8. The teacher may hold up projection at any point for review or discussion.
9. The teacher may take an active part in controlling student responses to skill-building activities.

³Ibid., p. 259.

Researcher comment.--Although Ruegg did not report on any experiments that had been done in shorthand utilizing the controlled reader, his discussion does give us some insight into the application of visual methods in skill training and points out some of the advantages of instrument training in skill development. As will be clear later, many of the benefits of instrument training presented by Ruegg also apply to the use of the visual-presentation machine in the experimental program described in this study.

Nixdorf Study⁴

Nixdorf experimented with the Skill-Builder Controlled Reader in beginning Gregg shorthand. One of the purposes of her experimental study was to determine whether forced reading of shorthand outlines in the initial learning period would have an effect on the speed at which beginning shorthand students would be able to take new-matter dictation.

This study was carried out in two beginning shorthand classes of eleventh grade girls at St. Louis Park Senior High School, St. Louis Park, Minnesota. Each class had an enrollment of twenty students.

Instruction with the controlled reader was begun in an experimental class with Lesson 7 in the shorthand text, Gregg Shorthand Manual Simplified, Functional Method. Approximately

⁴Marion E. Nixdorf, "A Study to Determine the Effect of Using the Skill-Builder Controlled Reader in the Teaching of Beginning Shorthand," (unpublished Masters' thesis, The University of Wisconsin, Madison, 1962).

fifteen minutes of each class period was spent on using the controlled reader. Filmstrip lessons which correlated in vocabulary with the lesson assigned for the previous day's homework were used.

With the Skill Builder set for full-slot projection (entire line exposed) and with the teacher manually regulating the exposure time, the class first read the shorthand material. Difficult words were spelled by the class in unison. Following the initial reading, the letter was read again with open-slot projection (moving left-to-right motion); this procedure was repeated until the class was able to read the material as fast as the Skill Builder is able to project it, 144 words per minute. As the class increased its reading skill, the number of repetitions necessary to reach this maximum speed decreased. Individual reading from the screen became more frequent as the students⁵ gained confidence in their reading ability.⁵

Nixdorf reported that by the time the control and experimental classes had completed Lesson 14, the students were anxious to begin writing shorthand. Beginning with Lesson 15, about ten minutes of the class time each day was devoted to the introduction of shorthand writing. Beginning with Lesson 19 both groups began some work with teacher-dictation on practiced material. After the completion of Lesson 60, the controlled reader was no longer used.

Beginning with the second semester of school, all dictation in each class--control and experimental--consisted of new material. Testing of the students' ability to take new-matter dictation consisted of three-minute dictations which the classes transcribed in longhand. The end-of-third-quarter

⁵Ibid., p. 9.

results showed that the experimental class was able to take new-matter dictation for three minutes at higher speeds than was the control class.

All of the students in both classes were able to take dictation and transcribe at the 95 percent level of accuracy on material dictated at 50 words per minute. At 60 words per minute, 5 percent more (17 vs. 16) of the experimental class passed. However, beyond 60 words per minute, the percentage of students passing these higher speeds was greater in the experimental group. All of the experimental class students who passed 60 words per minute (17) also passed 70 words per minute, while only 65 percent (13) of the control class passed this speed. At 80 words per minute approximately half (9) of the experimental class passed, while only one-fourth (5) of the control class passed. One student in the experimental class was able to take and transcribe dictation successfully at 90 words per minute.⁶

Nixdorf concluded from the results of the study that the greater achievement of the experimental group in dictation-transcription would tend to indicate that the use of the Skill-Builder Controlled Reader had a positive effect on the development of that skill. She further concluded that the ability to read shorthand well transfers to a greater ability to write shorthand, and that the forced reading of shorthand outlines in the initial learning period appears to have a

⁶Ibid., p. 32.

positive effect on the speed at which the beginning shorthand student is able to take new-matter dictation.

Researcher comment.--The research being reported in the present study is similar in some ways to the Nixdorf study. The researcher's study also was involved with developing rapid reading rates on shorthand outlines, but this was done in conjunction with developing rapid and fluent writing of shorthand outlines on connected material. As in the Nixdorf study, one of the primary measures of achievement was the speed levels attained by students in dictation-transcription.

Hanson Study⁷

Hanson experimented with both visual and audio-visual stimuli in conjunction with assigned homework in beginning Gregg shorthand. The purpose of his study was to determine whether there were differences in performance of first-semester college Gregg shorthand classes doing homework by self-dictation from textbooks (visual stimulus) and classes doing homework from textbooks and tape-recorded dictation of the textbook plate material (combined audio-visual stimuli).

The subjects for the experiment were first-semester college Gregg shorthand students at Illinois State University, Normal, Illinois.

⁷Robert Nelton Hanson, "Visual Stimulus Versus Combined Audio-Visual Stimuli for Out-of-Class Practice in First-Semester College Gregg Shorthand," (unpublished Ed.D. dissertation, The University of North Dakota, Grand Forks, 1966) as cited in the summaries of research, The National Business Education Quarterly, 36 (Fall 1967), pp. 35-36.

Control group students did their homework writing by self-dictation from the textbook plate material while students in the experimental groups did their homework in the shorthand laboratory with textbooks open for reference.

Theory knowledge of the groups was compared after 15, 30, and 45 clock hours of formal instruction and new-matter dictation tests were administered after 45 clock hours.

When the theory test scores of all control students were compared with scores of experimental students after 45 clock hours of formal instruction, the difference in favor of control students reached the .01 level of significance. New-matter transcript scores after 45 clock hours showed differences in favor of the experimental groups, but none reached the .05 level of significance.

Hanson concluded that first-semester college Gregg shorthand students who do their writing by self-dictation from textbooks (visual stimulus) achieve a superior knowledge of the principles of the shorthand system than do students who do their writing from recorded dictation with textbooks open for reference. He further concluded that neither homework method is superior in the development of skill in writing new-matter dictation after 45 clock hours of formal instruction.

Researcher comment.--The Hanson study is related in design to the study being reported by the researcher, as it does involve basic work with visual and audio-visual stimuli. As Hanson reported, and will be reported later in this research, the visual stimulus was superior to the audio-visual stimuli in developing theory mastery.

Barber Study⁸

Barber experimented with tachistoscope training to determine whether this training accelerated the learning process and resulted in a higher degree of achievement in an elementary college shorthand course which emphasized transcription. The tachistoscope is very similar to the Skill-Builder Controlled Reader that Nixdorf experimented with and which was reported on previously in this chapter.

Barber's study was conducted in the elementary shorthand classes at Oregon State College during the fall, winter, and spring quarters of 1957-58, 1958-59, and 1959-60. Seventy-nine students were involved in the study. Control and experimental classes were utilized with the only difference in training between the classes being the use of the tachistoscope with the experimental classes. Statistical analysis of mental ratings and English test scores secured on all students involved in the study disclosed that there was no statistically significant difference between groups. In addition, it was determined from an examination of the students' high school transcripts that they had had no prior shorthand instruction.

The experimental groups were given ten to fifteen minutes of work with the tachistoscope during a class period. Whatever material was used on the tachistoscope with the experimental

⁸Shirley Barber, "An Experimental Study in Teaching Shorthand Using the Tachistoscope," (unpublished Ed.D. dissertation, Colorado State College, Greeley, 1961).

groups was also given to the control groups, but was presented on the chalkboard by the instructor. The drills used in the classes involved both reading and writing of individual shorthand outlines.

Student achievement in shorthand learning was determined by evaluating the students' ability to read and write shorthand in and out of context, from the shorthand in the textbooks and from their own notes, on familiar and unfamiliar material, at various rates of speed and for different lengths of time. Three- and five-minute tests were constructed that measured reading ability, speed of transcription from the textbook, students' knowledge of theory, and transcription ability on their own notes.

Barber found from the statistical analyses of data in her study that there was a significant difference in reading rates between groups on all types of materials and that this difference favored the experimental groups that had received tachistoscopic training. In addition, she found that there was a significant difference in transcription speed rates attained between groups and that this difference favored the experimental groups. There was also found a significant difference between groups in number of transcription errors committed, but on this measure the control groups came out on top with fewer errors.

Researcher comment.--The tachistoscope, like the visual-presentation machine used in this research and the Skill-Builder Controlled Reader used by Nixdorf, was designed to force

students to move along rapidly in their reading and/or writing. This forcing pressures the students to think and react quickly to stimuli, one of the skills that it is necessary to develop in shorthand students. And, as presented in the Barber and Nixdorf studies, this quick thinking and reacting was found to transfer to the development of important shorthand skills. The present research study will give complete detail on the effects of forced reading and writing of shorthand, via the visual-presentation machine, on the development of skill.

Pilot Study

The researcher conducted a pilot study utilizing the visual-presentation machine during the fall and winter terms of the school year 1967-68 at Lansing Community College, Lansing, Michigan. It was the feeling of the researcher that the visual-presentation machine and the concept of learning shorthand primarily through the visual method needed to be tested in a limited way prior to committing time, students, and the college to a comprehensive research program.

An instructional program was developed for beginning Gregg shorthand in which the machine was used in presenting text, practice-dictation material to an experimental group to replace the teacher-dictation portion of class activity used with a control group. The subjects included in the experiment were fifteen female college students who had had no previous shorthand training--seven in the control group and eight in the experimental group. The control group met

from 10:10-11 a.m. on Monday, Tuesday, Thursday, and Friday and the experimental group met from 11:10-12 noon the same days. The same classroom was used for each class both terms. Students were required to stay in the same class for the two terms of the study.

The experimental hypotheses tested were:

1. Copying accurate, professionally written shorthand practice material at forcing speeds in the early stages of learning will eliminate tendencies to write incorrect outlines and thereby provide a more efficient learning process for the mastery of shorthand theory than teacher dictation of practice material.

2. Copying accurate, professionally written shorthand practice material at forcing speeds will more quickly develop vocational level, dictation-taking abilities for transcription than teacher dictation of practice material by eliminating tendencies to hesitate while writing and to write illegible outlines.

All of the Gregg shorthand theory, Diamond-Jubilee series, lessons 1-48, was covered during the first term of the study (fall quarter) and the second term (winter quarter) was devoted to theory review and speed building--lessons 49-70, selected review from lessons 1-48, and the first twenty lessons from the intermediate Gregg shorthand text.

The experimental group received the same presentations as the control group for the introduction of theory, took part in the same oral spelling and reading exercises, completed

the same homework assignments, and was given the same theory and dictation-transcription tests for measurement of achievement on the same days and under similar conditions.

The students enrolled in beginning Gregg shorthand in the fall of 1967 without any knowledge of an experiment taking place, thus providing a degree of randomization. However, to check the equality of the groups on one of the more significant predictors of shorthand success, the students' high school transcripts were obtained and a comparison was made on the basis of overall grade-point averages. The results of the comparison indicated no significant difference between groups.

During the first term of the study, the students in the experimental group spent from ten to fifteen minutes per class day actively engaged in reading and copying shorthand text practice material from the visual-presentation machine. The control group spent the same amount of time taking teacher-dictation on the same practice material. The material used for practice in both groups was taken from lessons that had been previously introduced in the classes and studied as homework.

During the second term of the experiment, the control group received twenty-five minutes of teacher-dictation per class day on practice material while the experimental group received five minutes of teacher-dictation and twenty minutes of practice utilizing the visual-presentation machine on the same material.

In order to measure the achievement of the two groups of students on theory mastery and dictation-taking ability for transcription as this relates to the two hypotheses that have been stated, two types of tests were utilized.

1. To measure theory mastery, a comprehensive 100-word theory test was administered to the two groups at the end of the second term of the study. This test involved the teacher's supplying to the students a printed list of words written in longhand, and the students writing the words on the list in shorthand. Scores were obtained on the number of words written incorrectly according to Gregg theory.

2. To measure dictation-taking ability for transcription, two- and three-minute dictation-transcription tests were administered throughout the two terms of the study. All of the material used for dictation-transcription measurement was new material in the form of business letters. The minimum level of accuracy required for transcript acceptability was set at 95 percent. The tests administered to the two groups were always identical, dictated at the same speeds, and given on the same days and under similar conditions.

In order to test the first hypothesis--copying at forcing speeds results in improved theory mastery--the comprehensive theory test was administered. The results of this test can be seen in Table 1.

A "t" test was applied to this data to determine whether or not there was a significant difference between the groups

on this measure. The t-ratio obtained was .067, much less than that required to reject a null hypothesis of no difference.

TABLE 1
COMPREHENSIVE THEORY FINAL EXAM
(Number of Errors Reported--Possible Error Score of 100)

Control Group	Experimental Group
12	7
13	9
14	10
14	13
27	25
42	33
58	33
	70

Average Scores: Control Group--25.7; Experimental Group--25.0.

The data does point out, however, that the top three students in the experimental group (37.5 percent) compiled better scores than the best score recorded in the control group. It also points out that excluding the one very poor score in the experimental group, there was less variance between the scores recorded in the experimental group than in the control group.

In order to test the second hypothesis--copying at forcing speeds results in more quickly developed vocational level dictation-taking abilities--two- and three-minute dictation-transcription tests were administered throughout the two terms of the study. The results of these tests in terms of student attainment can be seen in Table 2.

Table 2

DICTATION-TRANSCRIPTION ACHIEVEMENT

(New Material--Minimum of Two Transcripts--95 Percent Accuracy Minimum--Two- and Three-Minute Dictation)

Speed Level	Experimental Group Students	Length of Dictation	Control Group Students	Length of Dictation
100	1	Two Minutes	0	
90	3	Two Minutes	0	
80	0		2	Three Minutes
70	1	Three Minutes	3	Three Minutes
60	0		0	
50	3	Three Minutes	2	Three Minutes

Average Speeds: Experimental Group--73.8; Control Group--67.1.

This data shows that four of the people in the experimental group (50 percent) exceeded the highest speed attained in the control group although these four people did so on dictation-transcription tests of two-minutes' duration.

A "t" test was applied to the dictation-transcription test data to determine whether or not there was a significant difference between the groups in regard to the number of correctly transcribed words. The t-ratio obtained was .7169, much less than that required to reject a null hypothesis of no difference. Although it appears that there may be a significant difference between the two groups on this measure, the reader is cautioned to recall that both two- and three-minute dictation transcripts are included in the data. However, the data did show a difference in speed level attainment that seemed to call for further research.

On the basis of the evidence obtained from the pilot study, the researcher was convinced of the merit of designing a more comprehensive study, with many more controls exercised, to determine more accurately the real effect of this visual method on learning Gregg shorthand. The researcher also felt it necessary to collect more descriptive information related to the effects on learning of this visual method throughout the training period; to plan better use of the visual-presentation machine, especially as this relates to time, so that the achievement of the students could be more reliably related to the use of this visual method; and to collect data on the opinions of students relative to using the machine and the effects of using it on the student attrition rate in shorthand.

Early Introduction of New-Matter Dictation for Transcription

The design of the present research study involved the early introduction of new-matter dictation for transcription purposes. This was necessary because of the need to measure skill achievement on the terminal goal in shorthand, successful transcription of shorthand notes, and to aid in determining the effects of the two methods of learning employed in the study on the attainment of that goal. The question this procedure raised was whether the early introduction of new matter would have any adverse effects on learning shorthand and thus jeopardize the study and/or the students in their learning.

Russon Article⁹

Russon stated that she is an advocate of the early introduction of new-matter dictation.

Psychologists tell us that greater learning takes place when the skill to be learned is taught in a way that is close to the conditions of actual use. If new-matter dictation is treated as a skill that must grow just as the skills of reading and writing shorthand must grow, then it is evident that new-matter dictation should start at a simple level and gradually increase in length and difficulty. This would seem to be a more logical course than to expect such an ability to emerge, full blown, at the conclusion of the theory lessons.¹⁰

The procedure followed by Russon is to begin new-matter dictation for practice in the middle of the second week of class and start new-matter dictation for transcription in the fifth week. Russon emphasized that the new matter is quite easy in the beginning and is dictated at relatively slow rates, but the students enjoy the challenge of real dictation and benefit greatly from practicing the whole skill.

McKenna Study¹¹

McKenna's study involved an experiment to determine the effect of the early introduction of new-matter dictation on achievement in teaching beginning shorthand to college students.

⁹Allien R. Russon, "Let's Start New-Matter Dictation Early," Business Education World, 44 (October 1963), pp. 16, 34-35.

¹⁰Ibid., p. 16.

¹¹Margaret Ann McKenna, "An Experiment to Determine the Effect of the Early Introduction of New-Matter Dictation in the Teaching of Beginning Shorthand to College Students," (unpublished Ph.D. dissertation, Michigan State University, East Lansing, 1966).

The study involved students enrolled in beginning shorthand at Michigan State University during the winter and spring terms of 1965.

This investigation was concerned with determining the difference in achievement between beginning shorthand students taking new-matter dictation from the third week of the first term and students who had experienced only practice material for dictation until after all of the shorthand theory had been presented. Two theory tests and a series of dictated letters were used to determine the difference in achievement between the two groups of students.

McKenna found that there was no statistically significant difference between the achievement of the two groups on the dictation tests or on the two theory tests. Thus she concluded that the early introduction of new-matter dictation did not result in an increase in the ability to take and accurately transcribe new-matter dictation material as measured by the existing departmental standards at Michigan State University. She further concluded, however, that the early introduction of new-matter dictation does not, as claimed by some experts, retard the students in their ability to take and transcribe new-matter dictation, nor does the study provide any evidence to suggest either postponed benefits or postponed handicaps due to the early introduction of new-matter dictation.¹²

Researcher comment.--Since evidence existed that indicated no adverse effects from the early introduction of new-matter

¹²Ibid., pp. 90-91.

dictation, the researcher concluded that the use of such dictation early in the instructional program being reported on in this research would not adversely effect the study or the students in their learning.

Criteria for Predicting Shorthand Success

A great deal of work has been done over the years in the area of shorthand prognosis. Although the present study did not concern itself with identifying criteria for predicting shorthand success, known criteria for predicting success were used in evaluating the control and experimental groups to determine if each had an equal chance for success.

O'Connell Study¹³

O'Connell completed a study in which one of the objectives was to determine the relationship between scores on the Turse Shorthand Aptitude Test and grade-point average with that of achievement in beginning shorthand. The subjects for the study were 210 high school students. Since most of the students involved in the study were high school juniors, the grade-point average was secured from the average grade attained in the subjects taken in the ninth and tenth grades. For the few seniors involved in the study, the grade-point average included subjects for the ninth, tenth, and eleventh grades.

¹³Mary Margaret O'Connell, "An Experimental Study to Determine the Effectiveness of Programmed Gregg Shorthand Materials," (unpublished Ph.D. dissertation, The University of Wisconsin, Madison, 1967) as cited in an article by Mary Margaret O'Connell and Russel J. Hosler, "Predictors of Success in Shorthand," The Journal of Business Education, XLIV (December 1968) pp. 96-98.

In this study O'Connell reported that there were many other factors correlated with the students' achievement in first-semester shorthand. However, the two factors that correlated the highest with shorthand achievement were grade-point average (average grade in all high school subjects prior to the semester in which they enrolled in shorthand) and scores on the Turse Aptitude Test, with grade-point average having a considerably higher relationship than the Turse scores. The coefficient of correlation between the first-semester shorthand grade and grade-point average was .68. Between shorthand grades and the Turse Test the correlation was .54.

Whittle Study¹⁴

Whittle carried out a study at the University of Texas to determine the value of certain selected variables in predicting achievement of college students in beginning shorthand at the University. The criterion used for measuring shorthand success was the grade that each student made in shorthand during the first semester of study.

A correlation coefficient of .586 was found between shorthand success and general scholastic average of all high school grades. The only correlation higher than this was .759 on the University of Texas Admissions Test.

¹⁴Marie Whittle, "The Relationship Between Certain Variables and Achievement in Beginning Shorthand at the University of Texas," (unpublished Masters' thesis, The University of Texas, Austin, 1959) as cited in an article by Marie Whittle, "Do We Have Criteria for Predicting Shorthand Success?" The Business Education Forum, 16 (March 1962) pp. 25-26.

Varah Study¹⁵

Varah's study included a synthesis of the research completed related to shorthand prognosis. He listed fourteen different studies completed from 1934 to 1957 that reported twenty-three correlations between shorthand achievement and English grades and/or tests. These studies reported four correlations of .70 or higher; five correlations of .60 to .69; six correlations of .50 to .59; three correlations of .40 to .49; two correlations of .30 to .39; two correlations of .20 to .29; and one correlation of .01. Varah concluded from his review of studies completed that achievement in English is one of the better predictors of shorthand success.¹⁶

Six different studies completed from 1943 to 1954 used grade-point average as one of the variables in predicting shorthand achievement. Ten correlations were reported in these studies. Five correlations were .70 or higher; one was .60; two were between .50 and .59; one was .43; and one was .38.¹⁷

Varah concluded that grade-point average is also a valuable predictor of shorthand success.

Researcher comment.--The foregoing evidence was presented to substantiate the fact that English grades, English tests, and grade-point averages are valuable predictors of shorthand

¹⁵Leonard James Varah, "Effect of Academic Motivation and Other Selected Criteria on Achievement of First and Second Semester Shorthand Students," (unpublished Ph.D. dissertation, Michigan State University, East Lansing, 1966).

¹⁶Ibid., p. 33.

¹⁷Ibid., p. 34.

success and that they have been researched over an extensive period of time. These measures have been used by this researcher in equating the experimental and control groups to determine if each had an equal chance for shorthand learning success.

The Relationship Between Shorthand Theory Mastery and Transcription

One of the sub-studies carried on in this research dealt specifically with the correlation between theory mastery and the ability to transcribe correctly from shorthand notes. The researcher assumed that in order to transcribe with a high degree of accuracy the students would have to write their shorthand with a good degree of accuracy.

Lusk Study¹⁸

The purpose of Lusk's study was to determine whether the theoretical accuracy of shorthand outlines written from dictation affected a student's ability to transcribe. Two dictations at the speed of 60 words per minute and two at 80 words per minute were administered to seven classes of shorthand students during the fifteenth and sixteenth weeks of the second semester of shorthand. The shorthand notes and transcripts written by each student for the four dictation tests were analyzed and errors were classified within one of the ten error categories established for classifying shorthand and transcription errors.

¹⁸Norman Malcolm Lusk, "A Study of the Comparison Between Construction of Shorthand Outlines According to Theory and the Accuracy of Transcription," (unpublished Masters' thesis, The University of Washington, Seattle, 1959) as cited in the summaries of research, The National Business Education Quarterly, 29 (Fall 1960) pp. 43-44.

Lusk found that the students who passed each of the dictations wrote incorrectly only 30 percent or less of the total predictable shorthand and transcription errors. He also found that although a high percentage of the theoretically incorrect outlines were classified as "incorrect outline" and "proportion" errors within the ten error categories, a high proportion of the "incorrect outline" and "proportion" errors were transcribed correctly by both the passing and failing students, but especially the passing students.

He concluded from his statistics that students probably do not need to be given drills which place great emphasis upon accurate construction of shorthand outlines or the details of penmanship and proportion.

Danielson Study¹⁹

Danielson completed a study dealing with the relationship between competency in shorthand vocabulary and achievement in shorthand dictation. This study involved 120 transcription students at Indiana University. Competency in shorthand vocabulary was measured by administering six, 250-word tests; and measurement of shorthand dictation-taking ability was accomplished by the dictation of an equated series of business letters. Shorthand vocabulary was defined as the number of shorthand outlines the student was able to transcribe correctly but not necessarily write correctly.

¹⁹Harriet Danielson, "Shorthand Vocabulary's Relationship to Dictation Achievement," The Business Education Forum, 15 (February 1961) pp. 21, 27.

She found that shorthand vocabulary was significantly related to shorthand dictation-taking ability, and that as a student's shorthand vocabulary increases, the rate of taking dictation also increases. Danielson concluded that if optimum growth in shorthand is to be achieved, one of the primary objectives in instruction must be the building of shorthand vocabulary.

Goety Study²⁰

The Goety study was designed to determine the relationship between shorthand symbol mastery and selected dictation speeds. This study utilized a list of 600 words that was administered at the beginning and end of the second semester to groups of students who took dictation and transcribed it successfully at speeds of 50-60, 70-80, and 90-100 words per minute for three minutes. All of the shorthand symbols used in writing these words were isolated, and on each student's test they were checked to see if they were written correctly. The gain in mean symbol mastery was determined from the beginning of the second semester to the end for each group. Eighty-six students were included in the three speed groups.

Goety found the following correlations between symbol mastery and dictation-transcription for the three groups: 50-60 wpm--.82, 70-80 wpm--.80, 90-100 wpm--.92. He concluded that there is a linear relationship between symbol mastery

²⁰Leo G. Goety, "The Relationship Between Symbol Mastery and Selected Dictation Speeds," (unpublished Ed.D. dissertation, The University of North Dakota, Grand Forks, 1966).

and selected dictation speeds and that approximately 67 percent of a student's dictation speed may be attributed to symbol mastery.²¹

Pullis Study²²

Pullis obtained a correlation of .8326 between the student's ability to write accurate shorthand outlines and his achievement in shorthand dictation. Approximately 69 percent of the achievement in shorthand dictation was directly associated with competency in shorthand accuracy. He also found a significant positive relationship ($r=.9305$) between the ability of the student to write accurate shorthand outlines and his ability to transcribe the outlines.

Researcher comment.--Although the study reported on in the present research does not deal with the relationship between theory mastery and dictation-transcription ability on connected matter, it does deal with the relationship between theory mastery and transcription on unconnected matter. And, whereas these related studies report a definite relationship between theory mastery, shorthand vocabulary, and the ability to transcribe from connected-matter dictation, the present research study presents some very different results in this area when dealing with unconnected matter.

²¹Ibid., pp. 87-88.

²²Joe Pullis, "The Relationship Between Competency in Shorthand Accuracy and Achievement in Shorthand Dictation," (unpublished Ed.D. dissertation, North Texas State University, Denton, 1966) as cited in an article by Ruth I. Anderson, "Utilizing Shorthand Research in the Classroom," The National Education Quarterly, 36 (Spring 1968) pp. 46-54.

CHAPTER III

INSTRUCTIONAL PROCEDURE

Course Scheduling

Beginning with the fall term, 1968, and continuing through the winter term, 1969, two separate classes in beginning Gregg shorthand were taught at Lansing Community College. Both of these classes met for fifty minutes on Monday, Tuesday, Thursday, and Friday in Room 305, Old Central. The experimental class met from 10:10 to 11 a.m. and the control class met from 11:10 to 12 noon. The students were required to remain in the particular class they enrolled in for both the fall and winter terms.

Student Selection of Class

No reference was made in the registration procedures or in the registration materials that either class would be involved in an experimental activity. The students selected one of the two classes offered by Lansing Community College in beginning Gregg shorthand without knowledge of the significance of their choice. It was assumed, therefore, that having no knowledge about the experiment, the students randomly distributed themselves between the two sections.

In order to prevent any teacher bias that could occur from knowledge of the two classes, a simple toss of a coin was

used to select the class that was to be given the experimental treatment. This selection was carried out prior to the first class meeting day.

Student Potential for Shorthand Success

In an attempt to establish the equality of the two classes as this relates to potential for shorthand success, the researcher obtained and compared the high school grade-point averages of each of the students, their high school grade-point averages in English, and their scores on the English section of the entrance test administered by the college.

The results of the comparison of these findings revealed that there was no statistically significant difference between the two groups. This fact substantiated the assumption that the students in the two classes entered beginning Gregg shorthand with no significant difference among them in relation to some known factors that influence success in learning shorthand.

Tables 5 and 6 in Chapter IV present the test scores and grade-point averages of the students in both classes. The results of the statistical analyses are also presented in Chapter IV.

Definition and Control of Essential Variables

Variable one.--Student selection of a particular class in beginning Gregg shorthand was assumed to have been the result of a process of randomization of student choice.

Assumption

The assumption was made that the two classes would be comparable because students registered for

either class without prior knowledge of the significance of their choice.

Control

T tests of the difference between the mean scores achieved by students in both classes on the English section of the College entrance test, their high school grade-point averages in English, and their overall high school grade-point averages were used as evidence of the equality of the two classes as this relates to potential for shorthand learning.

Variable two.--A possible variation in the instructional process that might occur if two or more instructional personnel were involved in the study was viewed as a potential problem.

Assumption

The assumption was made that since the same instructor was assigned to teach both classes, no significant variation in instructional process occurred except that which resulted from the use of the visual-presentation machine with the experimental class.

Control

In order to control the possibility of a variation existing, the same instructor was assigned to teach both classes. There was no attempt made to estimate the degree of variation, if any, in

the instructional process utilized by the instructor in the two classes. However, lesson plans were prepared each day for each class and these plans included each activity to be carried on in the class and the amount of time allocated to the activity. The instructional plans were kept identical except for the use of the visual-presentation machine in the experimental class used in place of the teacher-dictation activity carried on in the control class.

The Time and Activity Schedule in the Appendix presents the basic activities carried on in the classes each day along with the particular time allocations.

Variable three.--The variation in the instructional process resulting from the use of the visual-presentation machine in the experimental class but not in the control class was planned as an integral part of the instructional program.

Assumption

The assumption was made that the independent variable would be the use of the visual-presentation machine in the experimental class to present the shorthand text practice material.

Control

The time devoted to working on shorthand text practice material in both classes each day varied to some extent during the two terms of

the experiment. However, there was no variation between the two classes on any one day as to the amount of time devoted to this practice. Aside from the use of the visual-presentation machine in the experimental class, all other class activities were identical for both groups in regard to method, organization, presentation, and time allocation.

Furthermore, all teacher dictation of text practice material in the control group and all student use of the visual-presentation machine in the experimental group took place within the classroom on assigned class meeting days.

Variable four.--Comparability of classroom facilities, meeting days, and meeting times were considered as possible variables.

Assumption

It was assumed that facilities, meeting days, and times should be as identical as would be possible for the experiment.

Control

The two classes were scheduled in the same classroom, on the same days of the week, for the same length of time, and for succeeding hours in the day.

Variable five.--The number of students enrolled in each of the classes was viewed as being important as a possible variable in the study.

Assumption

It was assumed that the two classes should be quite equal in size to avoid the possibility of varied instruction which could result from inequality.

Control

Class size was limited to thirty-five students. The actual enrollment for the control class reached twenty-one and in the experimental class reached twenty-four. A thorough check of the high school transcripts of all these students revealed that four students in each class had had prior shorthand training. These students were eliminated from the study, although they remained in the classes.

By the end of the fall term, eight students from the experimental group and six students from the control group had dropped out of the classes. Within a few weeks of the start of the winter term two more students from the experimental class and one from the control class had dropped out. This left ten students in each class who had never had instruction in shorthand prior to this program to complete the two terms. These twenty students constituted the subjects for this study.

It had been hoped that the use of the visual-presentation machine would have a positive effect on the student dropout problem that has for so long a time plagued shorthand instruction. However, this was not the case, and the typical dropout percentage of approximately 50 percent prevailed.

Table 33 in Chapter IV gives a complete breakdown of the number of students who dropped out of the shorthand program along with their reasons for doing so.

Profile of Students

In addition to obtaining data on the comparability of the two classes as to their potential for success in learning shorthand, basic personal information was obtained on each of the twenty students who were the subjects for this research study. This information is presented in Tables 3 and 4.

TABLE 3
PROFILE OF STUDENTS--EXPERIMENTAL GROUP

Age	College Level	College Major	College Credits Fall	College Credits Carried Winter	Present Work Ex. Hours/Week	Career Objective
35	Fr.	Special	8	8	None	Secretary
32	Soph.	Special	10	4	None	Art Teacher
26	Soph.	Sec.	7	6	None	Secretary
21	Fr.	Sec.	11	4	25	Secretary
19	Soph.	Bus. Mgt.	14	15	None	Secretary
19	Soph.	Bus. Mgt.	7	4	40	Secretary
18	Fr.	Sec.	14	16	18	Secretary
18	Fr.	Sec.	14	15	20	Secretary
18	Fr.	Sec.	13	18	6	Secretary
18	Fr.	Sec.	15	14	12	Medical Secretary

TABLE 4
PROFILE OF STUDENTS--CONTROL GROUP

Age	College Level	College Major	College Credits Carried		Present Work Ex. Hours/Week	Career Objective
			Fall	Winter		
39	Fr.	Sec.	4	4	40	Secretary
*23	Fr.	Sec.	14	16	30	Secretary
20	Soph.	Sec.	14	7	20	Secretary
19	Fr.	Sec.	14	11	None	Secretary
18	Fr.	Sec.	14	13	None	Secretary
18	Fr.	Sec.	14	14	22	Legal Secretary
18	Fr.	Sec.	15	13	20	Secretary
18	Fr.	Bus. Mgt.	14	13	15	Gen. Off. Work
17	Fr.	Sec.	13	17	15	Secretary
17	Fr.	Sec.	15	13	5	Secretary

*Only male in either group

Average Age: Experimental Group--22.4; Control Group--20.7.

Average No. of College Credits Carried: Experimental Group--
Fall Term 11.3, Winter Term 10.4; Control Group--Fall Term
13.1, Winter Term 12.1.

Course Standards and Organization

The Lansing Community College catalog presents the following description of their beginning Gregg shorthand course.

Designed to teach the basic principles of shorthand and build an elementary vocabulary. Four credits.

The course description for the second term of Gregg shorthand is as follows:

Completes theory begun in beginning shorthand. Develops speed and accuracy in reading from plates, and in limited dictation. Four credits.

For purposes of this study, the shorthand theory lessons were divided in the following manner:

First term course: lessons 1-24
Second term course: lessons 25-48 plus theory
review lessons 49-56

Because of the nature of the experiment and the division of theory over two terms, course standards were developed for the termination point of the experiment. Both classes were conducted as though there was one, continuous instructional program over the two terms.

The standards set for completion of the second term were as follows:

For a grade of A - the student must be able to transcribe (in longhand) with a minimum of 95 percent accuracy a minimum of two, three-minute dictations given at the rate of 100 words per minute on new-matter dictation.

For a grade of B - the student must be able to transcribe (in longhand) with a minimum of 95 percent accuracy a minimum of two, three-minute dictations given at the rate of 80 words per minute on new-matter dictation.

For a grade of C - the student must be able to transcribe (in longhand) with a minimum of 95 percent accuracy a minimum of two, three-minute dictations given at the rate of 60 words per minute on new-matter dictation.

For a grade of D - the student must be able to transcribe (in longhand) with a minimum of 95 percent accuracy a minimum of two, three-minute dictations given at the rate of 50 words per minute on new-matter dictation.

Measurement of Skill

Two types of measurement were used in assessing the skill attained by students in the two classes--theory tests and dictation-transcription tests.

The theory tests consisted of twenty-five words representative of the theory that had been recently studied. These words were dictated to the students by the instructor, one word every five seconds. After the twenty-five words were dictated, the students were given five minutes to transcribe their shorthand outlines into longhand. Thirty theory tests were administered over the two terms to both classes--fifteen each term.

In addition to the twenty-five word theory tests, a comprehensive one hundred word theory exam was administered at the end of the second term.

Because the instructional program was designed to follow the functional or "language arts" method in many respects, and this method omits the use of word lists, the researcher felt that measuring skill through the use of word lists could be a problem. The researcher felt that some students may develop word lists for their own study in anticipation of the theory tests and a good measure of their real skill development could be lost. Therefore, the students were told that the theory tests were in no way to be used for grading purposes; they were simply a device to collect information about class progress in general. The tests were not discussed with either class, nor were the students told or shown the results of their tests.

Scores were obtained on the accuracy of the shorthand outlines and the longhand transcription on the theory tests.

The results of the statistical analyses of these scores are presented in Chapter IV.

The dictation-transcription tests consisted of timed, three-minute dictation of new matter in the form of business letters. The instructor dictated the material to the students at particular speeds and this was followed by the students transcribing their shorthand notes into longhand. The particular speeds of the dictation varied according to the skill levels that had been attained by the students. For example, on many occasions one, three-minute dictation was given at 60 words per minute and another at 80 words per minute.

Scores were obtained on the number of correctly transcribed words from the dictation. The results of the statistical analyses of these scores are presented in Chapter IV.

Dictation for transcription was administered on thirty-one class days over the two terms--fifteen days the first term and sixteen days the second term. For grading and morale purposes, students were given credit for having transcribed one and two minutes of a three-minute dictation with 95 percent accuracy; but for purposes of this study, only the three-minute transcripts with a minimum of 95 percent accuracy were analyzed.

In both the control and experimental class the dictation of the theory and dictation-transcription tests was "live." In addition, the same material was dictated to both classes, in the same manner, at the same speeds, on the same days, and under the same conditions.

Reference has been made to the fact that the students transcribed their notes into longhand on both the theory and transcription tests. Although the procedure followed in many shorthand classes is to introduce the use of the typewriter for transcription purposes, the classroom used during the experiment was not equipped with typewriters.

Factors Kept Constant in the Two Classes

The following factors were kept constant in both classes.

1. Daily time and activity schedules.--The time schedule and the material covered was identical for each class on any given day. The only difference between the classes was the use of the visual-presentation machine for practice work in the experimental class in place of teacher dictation of the same work. Therefore, the only variance that occurred was in the way in which the practice was carried on.

For the first seven days of class, both classes were taught in identical manners, since the visual-presentation machine was not introduced in the experimental class until the eighth day.

A complete Time and Activity Schedule for both classes for the two terms is presented in the Appendix.

2. New-matter dictation.--This type of dictation was given "live" for transcription purposes to both classes over the two terms. This dictation was introduced to both classes in the eighth week of the fall term and was administered each day for the remainder of the term. In the winter term, "live"

new-matter dictation for transcription purposes was administered on a regular schedule of two days per week beginning with the third week.

The use of new-matter dictation for transcription purposes was delayed until the eighth week of the fall term because it was felt that the students needed that much time to develop their shorthand reading and writing ability on practice material. And they had to have assimilated enough theory knowledge to permit their being able to write new-matter dictation with some degree of competence and confidence.

The new-matter dictation utilized for this experiment was loaned to the researcher by the Business Law and Office Administration Department, College of Business, Michigan State University. This material is used for dictation-transcription purposes in the beginning Gregg shorthand courses at Michigan State. A copy of this material is contained in the Appendix.

3. Introduction of new lessons.--Both classes were presented with the same "new" theory lessons according to the lesson plans that had been developed. Since no significant difference was found between the two groups in regard to some known factors that influence success in learning shorthand, it was reasoned that they could be paced equally in the presentation of "new" theory.

4. Testing kept identical within the two groups.--The same dictation-transcription and theory tests were administered to the two groups, in the same manner, under the same conditions, at the same speeds, and always on the same days.

The first, three-minute, new-matter dictation for transcription test was administered in the fall term on the twenty-eighth day of class; and one, new-matter dictation test was administered each class day thereafter until the end of the term. The speed of the first new-matter dictation was 50 words per minute, but this was increased to 60 words per minute on the thirty-second day of class and remained at this speed for the rest of the fall term.

The researcher felt that 50 words per minute was too slow to develop the rapid writing skill desired, so this speed was used for only a brief time in the beginning as an introduction to taking new-matter dictation.

Three-minute, new-matter dictation for transcription purposes was begun again on the ninth day of class in the winter term and was administered twice each week for the remainder of the term. Beginning with this term, two separate new-matter dictation tests were administered--one at 60 words per minute and one at 80 words per minute. On the twenty-second day of class a third new-matter dictation test was added at 100 words per minute.

The timing of the addition of the new-matter dictation tests at 80 and 100 words per minute coincided with students in both classes having met the established transcription standards at the lower speed levels.

On each class day that new matter for dictation was administered, one dictation test was given at each of the speed levels being utilized at that particular time.

Preceding each new-matter dictation test the researcher previewed, in shorthand, three to five words that were contained in the dictation material. This procedure is considered normal for beginning shorthand instruction. These words were selected on the basis of their presenting special problems related to how they are written in shorthand, and on the basis of their being unusual words as this relates to their usage in the dictation material. The previewed words were always the same for each class.

Class time devoted to dictation-transcription in each class was always the same, but varied in total time with the addition of dictation at 80 and 100 words per minute. Twenty minutes were set aside in both classes for dictation-transcription at 50 and 60 words per minute. When dictation was given at 60, 80, and 100 words per minute, thirty-five minutes were set aside. The order of the dictation proceeded from the higher speeds down to the lower speeds.

The policy of the instructor was to have the students working toward acceptable transcripts at 60 words per minute try to write as much as they could at the higher speeds dictated on a given day. This policy was also followed with students working toward acceptable transcripts at 80 words per minute when dictation for transcription was given at 100 words per minute. In addition to the extra practice students received in following this procedure, the time actually devoted to transcription by any one student was kept fairly proportional to the length of the particular dictation in total number of words.

The theory tests administered to the two classes consisted of twenty-five words each, and were the same for each class. The first theory test was administered on the seventh day of class in the fall term. One or two of these tests were given each week during the remainder of the fall and winter terms depending on the amount of new theory material covered by the classes. These tests were always given to both classes on the same day and under the same conditions. Whenever a theory test was planned, ten minutes was set aside in both classes for administration and student transcription of shorthand notes.

5. All practice-dictation material the same.--All of the practice-dictation material was the same for both classes and was taken from the particular lessons that were being studied by both groups at the time. The only difference was the method of study or practice--the one variable in the experiment. The control group received their practice via teacher dictation and the experimental group via the visual-presentation machine. The amount of time spent on practice material by both groups varied according to the instructional program that had been developed, but was always the same for each class on any given class day.

6. The same instructor taught both classes.--Both classes were taught by the same instructor, also the researcher in this experiment. This was done to maintain, to the highest degree possible, similarity of instructional technique.

Factors Not Held Constant in the Two Groups

Only those activities germane to the use of the visual-presentation machine for work on practice material in the experimental group and to teacher dictation of practice material in the control group were not held constant.

In the experimental group each student was issued a visual-presentation machine. The student was then given a paper roll to insert in the machine on which was printed the material from the particular lesson that was to be practiced.

The material on the roll was an exact copy of the material in the book, except that it had been reprinted on the rolls and reorganized in line length to conform to the standard width of adding machine tape. This was accomplished by actually cutting up the practice-dictation material in a copy of the shorthand textbook; rearranging and pasting this material in columns that conformed to the width of the adding machine tape; photographing this material to prepare plates for the commercial printing of the material; cutting up the printed sheets into long, narrow adding machine roll width; and rolling this material up so it could be placed on a cylinder in the visual-presentation machine. The practice material for each shorthand lesson was placed on a separate roll.

After the student placed the roll of practice material on the machine, he or she would select the speed at which the practice material was to be presented to force his or her reading and writing speeds, turn the machine on, and proceed

to read and write. The material was presented to the students through an opening in the top of the machine at the desired rate of speed. Students were carefully supervised by the instructor to make sure they were always being forced to faster reading and writing speeds.

These machines were capable of presenting the practice material at speeds ranging from 80 to 280 words per minute.

The student practice procedure was to read out loud, but quietly, and write as quickly as possible the material being presented to them by the machine. For variety sake, sometimes the students were told to reread and write a particular letter several times; and at other times they were told to read and write straight through the lesson.

The basic assumptions underlying this type of procedure were:

1. Practice in reading and writing the same words several times would help form the un verbalized generalizations necessary to write shorthand, and also help automatize a certain number of frequently used words that would then constitute a basic writing vocabulary.
2. Seeing words written in shorthand as they practiced would help students establish mental connections that would aid them in recalling particular outlines when taking dictation for transcription.
3. Reading out loud as they wrote would give the students the benefit of both a visual and audio approach to learning.
4. Seeing the shorthand as they wrote would decrease the tension and frustration that many students experience in developing skill when they attempt to react to the stimulus of teacher-dictation.

5. Forcing rapid writing through copying would aid the student in developing fluency in his writing.
6. Seeing and reading the shorthand outlines as they wrote would help the student concentrate on the immediate task of writing through control of his attention.
7. Intensive and extensive practice of material would be possible.

Throughout the two terms the visual-presentation machine was used exclusively, with one exception, for all practice dictation work done in the experimental class. The one exception centered around getting the students in the experimental class familiar with "live" dictation and the instructor's voice prior to taking "live" dictation for transcription.

In the week preceding the introduction of dictation for transcription in the fall term, twenty minutes of "live" practice dictation was given by the instructor each day for four days. The researcher assumed that this small amount of "live" dictation would not interfere with the results of the study.

In the winter term preceding the introduction of dictation for transcription, "live" dictation was given by the instructor for seven days, ten to fifteen minutes per day, to again prepare the students for "live" dictation for transcription. Also, some new students joined the class in the winter term and needed this experience before beginning to transcribe their shorthand notes from "live" dictation. Again the researcher assumed that this small amount of "live" dictation would not interfere with the results of the study.

The time spent by both classes in practice dictation work either by using the machine in the experimental group or teacher-dictation in the control group ranged from ten to forty minutes per class day. Most frequently the time ranged from twenty to thirty minutes per class day. However, as stated previously, the time was always the same for both classes on any given day.

The material used for practice dictation on any given day was always the same for both classes, and was always from a lesson that had been introduced in class previously and studied for homework.

In the control group the method used for teacher-dictation of practice material centered around the minute-step plan. In utilizing this plan the following procedure was followed:

1. Some of the words from the practice material were written on the board for student pre-view before dictation.
2. The instructor would dictate for one minute at a speed from 10 to 20 words per minute below the class average.
3. The instructor would start over and dictate for one minute at a speed 10 to 20 words per minute faster than the first dictation.
4. Next, the instructor would start over again and dictate for one minute at a speed 10 to 20 words per minute faster than the previous dictation.
5. Once more the instructor would start over and dictate for one minute at a speed 10 to 20 words per minute faster than the previous dictation.
6. Finally, the instructor would dictate from the beginning at a slower speed, one which the students could handle with relatively good control.

This procedure was often used with each portion of a piece of dictation material until all of it had been practiced. At that point it could be practiced in its entirety.

CHAPTER IV

FINDINGS

This portion of the study contains the results of comparison of inter-class student achievement on various pre-determined criteria. The results obtained from additional investigations carried on in conjunction with the major areas of concern in the study are also reported here.

The following list constitutes the areas from which findings are reported in this chapter in order of their presentation:

1. Comparative analyses of the two groups on certain criteria used in equating these groups.
2. Comparative analyses of the achievement of the two groups in shorthand theory.
3. Comparative analyses of the achievement of the two groups in dictation-transcription.
4. A comparison of the two groups on feelings of tension and frustration experienced in the development of skill.
5. Report on the feelings and opinions of the experimental group relative to using the visual-presentation machine in the development of skill.
6. Report on the dropout and failure problem experienced in both groups.

Comparative Analyses of the Two Groups on Certain Criteria Used in Equating These Groups

In an attempt to establish the equality of the two groups as this relates to potential for shorthand learning, the

researcher obtained and compared the two groups' high school grade-point averages, high school grade-point averages in English, and scores on the English section of the entrance test administered by Lansing Community College. The English section of the entrance test consisted of the S.R.A. Writing Skills Test¹ and the Nelson-Denny English Test.²

Tables 5 and 6 present the raw scores and grade-point averages used to equate the groups. And Table 7 summarizes the results of applying the "t" test to this data.³

TABLE 5

SUMMARY OF RAW SCORES AND GRADE-POINT AVERAGES
USED TO EQUATE THE CONTROL AND EXPERIMENTAL GROUPS
FOR PROBABLE SUCCESS IN SHORTHAND

Nelson-Denny English Test	Experimental Group		
	S.R.A. Writing Test	High School G.P.A.	High School English G.P.A.
100	52	3.9	4.0
100	45	3.4	3.7
95	44	2.9	3.0
92	43	2.8	2.7
82	41	2.8	2.7
80	40	2.8	2.7
68	30	2.6	2.7
57	30	2.4	2.3
56	28	2.4	2.0
50	25	2.0	2.0

¹Science Research Associates, Inc., Chicago, Illinois, Form A, 1960.

²Houghton Mifflin Company, Boston, Massachusetts, Form A, 1960.

³Paul Games and George Klare, Elementary Statistics, McGraw-Hill Book Company, Inc., New York, 1967, p. 330.

TABLE 6

SUMMARY OF RAW SCORES AND GRADE-POINT AVERAGES
USED TO EQUATE THE CONTROL AND EXPERIMENTAL GROUPS
FOR PROBABLE SUCCESS IN SHORTHAND

Control Group			
Nelson-Denny English Test	S.R.A. Writing Test	High School G.P.A.	High School English G.P.A.
109	42	3.7	4.0
106	39	3.0	3.3
98	39	3.0	3.0
98	38	2.8	3.0
74	38	2.7	2.7
64	35	2.4	2.7
64	34	2.3	2.7
64	32	2.2	2.7
58	29	2.0	2.0
54	28	2.0	1.7

TABLE 7

APPLICATION OF T TESTS TO DATA

(Entrance Tests and Grade-Point Averages)

Tests and Grade-Point Averages	Computed "t" test by Formula	Book Value of "t" at .05 Level of Confidence With 18 Degrees of Freedom
Nelson-Denny English Test	.099	2.101
S.R.A. Writing Test	.757	2.101
High School G.P.A.	.793	2.101
High School English G.P.A.	0.00	2.101

Table 8 reports the means and standard deviations for both groups on the criteria used in equating the groups for probable success in shorthand.

TABLE 8

A SUMMARY OF THE MEANS AND STANDARD DEVIATIONS
OF BOTH GROUPS FOR THE VARIABLES ASSOCIATED WITH
PROBABLE SUCCESS IN SHORTHAND

Variables	Experimental Group		Control Group	
	Means	Standard Deviations	Means	Standard Deviations
Nelson-Denny				
English Test	78.0	18.11	78.9	20.29
S.R.A. Writing Test	37.8	8.46	35.4	4.40
High School G.P.A.	2.8	.51	2.6	.51
High School				
English G.P.A.	2.8	.62	2.8	.60

The results of the comparison of the data revealed that there was no statistically significant difference between the two groups on any of these measures. This substantiated the assumption that the students in the two groups entered beginning Gregg shorthand with no significant differences among them in relation to some known factors that influence success in learning shorthand.

Comparative Analyses of the Achievement
of the Two Groups in Shorthand Theory

The first research hypothesis stated in this study was:

There will be a significant difference between the achievement levels of the two groups of learners in beginning Gregg shorthand in theory mastery, as measured by theory tests, when one of the groups (experimental) receives writing practice through the moving, visual presentation of text practice material at forcing speeds.

This section of the study presents the results of the analyses of the two groups in relation to shorthand theory achievement.

Comparison on Theory Transcripts

Table 9 presents the comparison of the achievement of the control and experimental groups on the transcript section of the theory tests. The mean score for the experimental group was 84.3, and for the control group it was 77.0.

TABLE 9

A COMPARISON OF THE ACHIEVEMENT OF THE TWO GROUPS
BASED UPON THE TRANSCRIPT SECTION OF THE THEORY TESTS

(Group Mean Scores Reported--Four Theory Tests
Collapsed for Total Possible Score of 100)

Test Numbers	Experimental Group	Control Group
1	83	75
2	86	77
3	86	77
4	82	78
5	81	71
6	86	79
7	86	82

Mean Scores: Experimental Group--84.3; Control Group--77.0.

In an attempt to reject Hypothesis I, when stated in null form, a "t" test was applied to the data. The t-ratio computed by the formula was 4.727. A t-ratio in excess of 2.179 is required to reject the null hypothesis at the .05 level of confidence with 12 degrees of freedom. Therefore, the difference in achievement between the groups on transcript scores on the transcript section of the theory tests was considered statistically significant.

Comparison on Shorthand Outlines

Table 10 presents the comparison of the achievement of the control and experimental groups on the outline section of the theory tests. The mean score for the experimental group was 71.4, and for the control group it was 59.9.

TABLE 10

A COMPARISON OF THE ACHIEVEMENT OF THE TWO GROUPS BASED UPON THE SHORTHAND OUTLINE SECTION OF THE THEORY TESTS

(Group Mean Scores Reported--Four Theory Tests
Collapsed for Total Possible Score of 100)

Test Numbers	Experimental Group	Control Group
1	74	64
2	77	68
3	78	65
4	73	62
5	57	52
6	69	52
7	72	56

Mean Scores: Experimental Group--71.4; Control Group--59.9.

In an attempt to reject Hypothesis I, when stated in null form, a "t" test was applied to the data. The t-ratio computed by the formula was 3.195. A t-ratio in excess of 2.179 is required to reject the null hypothesis at the .05 level of confidence with 12 degrees of freedom. Therefore, the difference in achievement between the groups on the outline section of the theory tests was considered statistically significant.

Based on the criterion for measurement of theory tests, there was a significant difference in achievement between the two groups. This would seem to indicate that the method of learning employed in the experimental group was superior to that employed in the control group for the development of theory mastery. However, as will be reported in detail later, the superiority in theory mastery did not carry over to the development of superior dictation-taking ability for transcription.

Theory Final

Table 11 presents the comparison of the achievement of the two groups on the comprehensive theory final examination. The mean score for the experimental group was 79.0, and for the control group it was 65.7.

TABLE 11

A COMPARISON OF THE ACHIEVEMENT OF THE TWO GROUPS
BASED UPON THE NUMBER OF CORRECTLY WRITTEN
SHORTHAND OUTLINES ON THE THEORY FINAL EXAM

(Possible Score of 100)

Experimental Group	Control Group
99	88
97	85
94	78
93	76
85	74
78	60
76	56
72	55
60	46
36	39

Mean Scores: Experimental Group--79.0; Control Group--65.7.

A "t" test was applied to this data to determine whether or not the difference between the groups was statistically significant. The t-ratio computed by the formula was 1.629. Since it would take a t-ratio in excess of 2.101 to reject Hypothesis I, when stated in null form, at the .05 level of confidence with 18 degrees of freedom, the difference in achievement between the groups on the theory final exam could not be considered statistically significant.

It is interesting to note that the two students in the control group who achieved the highest speeds in dictation-transcription (80 words per minute) scored 74 and 55 on the theory final. These scores ranked them in the fifth and eighth positions out of a possible ten. The three students in the experimental group who achieved the highest speeds in dictation-transcription (80 words per minute) scored 99, 97, and 94 on the theory final. These were the top three scores on the theory final exam.

Although it may appear from these figures that theory mastery is not closely related to dictation-transcription success but only coincidental, the researcher feels that there are some additional considerations that need exploring. Some of these considerations involve determining the minimum level of theory mastery necessary for dictation-transcription success; a better understanding of the relationship between theory mastery and dictation-transcription success; a longer period of experimentation to determine the points, if any, at which theory mastery is crucial to dictation-transcription.

success; the effects of the various degrees of theory mastery over time; and the effects of the various degrees of theory mastery on the production competence and confidence of shorthand writers.

To add to the mystery of this situation, one of the students in the experimental group who did not attain the speed of 60 words per minute on dictation-transcription scored 93 on the theory final--fourth highest in the group. However, it was the opinion of the instructor that one of the factors that led this student to low speed attainment was her strong dislike for using the visual-presentation machine to develop her skill.

Comparisons Over Time

Tables 12 and 13 present a comparison over time of the achievement of the two groups on the theory tests that were administered over the two terms. For purposes of analyses, the tests were grouped by fours and were collapsed to form one score, with a possible perfect score on each one of 100. Twenty-eight tests out of the thirty administered during the two terms were used in forming the seven collapsed scores that have been plotted in the Tables and used in the analyses. Two tests were disregarded because of low student attendance in both groups on the days the tests were given. The tests that were disregarded were numbers 26 and 30.

Table 12 presents the achievement of the two groups on the transcript section of the theory tests. The plotted scores indicate that the two groups achieved somewhat parallel

results, but that the experimental group was consistent in scoring between four and nine more points than the control group on each test.

Table 13 presents the achievement of the two groups on the outline section of the theory tests. The plotted scores indicate that the two groups achieved somewhat less parallel results than on the transcript section, and that the experimental group scored between five and seventeen more points than the control group on each test.

TABLE 12

A COMPARISON OVER TIME OF THE ACHIEVEMENT OF THE TWO GROUPS
BASED UPON THE TRANSCRIPT SECTION OF THE THEORY TESTS

(Group Mean Scores Plotted--Four Theory Tests
Collapsed for Total Possible Score of 100)

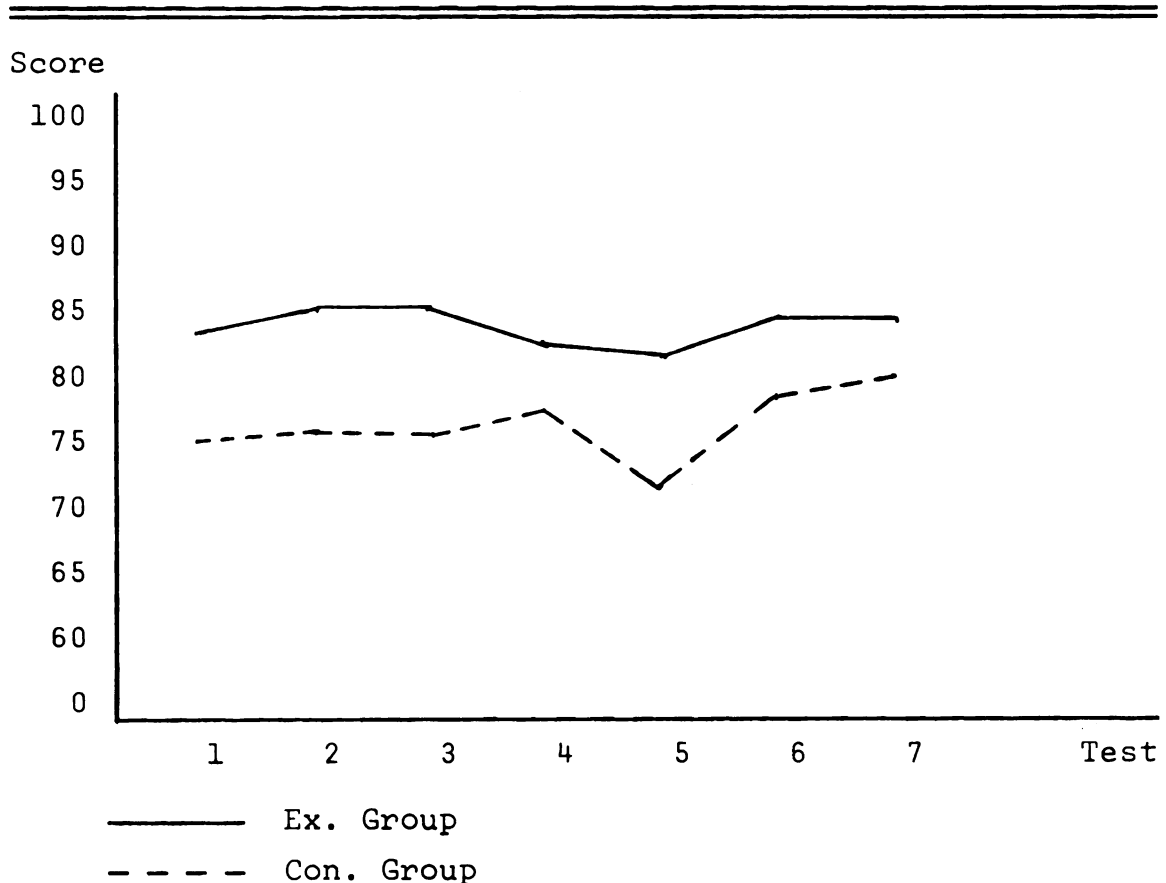
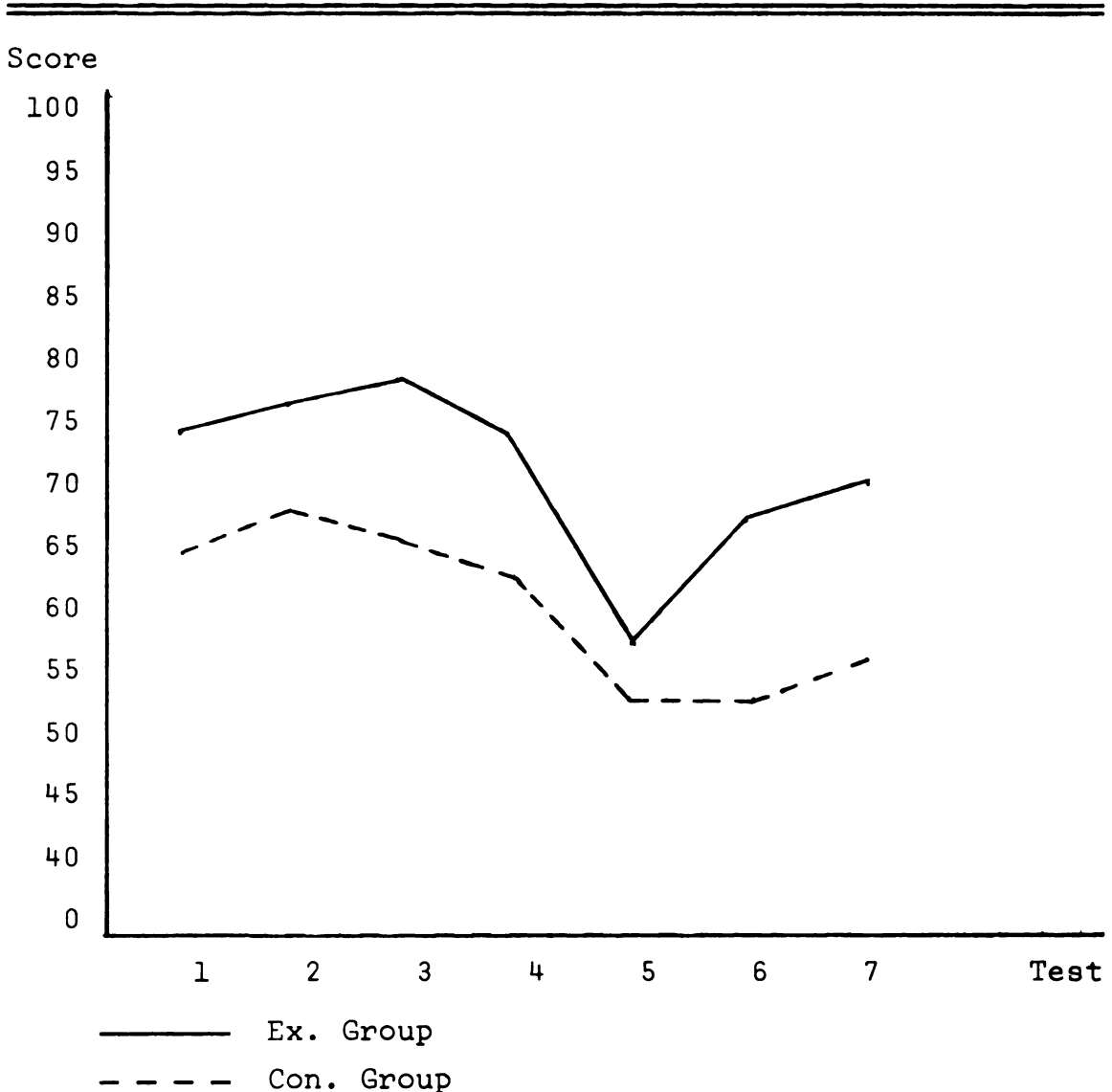


TABLE 13

A COMPARISON OVER TIME OF THE ACHIEVEMENT OF THE TWO GROUPS
BASED UPON THE SHORTHAND OUTLINE SECTION OF THE THEORY TESTS

(Group Mean Scores Plotted--Four Theory Tests
Collapsed for Total Possible Score of 100)



As Table 13 indicates, both groups scored especially low on the outline section of Test Five. The tests that were collapsed to form Test Five covered primarily the following shorthand theory: ie, ea, ng, ngk, x, mt, ual, ure. Upon investigating the specific results of these tests, the

researcher found that the following theory constituted the greatest number of errors: ie, ea, ngk, x. The researcher feels that these results may indicate that more time and practice needs to be given to this theory in the instructional program in the future in order to improve student performance.

However, it is interesting to note from Table 12 that the transcript scores on Test Five were relatively stable, with only slightly decreased performance in the control group. It is also interesting that, as shown in Table 13, the experimental group improved their scores on outlines considerably on Test Six while the control group remained at the low performance point shown on Test Five. And the control group showed only slight improvement in outline writing on Test Seven.

A slight but interesting trend appears in transcript scores in Table 12. The control group steadily improved their scores throughout the instructional program, with the exception of Test Five, while the experimental group scores wavered throughout the program. The control group increased their score by seven points from Test One to Test Seven while the experimental group increased their score by three points from Test One to Test Two but failed to make any further increase on any of the other tests.

Table 13 shows that on the outline section of the theory tests the experimental group recorded their highest scores on Tests Two and Three. The score on Test Five was a sharp decrease from prior performance, but the scores on Tests Six

and Seven showed a sharp recovery. However, the Test Seven score was still the third lowest in the group of seven tests.

The control group recorded their highest score in outline writing on Test Two and then recorded a steady decrease until Test Seven. However, the Test Seven score was still eight points lower than Test One and twelve points lower than the highest score achieved.

TABLE 14

A COMPARISON OVER TIME OF THE ACHIEVEMENT
OF THE CONTROL GROUP BASED UPON THE TRANSCRIPT
AND OUTLINE SECTIONS OF THE THEORY TESTS

(Group Mean Scores Plotted--Four Theory Tests
Collapsed for Total Possible Score of 100)

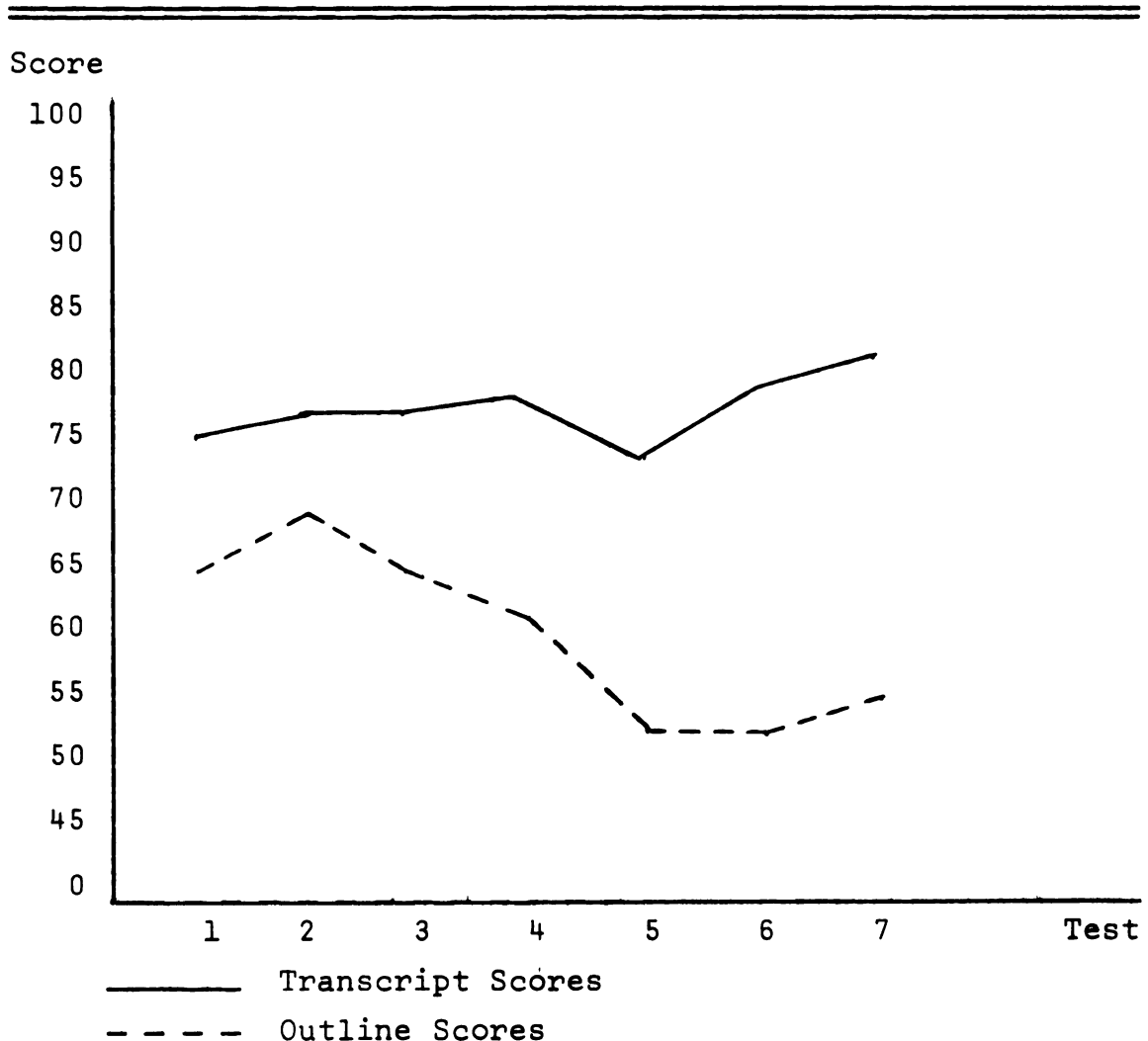


Table 14 shows that in spite of the steadily decreasing scores in outline writing recorded by the control group, this group steadily increased their transcript scores. The outline and transcript scores of the control group grew farther and farther apart throughout the instructional program. The gap between these scores on Test Two is nine points and on Test Seven it is twenty-six.

TABLE 15

A COMPARISON OVER TIME OF THE ACHIEVEMENT OF THE
EXPERIMENTAL GROUP BASED UPON THE TRANSCRIPT
AND OUTLINE SECTIONS OF THE THEORY TESTS

(Group Mean Scores Plotted--Four Theory Tests
Collapsed for Total Possible Score of 100)

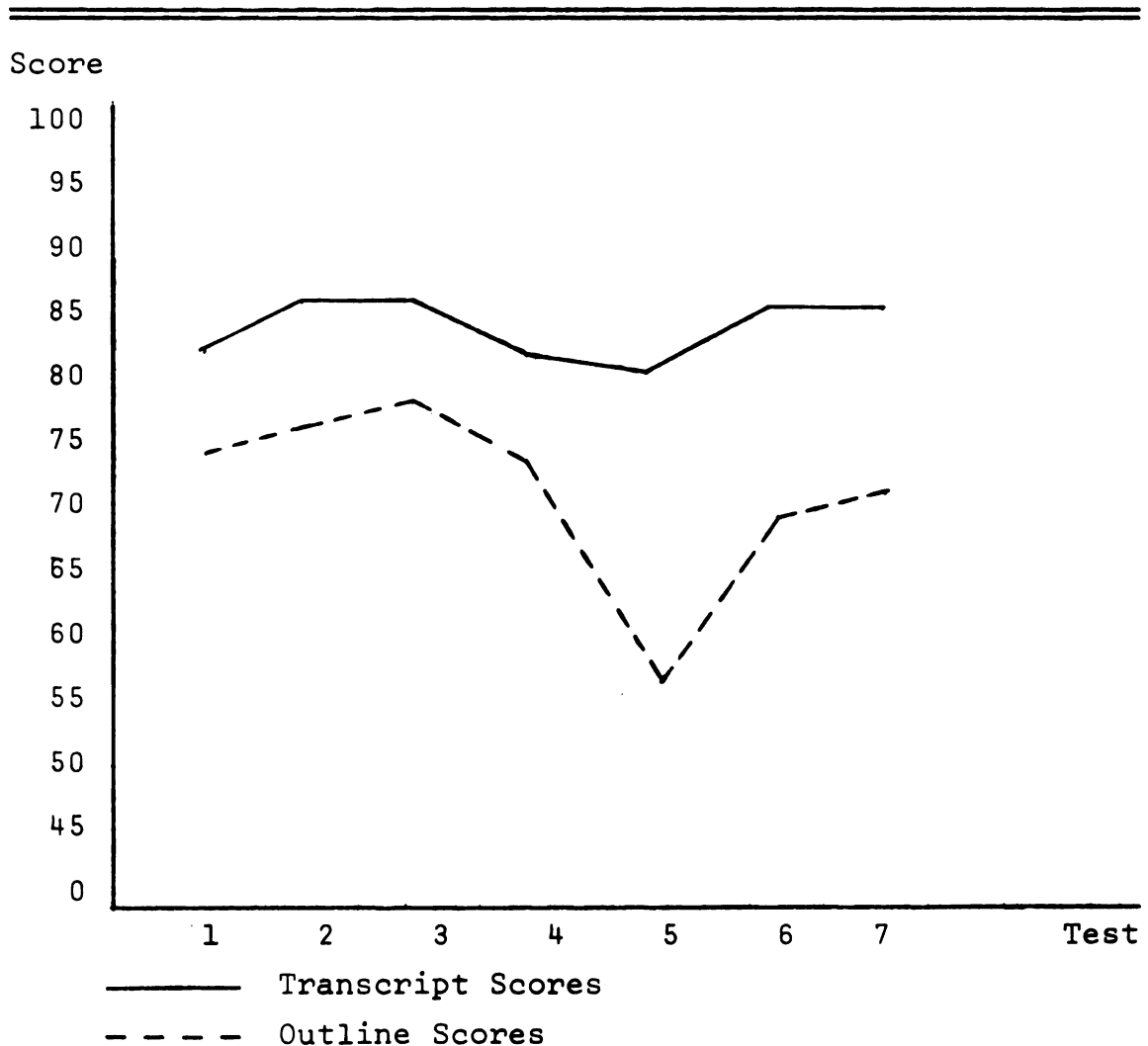


Table 15 shows that, with the exception of Test Five, the experimental group scores on outlines and transcripts are somewhat parallel, at least for the first four tests. The gap on Test Two is nine points and on Test Seven it has increased to fourteen.

One of the sub-studies to be carried out in this research was to determine the correlation between the group scores on the accuracy of the shorthand outline section and transcript section of the theory tests within each group. Tables 16 and 17 present these transcript and outline mean scores for the groups. The Pearson Product-Moment Correlation⁴ was used within each group to compare these scores.

TABLE 16

A COMPARISON OF THE ACHIEVEMENT OF THE
CONTROL GROUP BASED UPON THE TRANSCRIPT AND
OUTLINE SECTIONS OF THE THEORY TESTS

(Group Mean Scores--Four Theory Tests
Collapsed for Total Possible Score of 100)

Test Numbers	Transcript Scores	Outline Scores
1	75	64
2	77	68
3	77	65
4	78	62
5	71	52
6	79	52
7	82	56

⁴Murray R. Spiegel, Theory and Problems of Statistics, McGraw-Hill Book Company, Inc., New York, 1961, p. 244.

TABLE 17

A COMPARISON OF THE ACHIEVEMENT OF THE
EXPERIMENTAL GROUP BASED UPON THE TRANSCRIPT AND
OUTLINE SECTIONS OF THE THEORY TESTS

(Group Mean Scores--Four Theory Tests
Collapsed for Total Possible Score of 100)

Test Numbers	Transcript Scores	Outline Scores
1	83	74
2	86	77
3	86	78
4	82	73
5	81	57
6	86	69
7	86	72

In the control group the correlation between transcript scores and outline scores was .04, and in the experimental group it was .62. In order to show statistical significance at the .05 level of confidence using seven pairs, the obtained values for r would have to exceed .754.⁵ Therefore, neither one of the obtained correlations are statistically significant. It is, however, interesting to note the large difference between the correlations. In fact, the control group comes very close to recording a negative correlation.

Comparative Analyses of the Achievement of
the Two Groups in Dictation-Transcription

The second research hypothesis stated in this study was:

⁵James E. Wert, Charles O. Neidt, and J. Stanley Ahmann, Statistical Methods in Educational and Psychological Research, Appleton-Century-Crofts, Inc., New York, 1954, p. 424.

There will be a significant difference between the achievement levels of two groups of learners in beginning Gregg shorthand in dictation-taking ability for transcription from new matter, as measured by transcription tests, when one of the groups (experimental) receives writing practice through the moving, visual presentation of text practice material at forcing speeds.

This section of the study presents the results of the analyses of the two groups in relation to shorthand dictation-transcription achievement.

Comparison of Speed Levels Attained

Table 18 presents the number of students in each group who had attained particular dictation-transcription speed levels as of the termination point of the experiment. The average speed attained in each group was 64.0 words per minute. Thus there was no difference between the two groups in dictation-transcription speed achievement. But even though the average speed was the same, it will be noted that there were differences in the number of students at each particular speed level.

TABLE 18

A COMPARISON OF THE NUMBER OF STUDENTS IN
EACH GROUP WHO ATTAINED PARTICULAR THREE-MINUTE,
DICTATION-TRANSCRIPTION SPEEDS

(New Material--Minimum of Two Transcripts--
95 Percent Accuracy Minimum)

Speed Level	Experimental Group	Control Group
80	3	2
60	5	8
50	2	0

It is interesting to note that two students in the experimental group were not able to achieve a speed of more than 50 words per minute while all students in the control group achieved at least 60 words per minute. At the speed level of 80 words per minute there were three students from the experimental group and two from the control group.

Table 19 presents the number of students in each group who attained particular dictation-transcription speeds on the final examination. On this exam, one take of new material for each speed level was dictated and the students were told to transcribe their notes for the take at the highest speed at which they felt they could definitely meet the accuracy standard. All of the students were able to transcribe one of their takes at the 95 percent accuracy standard.

TABLE 19

A COMPARISON OF THE NUMBER OF STUDENTS IN EACH GROUP
WHO ATTAINED PARTICULAR THREE-MINUTE, DICTATION-
TRANSCRIPTION SPEEDS ON THE FINAL EXAM

(New Material--One Transcript--95 Percent
Accuracy Minimum)

Speed Level	Experimental Group	Control Group
80	1	0
70	3	4
60	4	4
50	2	2

The average speed attained by the experimental group was 63.0 and for the control group it was 62.0. Again there

was no real difference between the two groups. But there were some differences in the number of students at each particular speed level.

Because of the pressure put on the students by the testing situation to definitely produce one acceptable transcript, speed achievement was reduced at the top level. However, it appears that there was more change in speed level achievement in the control group. Whereas two students in the control group achieved terminal speeds of 80 words per minute, on the final exam these students dropped to 70 words per minute. Of the eight students who achieved a terminal speed of 60 words per minute, two of them were able to achieve 70 words per minute on the final exam while two others dropped to 50 words per minute. Thus six students in the control group changed their speed achievement level on the final exam--two increased their speed and four decreased it.

In the experimental group, one of the students who had achieved 80 words per minute, terminal speed, maintained that speed on the final exam while the other two dropped to 70 words per minute. There were five students in this group that had terminal speeds of 60 words per minute, and on the final exam one of them increased this to 70 words per minute. Thus only three students in the experimental group changed their speed achievement level on the final exam--one increased and two decreased.

It would appear from this data that the experimental group may have achieved more stable dictation-transcription

speeds than the control group. In support of this statement the figures presented in Table 20 are of interest. The experimental group produced 65 transcripts during the two terms of the study that met the accuracy standards, while the control group produced 43. This is a difference of 22, or approximately 50 percent greater production for the experimental group.

TABLE 20

A COMPARISON OF THE TOTAL NUMBER OF THREE-MINUTE
DICTATION TRANSCRIPTS PRODUCED IN BOTH GROUPS

(New Material--95 Percent Accuracy Minimum)

Dictation Speed	Experimental Group	Control Group
80	9	4
70	3	4
60	34	26
50	19	9

Total Number of Transcripts Produced: Experimental Group--65; Control Group--43.

Comparison of Transcribed Words

Another means of comparing the achievement of the two groups in dictation-transcription ability is presented in Tables 21, 22, and 23. In this comparison the number of correctly transcribed words produced on transcripts is analyzed.

Table 21 presents the achievement of each student in the two groups on the best two, three-minute transcripts produced over the two terms of the study. "Best" in this case refers

to transcripts produced at the highest speed level and that meet the accuracy standard. The mean number of correctly transcribed words in the experimental group was 384, and in the control group it was 379.

TABLE 21

A COMPARISON OF THE ACHIEVEMENT OF THE TWO GROUPS
BASED UPON THE TOTAL NUMBER OF CORRECTLY TRANSCRIBED
WORDS ON THE BEST TWO, THREE-MINUTE DICTATION TRANSCRIPTS

(New Material--95 Percent Accuracy Minimum)

Experimental Group	Control Group
479	467
459	465
458	380
435	378
358	358
357	354
350	351
344	348
320	348
284	342

Mean No. of Correctly Transcribed Words: Experimental Group--384.4; Control Group--379.1.

In an attempt to reject hypothesis II stated in the null form, no difference between the groups, the "t" test was applied to the data. The t-ratio computed by the formula was .203. Since it would take a t-ratio in excess of 2.101 to reject the null hypothesis at the .05 level of confidence with 18 degrees of freedom, the difference between the groups in number of correctly transcribed words on the best two, three-minute transcripts could not be considered statistically significant.

Table 22 presents the achievement of each student in the two groups on the highest number of correctly transcribed words produced on two, three-minute transcripts over the two terms of the study. In this comparison no minimum accuracy standard was set for transcript acceptability. The mean number of correctly transcribed words in the experimental group was 416, and in the control group it was 393.

TABLE 22

A COMPARISON OF THE ACHIEVEMENT OF THE TWO GROUPS
BASED UPON THE HIGHEST NUMBER OF CORRECTLY TRANSCRIBED
WORDS PRODUCED ON TWO, THREE-MINUTE DICTATION TRANSCRIPTS

(New Material--No Minimum Accuracy Level Set)

Experimental Group	Control Group
560	495
459	465
458	428
448	399
420	369
412	368
391	360
344	355
341	348
323	342

Mean No. of Correctly Transcribed Words: Experimental Group--
415.6; Control Group--392.9.

In an attempt to reject hypothesis II stated in the null form, no difference between the groups, the "t" test was applied to the data. The t-ratio computed by the formula was .801. Since it would take a t-ratio in excess of 2.101 to reject the null hypothesis at the .05 level of confidence

with 18 degrees of freedom, the difference between the groups in the highest number of correctly transcribed words produced on two, three-minute transcripts could not be considered statistically significant.

Table 23 presents the achievement of each student in the two groups on the dictation-transcription final examination. The mean number of correctly transcribed words in the experimental group was 186, and in the control group it was 181.

TABLE 23

A COMPARISON OF THE ACHIEVEMENT OF THE TWO GROUPS BASED
UPON THE TOTAL NUMBER OF CORRECTLY TRANSCRIBED WORDS
ON THE THREE-MINUTE, DICTATION-TRANSCRIPTION FINAL EXAM

(New Material--95 Percent Accuracy Minimum)

Experimental Group	Control Group
239	208
207	205
207	203
205	200
180	178
179	177
178	176
172	171
148	147
142	143

Mean No. of Correctly Transcribed Words: Experimental Group--185.7; Control Group--180.8.

In an attempt to reject hypothesis II stated in the null form, no difference between the groups, the "t" test was applied to the data. The t-ratio computed by the formula was .413. Since it would take a t-ratio in excess of 2.101

to reject the null hypothesis at the .05 level of confidence with 18 degrees of freedom, the difference between the groups in number of correctly transcribed words on the dictation-transcription final exam could not be considered statistically significant.

Table 24 reports the means and standard deviations of both groups for the dependent variables associated with achievement in shorthand theory and dictation-transcription.

TABLE 24
A SUMMARY OF THE MEANS AND STANDARD
DEVIATIONS OF BOTH GROUPS FOR THE
VARIOUS DEPENDENT VARIABLES

Variables	Experimental Group		Control Group	
	Means	Standard Deviations	Means	Standard Deviations
Transcript Section of Theory Tests	84.3	2.05	77.0	3.16
Shorthand Outline Section of Theory Tests	71.4	6.52	59.9	6.01
Theory Final Exam	79.0	18.57	65.7	15.93
Best Two, Three-Minute Transcripts	384.4	64.02	379.1	45.03
Highest No. of Correctly Transcribed Words on Two, Three-Minute Transcripts	415.6	67.45	392.9	50.21
Dictation-Transcription Final Exam	185.7	27.89	180.8	22.14

Comparison Over Time

Another way of comparing the two groups in dictation-transcription achievement was to look at time as a factor in reaching particular speed level goals. Table 25 presents a comparison over time of when the students in both groups reached these goals.

TABLE 25

A COMPARISON OVER TIME OF THE NUMBER OF STUDENTS
IN BOTH GROUPS WHO ATTAINED THE GOAL OF TWO,
THREE-MINUTE DICTATION TRANSCRIPTS AND THE
PARTICULAR WEEKS OF ATTAINMENT

(New Material--95 Percent Accuracy Minimum)

Speeds		Experimental Group													
80							1						2		
60		2	1	1			1	1		1				1	
*Two students in Experimental Group did not reach 60 words per minute															
		Control Group													
80												1			1
60				1			1	1		2	1	1	2		1
Week	1 - 9	10	11	12	13	14	15	16	17	18	19	20	21		

The analysis of the time factor provided some very interesting results. By the end of the eleventh week of the study, the end of the fall term, four students in the experimental group had achieved the goal of two, three-minute dictation transcripts on new material at 60 words per minute,

while only one student had achieved this goal in the control group. At the end of the sixteenth week of the study, approximately half way through the winter term, six students in the experimental group had achieved the 60 words per minute goal and one of these students had also reached the goal of 80 words per minute. In the control group at this time only three students had achieved the goal of 60 words per minute.

It is especially interesting to note that seven students in the control group achieved the goal of 60 words per minute in the last five weeks of the winter term, while only two students in the experimental group required this period of time to reach this goal. However, it must be remembered that there were two students in the experimental group who never achieved the goal of 60 words per minute, while in the control group everyone reached this goal.

In comparing student achievement at the 80 words per minute level, one experimental group student reached the goal in the fifteenth week and two other students from each group reached the goal within the last four weeks of the study.

Although there was no significant difference found between the two groups on speed levels attained, a comparison of the time involved to achieve particular speed goals shows a definite earlier success pattern in favor of the experimental group.

Number of Trials to Goal

Table 26 presents a comparison of the number of trials required to achieve two, three-minute dictation transcripts

in both groups. With the exception of the two students in the experimental group who did not achieve the goal of 60 words per minute, the other members of this group required as few as one-third as many trials to reach goal in some instances as did some members of the control group. A total of eight students in the experimental group required fewer trials to achieve their goals at the 60 words per minute level than in the control group.

TABLE 26

A COMPARISON OF THE NUMBER OF TRIALS REQUIRED BY STUDENTS TO ATTAIN TWO, THREE-MINUTE DICTATION TRANSCRIPTS AT PARTICULAR SPEED LEVELS IN BOTH GROUPS

(New Material--95 Percent Accuracy Minimum)

Students	Trials			
	Experimental Group		Control Group	
	60 wpm	80 wpm	60 wpm	80 wpm
1	3	4	9	6
2	4	12	12	14
3	6	12	12	
4	6		17	
5	11		19	
6	15		19	
7	18		19	
8	19		21	
9	*27		23	
10	*27		27	

*Maximum Trial Figure Recorded for Two Students Who Did Not Achieve 60 words per minute.

A comparison of the four students in each group who required the fewest number of trials to achieve their goals

at the 60 words per minute level reveals that three of these students from the experimental group required only one-third as many trials as did their counterparts in the control group. Furthermore, a total of nineteen trials to achieve goals at 60 words per minute were required by these four students in the experimental group, while the four students in the control group required fifty trials.

An important note for the reader to bear in mind here is that on many of these trials to achieve goals in both groups, students were able to transcribe successfully one or two minutes of the dictation material. However, for this comparison goal achievement was defined as the number of trials to achievement of two, three-minute dictation transcripts.

It is interesting to note that the gap between trials to achieve goals in the two groups narrows rapidly as the number of trials to goal increases. It would appear that further research in this area is needed, as this may indicate that the method of instruction employed in the experimental group was especially effective in making it possible to achieve speed goals rapidly, at least at the lower speed levels.

Comparison of the Two Groups on Feelings of Tension and Frustration Experienced in the Development of Skill

One of the sub-studies designed for this research project had as its purpose trying to discover, if possible, through a student questionnaire, the feelings of tension and frustration

experienced by students in both groups in the development of their skill. A short questionnaire was presented to each of the students on four separate occasions during the study-- at mid-term and at the end of the term in each of the two quarters during which the study was conducted. A copy of this questionnaire is contained in the Appendix.

The researcher felt that possibly the students in the experimental group, because of the use of the visual-presentation machine, would report feelings of less tension and frustration than students in the control group in the development of their skill. It was felt that since the machine presented the practice material visually to the students at all times, and the speed of its presentation could be regulated to fit the student's needs and level of skill development, it might possibly reduce the tension and frustration that is often felt in developing skill.

When the questionnaire was administered to the two groups of students, they were told to report their feelings, as they would characterize them, for a specific period of time. The periods of time included were from the beginning of the term for the questionnaire administered at mid-term, and from mid-term for the questionnaire administered at the end of the term.

The results of this sub-study are reported in Tables 27 and 28. The numbers in these tables represent the mean response figure for both groups on each of the questionnaires.

TABLE 27

A COMPARISON OF THE DEGREE OF TENSION
FELT BY BOTH GROUPS IN THE CLASSROOM SITUATION

(Average Response Figure Reported for
Each Group on Four Occasions)

Questionnaire	Experimental Group	Control Group
1	2.9	2.8
2	3.0	3.1
3	2.7	2.8
4	2.8	2.8

Students Responded to Questions on a Point Scale Ranging
From 1-5, with 5 Representing "A Great Deal of Tension"
and 1 Representing "No Tension."

TABLE 28

A COMPARISON OF THE DEGREE OF FRUSTRATION
FELT BY BOTH GROUPS IN THE CLASSROOM SITUATION

(Average Response Figure Reported for
Each Group on Four Occasions)

Questionnaire	Experimental Group	Control Group
1	2.4	2.6
2	2.5	2.6
3	2.6	2.6
4	2.7	2.6

Students Responded to Questions on a Point Scale Ranging
From 1-5, with 5 Representing "A Great Deal of Frustration"
and 1 Representing "No Frustration."

The responses related to tension centered around 3.0
for each of the groups. This is interpreted to mean that
both groups felt somewhat tense in class regularly. The
responses related to frustration centered around the

mid-point between 2.0 and 3.0 for each of the groups. This is interpreted to mean that both groups felt a little frustrated at times to somewhat frustrated regularly.

From these figures there is no indication that the experimental group felt less tense or frustrated than the control group in the development of their shorthand skill.

Report on the Feelings and Opinions of the
Experimental Group Relative to Using the Visual-
Presentation Machine in the Development of Skill

Another one of the sub-studies in this research project concerned itself with the experimental group's feelings and experiences with regard to using the visual-presentation machine. The researcher was very much interested in finding out whether or not the students liked using the machine in developing their skill, and whether they felt it was really helping to develop their writing speed and theory mastery.

A questionnaire was developed to try to determine these feelings and experiences. A copy is contained in the Appendix.

The researcher felt that any future development of the visual-presentation machine and an instructional program that would utilize the machine would have to take into account the personal feelings and experiences of students who had been exposed to it.

The questionnaire was administered to each of the students at the end of each week that the machine was used during the study, and the students were asked to respond according to their feelings and experience during that week. Tables 29,

30, and 31 present the results over time of the responses reported by the experimental group members.

Table 29 presents the degree of like versus dislike in using the machine. Because of the newness and novelty of the machine when it first was introduced, apparently the students tended to like using it. After the introductory period, however, a steady pattern emerged which seemed to place student opinion about midway between "tend to like" and "neutral."

TABLE 29

RESULTS OVER TIME OF THE OPINIONS REPORTED BY THE
EXPERIMENTAL GROUP ON THE DEGREE OF LIKE VERSUS DISLIKE
IN USING THE VISUAL-PRESENTATION MACHINE
TO DEVELOP SHORTHAND SKILL

(Group Mean Plotted)

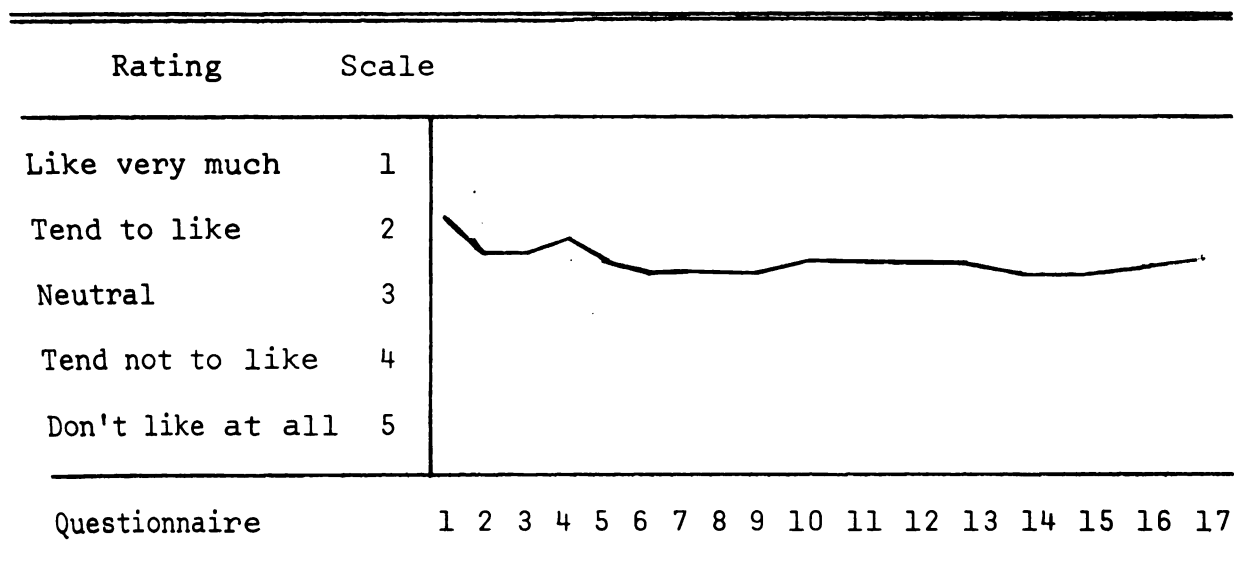


Table 30 presents the degree to which the students thought using the machine helped increase their shorthand writing speed. As can be seen in the table, the responses were rather erratic on the first seven questionnaires. The inability of the students to really judge early in the program whether or not the

machine was helping develop their speed may account for this. Many of the students did orally express to the instructor early in the program the feeling that they really weren't able to tell whether the use of the machine was aiding them in increasing their writing speed. Beginning with questionnaire eight and continuing through to the end of the term, the students generally reported that they thought the machine was helping.

TABLE 30

RESULTS OVER TIME OF THE OPINIONS REPORTED BY THE
EXPERIMENTAL GROUP ON THE DEGREE TO WHICH THEY THOUGHT
THE VISUAL-PRESENTATION MACHINE HELPED
INCREASE THEIR SHORTHAND WRITING SPEED

(Group Mean Plotted)

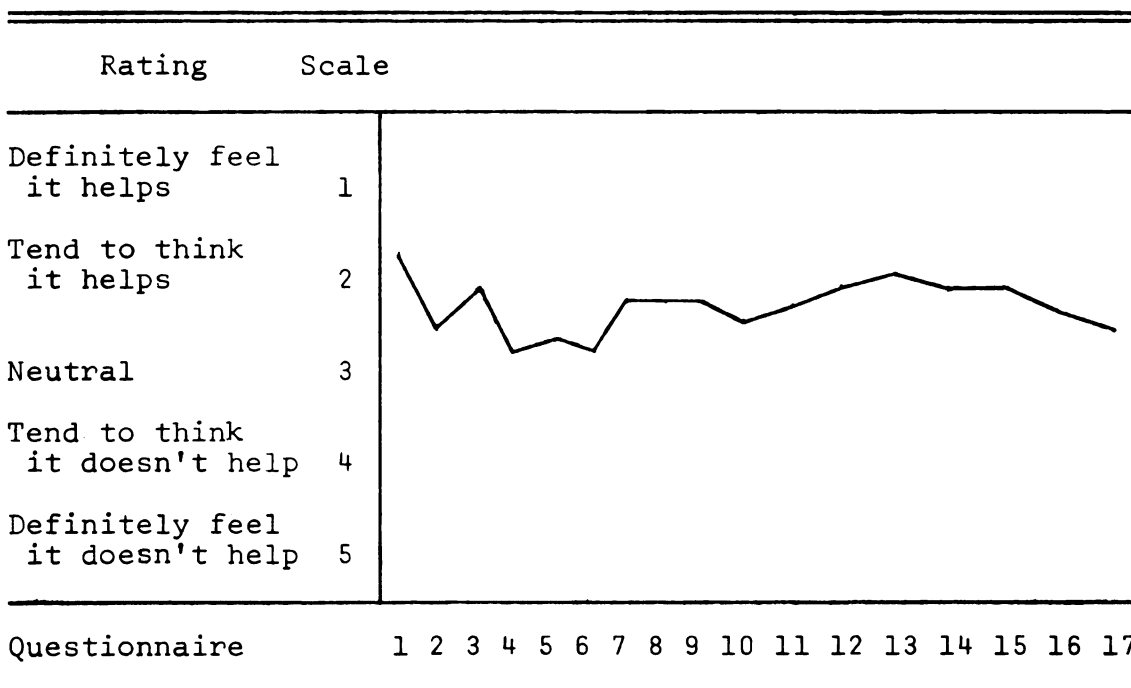


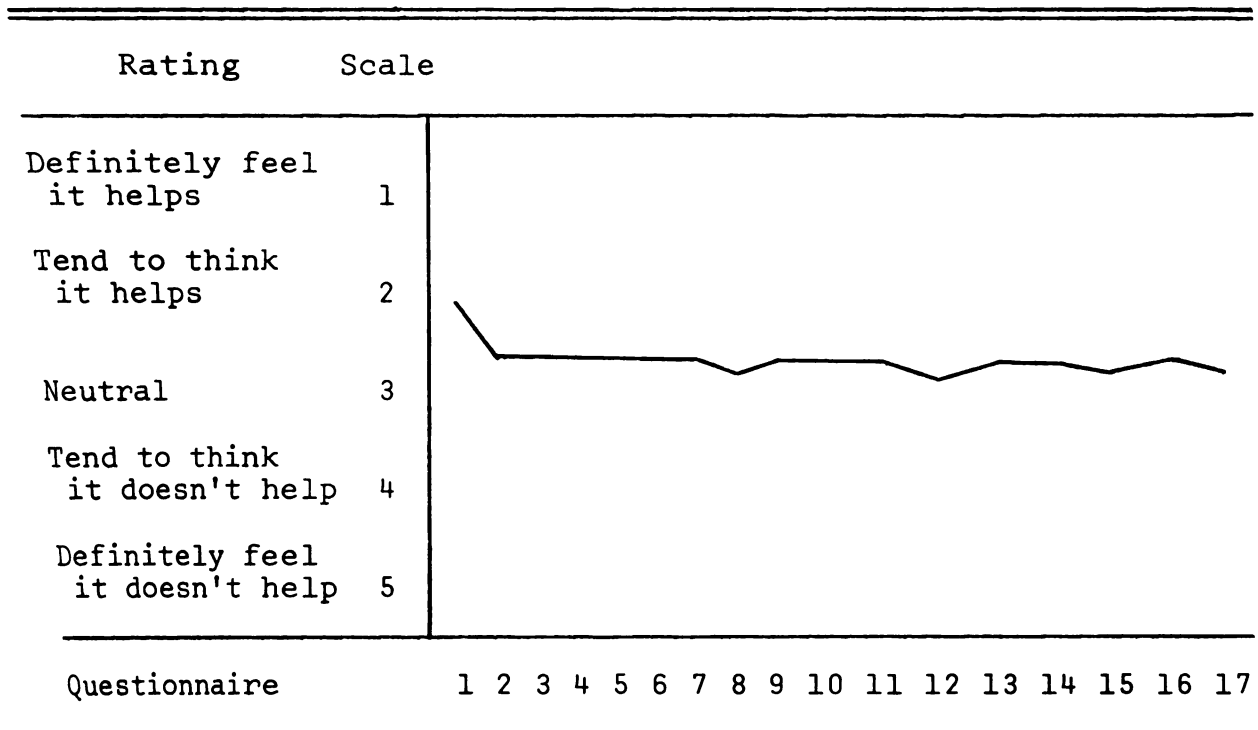
Table 31 presents the degree to which the students thought using the machine helped develop their shorthand theory mastery.

he erratic response recorded for writing speed was not evident in the responses reported on theory. After an initial reaction of "tend to think it helps," the responses were quite steady throughout the rest of the program at the midway point between "tend to think it helps" and "neutral."

TABLE 31

RESULTS OVER TIME OF THE OPINIONS REPORTED BY THE EXPERIMENTAL GROUP STUDENTS ON THE DEGREE TO WHICH THEY THOUGHT THE VISUAL-PRESENTATION MACHINE HELPED DEVELOP SHORTHAND THEORY MASTERY

(Group Mean Plotted)



The results of this questionnaire seem to indicate that the students tended toward liking to use the machine, tended to think the machine helped to develop their writing speed, and tended toward thinking the machine helped to develop their shorthand theory mastery. However, many of the student reactions

also tended to be somewhat neutral, thus calling for more research into the most effective and efficient use of the visual-presentation machine for developing shorthand skill.

TABLE 32

SELECTED STUDENT COMMENTS ON THE LIKES AND DISLIKES
OF USING THE VISUAL-PRESENTATION MACHINE

Likes	Dislikes
1. Forces me to write faster and pattern my shorthand correctly.	1. Impersonal.
2. Speed can be adjusted when one speed is mastered.	2. Not like the dictation by voice that I'll have to take in business.
3. Forces me to read faster and write correctly.	3. Pushes me too much.
4. Makes me concentrate on good proportions in my writing.	4. Get sick of it sometimes--forces my attention too much.
5. I find I am reading my shorthand rapidly all the time. I always want to hurry.	5. Very frustrating if the machine doesn't work right.
6. I learn to recognize words fast without spelling them out.	6. Repeating material is boring.
7. Set my own pace for pushing.	7. Machine doesn't adjust its speed for a group of difficult outlines.
8. Develops good theory foundation.	8. Don't like to use it for such a long time.
9. Probably my writing is better by continually seeing the words written right.	9. Didn't make me think enough.

Table 32 summarizes some of the student comments relative to using the visual-presentation machine to develop shorthand skill. Much of the student comment on "Likes" centers around the speed forcing aspect of the machine. On the "Dislikes" side the students seemed to feel that the machine was somewhat impersonal and that using it made learning a little too mechanical.

Report on the Dropout and Failure
Problem Experienced in Both Groups

The researcher felt that possibly the use of the visual-presentation machine in the experimental group would help cut down on the number of students who normally are expected to either drop shorthand or fail to achieve the minimum skill necessary to continue in an instructional program. This feeling was based on the assumption that in working with the machine the students would be guided more in skill development through reading and writing of practice material and would always be practicing at speeds within their grasp. In contrast, the instructor-directed approach to learning shorthand seems to call for more self-direction, motivation, and perseverance on the part of the student.

Tables 33 and 34 report the reasons given by the students in the two groups for dropping out of shorthand. These results were obtained by interviewing the students at the time that they were processing their drop from the course. In summary, ten students dropped from the experimental group from an original enrollment of twenty, and seven students dropped from the control group from an original enrollment of seventeen.

TABLE 33

REASONS GIVEN BY EXPERIMENTAL GROUP STUDENTS FOR
DROPPING OUT OF THE SHORTHAND CLASS DURING OR AT THE
END OF THE FALL AND WINTER TERMS

Fall Term	No.	Winter Term	No.
Don't like school.	1	Discouraged about success.	1
Too much work.	1	Have lost interest in school.	1
Family is moving.	1		
Discouraged about success.	1		
Work nights--not enough time for study.	1		
Have been ill.	1		
Accounting major--don't need shorthand.	1		
Enrolled in machine shorthand too--want to put time there.	1		

Experimental Group--8 Drops Fall Term, 2 Winter Term.

TABLE 34

REASONS GIVEN BY CONTROL GROUP STUDENTS FOR
DROPPING OUT OF THE SHORTHAND CLASS DURING OR AT THE
END OF THE FALL AND WINTER TERMS

Fall Term	No.	Winter Term	No.
Discouraged about success.	4	Discouraged about success.	1
Going to work full time.	1		
Have lost interest in school.	1		

Control Group--6 Drops Fall Term, 1 Winter Term.

Analysis of the dropouts in the experimental group shows that possibly five of these ten students rather than two may have actually dropped out because of lack of success in their skill development. Those students who reported that they didn't like school or that shorthand was too much work may have simply been rationalizing their position. The instructor verified that the students who reported family moving, long illness, work nights so can't study, accounting major, and enrolled in another shorthand program as their reasons for dropping out were reporting correctly.

Analysis of the dropouts in the control group shows that possibly six of these seven students rather than five may have actually dropped out because of lack of success in their skill development. The student who reported having lost interest in school may have been rationalizing her position. The instructor verified that the student who reported going to work as her reason for dropping shorthand was reporting correctly.

Therefore, 50 percent of the dropouts in the experimental group may have been due to lack of success while in the control group 85 percent may have been due to this factor. As a percentage of the initial enrollment figures in the classes of twenty and seventeen, 25 percent of the students in the experimental group may have dropped the course because of the success factor, and 35 percent of the students in the control group may have dropped because of this.

The total dropout percentages for the two groups were 50 percent in the experimental group and 41 percent in the control group. These figures are about what has been recognized as normal attrition in beginning shorthand.

Although the experimental group experienced a lower dropout percentage related to the success factor, the researcher felt that the difference between the groups was not significant enough to make any judgments. Furthermore, the impact of the use of the visual-presentation machine in helping to cut down on the dropout rate in shorthand was not apparent from the data obtained in this study.

Summary of the Findings

Through a careful check of the high school transcripts, it was determined that the twenty students who were used as subjects for the study had not had previous training in shorthand. Furthermore, to establish the equality of the two groups in relation to potential for shorthand learning, the researcher compared the groups' high school grade-point averages, high school grade-point averages in English, and scores on the English section of the entrance test administered by Lansing Community College. The results of this comparison by means of "t" tests showed that there was no significant difference between the groups relative to these measures.

When the achievement of the two groups on the transcript and shorthand outline sections of the theory tests administered over the two terms of the study was analyzed, it was found that there was a significant difference between groups. On

both transcripts and outlines the achievement of the experimental group was superior to that of the control group. This would seem to indicate that the method of learning employed in the experimental group, that of using the visual-presentation machine, was superior to the method utilized in the control group in developing shorthand theory mastery.

When the achievement of the two groups on the three-minute, dictation-transcription tests administered over the two terms of the study was analyzed, no significant difference was found on terminal speed levels achieved or on the number of correctly transcribed words produced. However, the experimental group produced approximately 50 percent more three-minute, dictation-transcripts with a minimum of 95 percent accuracy than did the control group. And, generally, the members of the experimental group achieved the goal of two, three-minute transcripts with a minimum of 95 percent accuracy at each speed level in a shorter period of time and with fewer trials required than did the members of the control group.

A comparison of the two groups on feelings of tension and frustration experienced during the development of shorthand skill over the two terms of the study revealed no difference between them. Thus, the hope that the visual-presentation machine would help reduce the feelings of tension and frustration associated with the development of shorthand skill did not materialize.

The questionnaire employed in the experimental class over the two terms of the study to determine the feelings and opinions of the students relative to using the visual-presentation machine in the development of skill revealed that the students tended to like using the machine, tended to think the machine helped to develop their writing speed, and tended to think the machine helped to develop their shorthand theory mastery.

An analysis of the dropout and failure problem experienced in both groups during the two terms of the study revealed that fewer students dropped out of the experimental group due to lack of success than did from the control group, although the total dropout percentages for the two groups were about the same and at the level normally expected in beginning shorthand. Therefore, the visual-presentation machine did not have the hoped-for impact of helping to cut down on the shorthand attrition rate.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study was designed to identify the differences in achievement, if any, between two groups of beginning Gregg shorthand students as measured by shorthand theory and transcription tests. A moving, visual presentation of shorthand text material to force faster writing and to develop greater accuracy in writing was used with an experimental group to replace the teacher dictation part of class activity used with a control group.

The moving, visual presentation of shorthand text practice material was designed to give the student intensive practice in reading and copying from expertly written shorthand at speeds that promote rapid writing skills.

Hypotheses Under Test

The terminal performance of the two groups of shorthand learners was compared by testing the following research hypotheses:

1. There will be a significant difference between the achievement levels of the two groups of learners in beginning Gregg shorthand in theory mastery as measured by theory tests when one of the groups (experimental) receives writing practice

through the moving, visual presentation of text practice material at forcing speeds.

2. There will be a significant difference between the achievement levels of two groups of learners in beginning Gregg shorthand in dictation-taking ability for transcription from new matter as measured by transcription tests when one of the groups (experimental) is forced to faster writing through the moving, visual presentation of text practice material.

Purposes of the Study

The purposes of this study were to test, under controlled experimental conditions, a new approach to learning beginning Gregg shorthand to determine:

1. Whether the moving, visual presentation of shorthand dictation practice material at forcing speeds, together with self-dictation at these speeds, would result in a higher level of achievement in theory mastery than shorthand instruction involving teacher-dictation practice.

2. Whether the moving, visual presentation of shorthand dictation practice material at forcing speeds, together with self-dictation at these speeds, would result in higher levels of dictation-taking ability for transcription from new matter than shorthand instruction involving teacher-dictation practice.

Four substudies were carried on concurrently with the major purposes of the study to determine:

1. The relationship between the group raw scores on the accuracy of the shorthand outline section and the accuracy of the transcript section of the theory tests administered within the two groups.

2. The attitudes of students in the experimental group relative to using the visual-presentation machine.

3. The effect of using the visual-presentation machine on the student attrition rate.

4. The effect of using the visual-presentation machine on the feelings of tension and frustration usually experienced in developing skill.

Delimitations and Limitations of the Study

This study was limited to two separate classes in beginning Gregg shorthand taught in two succeeding terms at Lansing Community College, Lansing, Michigan, during the school year 1968-69.

The differences between the achievement levels of the two classes were limited to measurement by theory and transcription tests.

No attempt was made to make judgments or generalizations about other shorthand instructional programs or the potential success of any other group of beginning shorthand students using this particular instructional program, although the results may have implications for other groups and programs.

Summary of the Procedures

Definition of the Population

The population included in the study was composed of twenty beginning shorthand students who had received no previous shorthand instruction. These students were divided evenly between the experimental and control classes.

The enrollment at the beginning of this experimental study was twenty-four in the experimental group and twenty-one in the control group; however, because of attrition and the elimination from the study of students having had prior shorthand instruction, ten beginning students in each group actually completed the instructional program.

No reference was made in the College registration procedures or in the registration materials that either beginning Gregg shorthand class would be involved in an experimental program. It was assumed, therefore, that having no knowledge about the experiment, the students randomly distributed themselves between the two classes. A simple toss of the coin was used to select the class that was to be given the experimental treatment.

Equality of the Groups

In order to establish that there was no significant difference between the groups as this relates to potential for shorthand success, comparisons were made based on the high school grade-point averages of each of the students, their high school grade-point averages in English, and their

scores on the English section of the entrance test administered by the college. Analyses of the data by "t" tests revealed that there was no statistically significant difference between the two groups in relation to some known factors that influence success in learning shorthand.

Instructional Procedure

The same instructor taught both of the shorthand classes to provide a control over the possibility of variance in the instructional procedure which might have occurred as a result of using more than one instructor.

The same instructional procedure and time schedule was followed for both classes throughout the instructional program with the exception that the experimental class used the visual-presentation machine for practice work in place of teacher dictation of the same work used in the control class.

Findings

Achievement of the Two Groups

1. A statistically significant difference was found between the two groups of shorthand learners on the transcript and shorthand outline sections of the theory tests administered over the two terms of the study. On both transcripts and shorthand outlines the achievement of the experimental group was found to be superior to that of the control group.

The mean score for the experimental group on the transcript section of the theory tests was 84.3, while the

mean score for the control group was 77.0. On the shorthand outline section of the theory tests the mean score for the experimental group was 71.4 and for the control group it was 59.9. Analyses of the data by means of "t" tests showed a statistically significant difference between the groups.

2. There was no statistically significant difference found between the two groups of shorthand learners on the three-minute, dictation-transcription tests administered over the two terms of the study. No significant difference was found on terminal speed levels attained or on the number of correctly transcribed words produced. Although three students in the experimental group as compared to two in the control group attained speeds of 80 words per minute, eight control group students attained 60 words per minute as compared to five experimental students, and there were two experimental group students who did not attain speeds above 50 words per minute. The average speed attained for both groups was 64.0 words per minute.

Although no significant difference in achievement was found between the groups on the measures of speed or correctly transcribed words, the experimental group did produce approximately 50 percent more three-minute, dictation-transcripts with a minimum of 95 percent accuracy than did the control group. Also, experimental group students achieved the goal of two, three-minute transcripts with a minimum of 95 percent accuracy at each speed level in a shorter period of time and with fewer trials required than did control group students.

Substudy Results

1. The correlation coefficient between the group raw scores on the accuracy of the shorthand outline section and the accuracy of the transcript section of the theory tests administered within the groups over the two terms was .04 for the control group and .62 for the experimental group.

2. A questionnaire used with the experimental group over the two terms to determine student feeling and opinion relative to using the visual-presentation machine in the development of skill revealed that the students tended to like using the machine, tended to think the machine helped to develop their writing speed, and tended to think the machine helped to develop their shorthand theory mastery.

3. An analysis of the dropout and failure problem experienced in both groups during the two terms of the study revealed that fewer students dropped out of the experimental group due to lack of success than dropped from the control group--50 percent in the experimental group and 41 percent in the control group. These percentages are within the range normally expected in beginning shorthand.

4. A comparison of the two groups on feelings of tension and frustration experienced during the development of shorthand skill over the two terms of the study revealed no difference between them.

Conclusions

From an analysis of the findings of this study--the effect on shorthand achievement of a visual-presentation

approach to learning beginning Gregg shorthand--the following conclusions have been drawn. These conclusions are pertinent to this study; substantiating research will be necessary, however, before they can be generalized.

1. The moving, visual-presentation approach to learning beginning Gregg shorthand results in greater achievement in transcription from shorthand outlines on shorthand theory tests than does a teacher-directed approach.

2. The moving, visual-presentation approach to learning beginning Gregg shorthand results in greater achievement in writing theoretically correct shorthand outlines on shorthand theory tests than does a teacher-directed approach.

3. The moving, visual-presentation approach to learning beginning Gregg shorthand results in a higher correlation between transcription scores and shorthand outline scores on shorthand theory tests than does a teacher-directed approach.

4. The moving, visual-presentation approach to learning beginning Gregg shorthand does not result in higher speed level attainment on three-minute, dictation-transcription tests than does a teacher-directed approach.

5. The moving, visual-presentation approach to learning beginning Gregg shorthand does not result in greater achievement in the number of correctly transcribed words produced on three-minute, dictation-transcription tests than does a teacher-directed approach.

6. The moving, visual-presentation approach to learning beginning Gregg shorthand results, generally, in faster

attainment of particular speed level goals in dictation-transcription, as this relates to time in a linear sense, than does a teacher-directed approach.

7. The moving, visual-presentation approach to learning beginning Gregg shorthand results in the production of a greater number of acceptable three-minute dictation transcripts than does a teacher-directed approach.

8. The moving, visual-presentation approach to learning beginning Gregg shorthand results, generally, in requiring fewer trials in order to achieve speed level goals in dictation-transcription than does a teacher-directed approach.

9. The moving, visual-presentation approach to learning beginning Gregg shorthand does not result in students experiencing less tension and/or frustration in the development of skill than does a teacher-directed approach.

10. The moving, visual-presentation approach to learning beginning Gregg shorthand does not result in a lower attrition rate in shorthand than does a teacher-directed approach.

11. The visual-presentation machine utilized in this visual-presentation approach to learning beginning Gregg shorthand elicits a positive response from the students as this relates to liking to use the machine, tending to think it helps develop writing speed, and tending to think it helps to develop theory mastery.

Recommendations

The following recommendations are made from the findings and conclusions of the research and the thoughts of the researcher as a result of conducting this study.

1. Further research should be carried on with this moving, visual-presentation approach to learning beginning Gregg shorthand to determine the most efficient and effective methods of utilizing the approach in an instructional program.

2. Further research should be carried on with this moving, visual-presentation approach to learning to determine what levels of instruction in shorthand other than the beginning level might benefit from this approach.

3. Further research should be carried on with this moving, visual-presentation approach to learning to determine whether or not over a greater span of time than was utilized in this study this method would result in higher speed level attainment in dictation-transcription than a teacher-directed approach.

4. Further research should be carried on with this moving, visual-presentation approach to learning with larger groups of students than those that made up the groups in the pilot and formal research reported on in this study, and that experimentation be extended to include groups of high school learners.

5. Further research should be carried on with this moving, visual-presentation approach to determine the level of theory mastery that it is necessary to develop at each stage of learning in order to be successful in dictation-transcription at that particular point in time.

6. Particular research should be carried on with this moving, visual-presentation approach to learning in which a

recorded audio presentation of the practice material is presented simultaneously with the visual presentation in order to fully utilize the hearing and seeing senses of the students in the learning situation.

7. Particular research should be carried on with this moving, visual-presentation approach to learning to determine its effectiveness on skill development in a program of out-of-class practice work through assigned homework preparation.

8. Particular research should be carried on with this moving, visual-presentation approach to learning to determine its effectiveness on skill development in a program of self-instruction in shorthand.

9. Further research should be carried on with this moving, visual-presentation approach to learning with students who are judged to be marginal as to their ability to learn shorthand to determine if this approach would, because of the repetitiveness of practice and constant imitating of the desired product, result in success for greater numbers of these students.

10. Particular research should be carried on with this moving, visual-presentation approach to determine its effects on the motivation of students to learn shorthand.

11. Particular research should be carried on with this moving, visual-presentation approach to determine quite specifically the effects of this method as it relates to time, in a linear sense, as a factor in achieving vocational-level competency in shorthand.

12. Particular research should be carried on with this moving, visual-presentation approach to determine its fit as a method of learning in relation to the learning habits and patterns of students who are judged to be bright, average, and dull.

APPENDIX

TIME AND ACTIVITY SCHEDULE

<u>Fall Term</u>				
<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
1-1	Introduce course	50	Introduce course	50
2	Introduce Lesson 1 (reading and spelling)	50	Introduce Lesson 1 (reading and spelling)	50
2-1	Read Lesson 1	15	Read Lesson 1	15
	Introduce Lesson 2 (reading and spelling)	35	Introduce Lesson 2 (reading and spelling)	35
2	Lesson 1 and 2 (reading and spelling)	50	Lesson 1 and 2 (reading and spelling)	50
3	Introduce Lesson 3 (reading and spelling)	50	Introduce Lesson 3 (reading and spelling)	50
4	Read Lessons 1, 2, 3	20	Read Lessons 1, 2, 3	20
	Begin Writing Practice	30	Begin Writing Practice	30
3-1	Introduce Lesson 4 (reading and spelling)	20	Introduce Lesson 4 (reading and spelling)	20
	Writing Practice	20	Writing Practice	20
	Theory Test	10	Theory Test	10
2	Introduce machine (Practice writing on Lesson 4)	50	Teacher Dictation	50
3	Machine - Lesson 4	20	Teacher Dictation	20

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
	Introduce Lesson 5 (reading and spelling)	30	Introduce Lesson 5 (reading and spelling)	30
4	Machine - Lesson 5	40	Teacher Dictation	40
	Introduce written homework	10	Introduce written homework	10
4-1	Machine - Lesson 5	20	Teacher Dictation	20
	Introduce Lesson 6 (reading and spelling)	30	Introduce Lesson 6 (reading and spelling)	30
2	Machine - Lesson 6	20	Teacher Dictation	20
	Introduce Lesson 7 (reading and spelling)	20	Introduce Lesson 7 (reading and spelling)	20
	Theory Test	10	Theory Test	10
3	Machine - Lesson 6	30	Teacher Dictation	30
	Read Lesson 7	20	Read Lesson 7	20
4	Machine - Lesson 6	20	Teacher Dictation	20
	Read Lesson 7	10	Read Lesson 7	10
	Introduce Lesson 8 (reading and spelling)	20	Introduce Lesson 8 (reading and spelling)	20
5-1	Machine - Lesson 7	30	Teacher Dictation	30
	Read Lesson 8	20	Read Lesson 8	20
2	Machine - Lesson 7	20	Teacher Dictation	20
	Read Lesson 8	10	Read Lesson 8	10
	Introduce Lesson 9	10	Introduce Lesson 9	10

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
	Theory Test	10	Theory Test	10
3	Machine - Lesson 8	30	Teacher Dictation	30
	Read Lesson 9	20	Read Lesson 9	20
4	Machine - Lesson 8	30	Teacher Dictation	30
	Read Lesson 9	10	Read Lesson 9	10
	Introduce Lesson 10	10	Introduce Lesson 10	10
6-1	Machine - Lesson 9	30	Teacher Dictation	30
	Read Lesson 10	10	Read Lesson 10	10
	Theory Test	10	Theory Test	10
2	Machine - Lesson 9	30	Teacher Dictation	30
	Read Lesson 10	10	Read Lesson 10	10
	Introduce Lesson 11	10	Introduce Lesson 11	10
3	Machine - Lesson 10	30	Teacher Dictation	30
	Read Lesson 11	20	Read Lesson 11	20
4	Machine - Lesson 10	20	Teacher Dictation	20
	Read Lesson 11	10	Read Lesson 11	10
	Theory Test	10	Theory Test	10
	Introduce Lesson 13	10	Introduce Lesson 13	10
7-1	Machine - Lesson 11	20	Teacher Dictation	20
	Read Lesson 13	10	Read Lesson 13	10
	Teacher Dictation (Lesson 6)	20	Teacher Dictation (Lesson 6)	20
	Assign Review Lesson 7		Assign Review Lesson 7	

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
2	Machine - Lesson 11	10	Teacher Dictation	10
	Read Lesson 13	5	Read Lesson 13	5
	Teacher Dictation (Lesson 6)	20	Teacher Dictation (Lesson 6)	20
	Theory Test	10	Theory Test	10
	Introduce Lesson 14	5	Introduce Lesson 14	5
3	Machine - Lesson 13	20	Teacher Dictation	20
	Read Lesson 14	10	Read Lesson 14	10
	Teacher Dictation (Lesson 7)	20	Teacher Dictation (Lesson 7)	20
	Assign Review Lesson 8		Assign Review Lesson 8	
4	Machine - Lesson 13	10	Teacher Dictation	10
	Read Lesson 14	5	Read Lesson 14	5
	Teacher Dictation (Lesson 8)	20	Teacher Dictation (Lesson 8)	20
	Theory Test	10	Theory Test	10
	Introduce Lesson 15	5	Introduce Lesson 15	5
8-1	Machine - Lesson 14	20	Teacher Dictation	20
	Read Lesson 15	10	Read Lesson 15	10
	Dictation- Transcription	20	Dictation- Transcription	20
	Assign Review Lesson 9		Assign Review Lesson 9	
2	Machine - Lesson 14	10	Teacher Dictation	10
	Introduce Lesson 16	5	Introduce Lesson 16	5
	Read Lesson 15	5	Read Lesson 15	5
	Theory Test	10	Theory Test	10

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
	Dictation- Transcription	20	Dictation- Transcription	20
3	Machine - Lesson 15	20	Teacher Dictation	20
	Read Lesson 16	10	Read Lesson 16	10
	Assign Review Lesson 10		Assign Review Lesson 10	
	Dictation- Transcription	20	Dictation- Transcription	20
4	Machine - Lesson 15	10	Teacher Dictation	10
	Introduce Lesson 17	5	Introduce Lesson 17	5
	Read Lesson 16	5	Read Lesson 16	5
	Theory Test	10	Theory Test	10
	Dictation- Transcription	20	Dictation- Transcription	20
9-1	Machine - Lesson 16	20	Teacher Dictation	20
	Read Lesson 17	10	Read Lesson 17	10
	Assign Review Lesson 11		Assign Review Lesson 11	
	Dictation- Transcription	20	Dictation- Transcription	20
2	Machine - Lesson 16	10	Teacher Dictation	10
	Introduce Lesson 19	5	Introduce Lesson 19	5
	Read Lesson 17	5	Read Lesson 17	5
	Theory Test	10	Theory Test	10
	Dictation- Transcription	20	Dictation- Transcription	20
3	Machine - Lesson 17	20	Teacher Dictation	20
	Read Lesson 19	10	Read Lesson 19	10

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
	Assign Review Lesson 13	13	Assign Review Lesson 13	
	Dictation- Transcription	20	Dictation- Transcription	20
4	Machine - Lesson 17	10	Teacher Dictation	10
	Introduce Lesson 20	5	Introduce Lesson 20	5
	Read Lesson 19	5	Read Lesson 19	5
	Theory Test	10	Theory Test	10
	Dictation- Transcription	20	Dictation- Transcription	20
10-1	Machine - Lesson 19	30	Teacher Dictation	30
	Dictation- Transcription	20	Dictation- Transcription	20
	Assign Review Lesson 14		Assign Review Lesson 14	
2	Machine - Lesson 19	15	Teacher Dictation	15
	Introduce Lesson 21	5	Introduce Lesson 21	5
	Theory Test	10	Theory Test	10
	Assign Review Lesson 15		Assign Review Lesson 15	
	Dictation- Transcription	20	Dictation- Transcription	20
11-1	Machine - Lesson 20	30	Teacher Dictation	30
	Introduce Lesson 22	5	Introduce Lesson 22	5
	Dictation- Transcription	15	Dictation- Transcription	15
2	Machine - Lesson 21	20	Teacher Dictation	20
	Introduce Lesson 23	5	Introduce Lesson 23	5
	Theory Test	10	Theory Test	10

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
	Assign Review Lesson 16		Assign Review Lesson 16	
	Dictation- Transcription	15	Dictation- Transcription	15
3	Machine - Lesson 22	30	Teacher Dictation	30
	Dictation- Transcription	20	Dictation- Transcription	20
	Assign Review Lessons 17 and 19		Assign Review Lessons 17 and 19	
4	Machine - Lesson 23	20	Teacher Dictation	20
	Theory Test	10	Theory Test	10
	Dictation- Transcription	20	Dictation- Transcription	20
	Assign Review Lessons 20 and 21		Assign Review Lessons 20 and 21	

TIME AND ACTIVITY SCHEDULE

Winter Term

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
1-1	Introduce course	50	Introduce course	50
	Assign Lesson 49 (review of Chap. 1)		Assign Lesson 49 (review of Chap. 1)	
2	Machine - Lesson 49	35	Teacher Dictation	50
	Teacher Dictation	15		
	Assign Lesson 50 (review of Chap. 2)		Assign Lesson 50 (review of Chap. 2)	
3	Machine - Lesson 50	25	Teacher Dictation	35
	Teacher Dictation	10		
	Assign Lesson 51 (review of Chap. 3)		Assign Lesson 51 (review of Chap. 3)	
	Introduce Lesson 25	15	Introduce Lesson 25	15
2-1	Machine - Lesson 51	25	Teacher Dictation	40
	Teacher Dictation	15		
	Read Lesson 25	10	Read Lesson 25	10
	Assign Lesson 52 (review of Chap. 4)		Assign Lesson 52 (review of Chap. 4)	
2	Machine - Lesson 52	25	Teacher Dictation	35
	Teacher Dictation	10		
	Read Lesson 25	5	Read Lesson 25	5
	Introduce Lesson 26	10	Introduce Lesson 26	10
3	Machine - Lesson 25	30	Teacher Dictation	40
	Teacher Dictation	10		

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
	Read Lesson 26	10	Read Lesson 26	10
4	Machine - Lesson 25	20	Teacher Dictation	30
	Teacher Dictation	10		
	Read Lesson 26	10	Read Lesson 26	10
	Introduce Lesson 27	10	Introduce Lesson 27	10
3-1	Machine - Lesson 26	30	Teacher Dictation	40
	Teacher Dictation	10		
	Read Lesson 27	10	Read Lesson 27	10
2	Machine - Lesson 26	10	Teacher Dictation	10
	Introduce Lesson 28	10	Introduce Lesson 28	10
	Dictation- Transcription	30	Dictation- Transcription	30
3	Machine - Lesson 27	30	Teacher Dictation	30
	Read Lesson 28	10	Read Lesson 28	10
	Theory Test	10	Theory Test	10
4	Machine - Lesson 27	10	Teacher Dictation	10
	Read Lesson 28	5	Read Lesson 28	5
	Introduce Lesson 29	5	Introduce Lesson 29	5
	Dictation- Transcription	30	Dictation- Transcription	30
4-1	Machine - Lesson 28	25	Teacher Dictation	25
	Read Lesson 29	10	Read Lesson 29	10
	Introduce Lesson 31	5	Introduce Lesson 31	5
	Theory Test	10	Theory Test	10

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
2	Machine - Lesson 28	10	Teacher Dictation	10
	Read Lesson 31	5	Read Lesson 31	5
	Introduce Lesson 32	5	Introduce Lesson 32	5
	Dictation- Transcription	30	Dictation- Transcription	30
3	Machine - Lesson 29	10	Teacher Dictation	10
	Read Lesson 32	10	Read Lesson 32	10
	Dictation- Transcription	30	Dictation- Transcription	30
4	Machine - Lesson 29	30	Teacher Dictation	30
	Read Lesson 32	5	Read Lesson 32	5
	Introduce Lesson 33	5	Introduce Lesson 33	5
	Theory Test	10	Theory Test	10
5-1	Machine - Lesson 31	20	Teacher Dictation	20
	Machine - Lesson 32	20	Teacher Dictation	20
	Theory Test	10	Theory Test	10
2	Machine - Lesson 32	15	Teacher Dictation	15
	Introduce Lesson 34	5	Introduce Lesson 34	5
	Dictation- Transcription	30	Dictation- Transcription	30
3	Machine - Lesson 33	35	Teacher Dictation	35
	Read Lesson 34	5	Read Lesson 34	5
	Brief Form Test	10	Brief Form Test	10
4	Machine - Lesson 33	15	Teacher Dictation	15

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
	Introduce Lesson 35	5	Introduce Lesson 35	5
	Dictation- Transcription	30	Dictation- Transcription	30
6-1	Machine - Lesson 34	30	Teacher Dictation	30
	Read Lesson 35	10	Read Lesson 35	10
	Theory Test	10	Theory Test	10
2	Machine - Lesson 34	10	Teacher Dictation	10
	Introduce Lesson 37	5	Introduce Lesson 37	5
	Dictation- Transcription	35	Dictation- Transcription	35
3	Machine - Lesson 35	30	Teacher Dictation	30
	Read Lesson 37	10	Read Lesson 37	10
	Theory Test	10	Theory Test	10
4	Machine - Lesson 35	10	Teacher Dictation	10
	Introduce Lesson 38	5	Introduce Lesson 38	5
	Dictation- Transcription	35	Dictation- Transcription	35
7-1	Machine - Lesson 37	30	Teacher Dictation	30
	Read Lesson 38	10	Read Lesson 38	10
	Theory Test	10	Theory Test	10
2	Machine - Lesson 37	10	Teacher Dictation	10
	Introduce Lesson 39	5	Introduce Lesson 39	5
	Dictation- Transcription	35	Dictation- Transcription	35

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
3	Machine - Lesson 38	30	Teacher Dictation	30
	Read Lesson 39	10	Read Lesson 39	10
	Theory Test	10	Theory Test	10
4	Machine - Lesson 38	10	Teacher Dictation	10
	Introduce Lesson 40	5	Introduce Lesson 40	5
	Dictation- Transcription	35	Dictation- Transcription	35
8-1	Machine - Lesson 39	30	Teacher Dictation	30
	Read Lesson 40	10	Read Lesson 40	10
	Theory Test	10	Theory Test	10
2	Machine - Lesson 39	10	Teacher Dictation	10
	Introduce Lesson 41	5	Introduce Lesson 41	5
	Dictation- Transcription	35	Dictation- Transcription	35
3	Machine - Lesson 40	30	Teacher Dictation	30
	Read Lesson 41	10	Read Lesson 41	10
	Theory Test	10	Theory Test	10
4	Machine - Lesson 40	10	Teacher Dictation	10
	Introduce Lesson 43	5	Introduce Lesson 43	5
	Dictation- Transcription	35	Dictation- Transcription	35
9-1	Machine - Lesson 41	30	Teacher Dictation	30
	Read Lesson 43	10	Read Lesson 43	10
	Theory Test	10	Theory Test	10

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
2	Machine - Lesson 41	10	Teacher Dictation	10
	Introduce Lesson 44	5	Introduce Lesson 44	5
	Dictation- Transcription	35	Dictation- Transcription	35
3	Machine - Lesson 43	30	Teacher Dictation	30
	Read Lesson 44	5	Read Lesson 44	5
	Introduce Lesson 45	5	Introduce Lesson 45	5
	Theory Test	10	Theory Test	10
4	Machine - Lesson 43	5	Teacher Dictation	5
	Read Lesson 45	5	Read Lesson 45	5
	Introduce Lesson 46	5	Introduce Lesson 46	5
	Dictation- Transcription	35	Dictation- Transcription	35
10-1	Machine - Lesson 44	30	Teacher Dictation	30
	Read Lesson 46	5	Read Lesson 46	5
	Introduce Lesson 47	5	Introduce Lesson 47	5
	Theory Test	10	Theory Test	10
2	Machine - Lesson 44	10	Teacher Dictation	10
	Read Lesson 47	5	Read Lesson 47	5
	Assign Lesson 53 (review of Chap. 5)		Assign Lesson 53 (review of Chap. 5)	
	Dictation- Transcription	35	Dictation- Transcription	35
3	Machine - Lesson 45	40	Teacher Dictation	40
	Assign Lesson 54 (review of Chap. 6)		Assign Lesson 54 (review of Chap. 6)	

<u>Week- Day</u>	<u>Experimental Group</u>	<u>Time Min.</u>	<u>Control Group</u>	<u>Time Min.</u>
	Theory Test	10	Theory Test	10
4	Machine - Lesson 46	15	Teacher Dictation	15
	Assign Lesson 55 (review of Chap. 7)		Assign Lesson 55 (review of Chap. 7)	
	Dictation- Transcription	35	Dictation- Transcription	35
11-1	Machine - Lesson 46	10	Teacher Dictation	10
	Machine - Lesson 47	30	Teacher Dictation	30
	Assign Lesson 56 (review of Chap. 8)		Assign Lesson 56 (review of Chap. 8)	
	Theory Test	10	Theory Test	10

THEORY TEST WORDS

Fall TermTheory Test 1

easy, sane, need, saved, name, tone, dare, dough, feel, more, deal, side, free, trade, life, hearing, raise, brief, space, neighbor, boat, paid, store, ride, stove

Theory Test 2

tire, stole, freight, vote, base, prepare, open, most, shore, chair, cheaper, close, gave, lake, green, ranging, going, guide, middle, any, start, fast, sells, thick, both

Theory Test 3

throwing, tries, staged, later, earth, stone, date, then, moved, sale, ages, small, occur, cause, drop, hall, source, author, fall, proper, talk, recall, teacher, lock, taught

Theory Test 4

stock, call, bought, daily, badly, nearly, job, highly, copy, cautioned, early, across, efficient, financial, fashions, costly, portion, special, only, nation, physician, social, thought, office, initial

Theory Test 5

lately, merely, rapidly, \$8,000, namely, national, sincerely, tall, efficiency, originally, ought, vacation, four o'clock, neatly, action, sorry, 700,000, collection, initialed, social, daughter, operation, office, essential, corporation

Theory Test 6

fiction, initials, find, closes, brand, finished, addresses, sister, spend, pleases, special, into, urgent, central, necessary, application, friend, agent, kind, especially, owned, basis, phoned, faces, entry

Theory Test 7

prices, entirely, mind, urgently, says, printing, told, assigned, guarded, grant, answered, flint, gold, toward, builder, held, cards, appeared, mailed, builder, handle, tired, currently, child, record

Theory Test 8

harder, filed, us, failed, drug, settled, wait, old, pull, stored, stood, folder, wash, colder, week, weak, boldly, push, sweater, enough, way, does, book, bus, just, wear

Theory Test 9

we, rated, wheel, watch, tested, foot, twice, swim, details, color, quick, took, provided, cover, noted, suffer, needed, truck, credit, audit, sweet, always, wheat, quit, dated

Theory Test 10

roadway, whole, payable, editors, reopen, selected, quickly, sensible, square, reply, deduction, while, resisted, quite, debtor, valuable, sizable, revise, today, tables, reliable, recent, available, replace, repaired

Theory Test 11

refers, possible, noise, revise, mended, oil, repeat, many or monthly, capable, toy, reasons, memorize, annoy, became, manner, believe, below, betray, monthly, mentioned, choice, businessmen, received, advisable, voice

Theory Test 12

spoil, mental, person, manager, purple, remember, deserve, avoid, decide, beyond, purchase, perhaps, appointed, persisted, personnel, because, perfectly, direction, managed, depress, delay, desired, eliminate, derive, immensely

Theory Test 13

perfect, basement, deposit, moment, fuel, deliver, review, desirable, refute, purse, advertisement, united, direct, view, depressed, equipment, decided, unique, appointment, director, few, settlement, persist, replacement, department

Theory Test 14

fewer, ounce, management, leather, payment, conferred, account, neither, now, assignment, connect, combine, other, utilize, committee, shipment, doubt, comply, unit, thousands, usual, conduct, another, allow, tribute

Theory Test 15

loud, danger, rather, seldom, brother, deny, concern, condemn, bulletin, together, estimate, amount, sentence, compare, define, developed, retain, sudden, different, container, devotion, defy, standing, divide, attempt

THEORY TEST WORDS

Winter TermTheory Test 1

underneath, insure, quiet, until, understood, enrolling, engineering, variation, unpack, client, dial, underpaid, unfamiliar, create, reliance, enlarge, area, insist, uncertain, invite, increase, appreciate, enable, enroute, enjoy

Theory Test 2

indeed, drier, science, created, unloaded, depreciate, incidental, wrong, underground, drinking, radiation, engage, appliance, anxious, defiance, understate, unjust, creative, notation, undertaker, included, instead, length, blank, bring

Theory Test 3

inclined, aware, strong, banquet, unknown, along, permission, frankly, incurred, yield, crank, bacteria, income, yes, unpacked, yard, perplex, stationed, quotations, maximum, engraver, flexible, front, spring, taxes

Theory Test 4

condition, single, expression, yeast, taxation, done, award, deemed, omission, young, helpful, index, mixer, exist, sanction, framed, extra, brushed, existence, delightful, kingdom, empty, fixed, useful, maximum

Theory Test 5

awaiting, except, youth, failure, powerful, lecture, flexible, venture, hopeful, welcome, mutual, equally, exterior, touched, procure, drum, eventual, prompt, nature, expect, schedule, useful, extends

Theory Test 6

exists, effort, future, mistaken, formal, explained, furnished, dispose, picture, furlough, misleading, extensive, furniture, heavily, informed, famed, alterations, despite, powerful, destroy, also, mature, formerly, destined, family

Theory Test 7

necessarily, portable, feature, forever, reports, dispute, physical, manual, unfortunate, terminate, alters, termed, natural, critical, display, forced, quarter, destiny, identical, signature, modern, furnace, radical, forgive, gradual

Theory Test 8

entertain, pattern, attorney, discount, feedings, description, fortune, western, perpetual, afford, enterprise, almost, mortal, furthermore, evenings, international, eastern, exportation, furnishings, steadily, quarterly, entered, particle, dislike, interval

Theory Test 9

intricate, determination, emphasis, external, interpret, assorted, imposing, return, earnings, interruption, proceedings, imprinted, exceedingly, interference, historical, employ, southern, internal, mechanical, chemical, improper, resort, empire, surprisingly, musically

Theory Test 10

minority, yourself, nobility, ownership, friendship, authority, subdivision, penalty, unknowingly, employment, themselves, liabilities, township, subway, myself, locality, ourselves, itself, suburb, improved, reliability, accordingly, substantial, impression

Theory Test 11

require, reimburse, hardship, submission, serious, latitude, charity, subsequent, subscription, sensibilities, institute, periodical, genuine, inquired, sublet, contribute, kinship, royalty, consequently, previous, oneself, attribute, facilities, qualities, various

Theory Test 12

security, transcript, aptitude, frequent, disability, transaction, personality, translate, distributors, penalty, eloquent, ratification, acquirement, inability, translation, transplant, fortitude, inquiry, classification, constitute, requirements, notification, transparent, casualty, substitution

Theory Test 13

transported, stipulate, postcard, retribution, supervision, identification, stimulating, contribute, regulations, frequently, specifications, post office, required, transmission, superior, esquire, qualifications, accumulate, supervisor, verification, postmark, restitution, postdate, transmittal, stimulation

Theory Test 14

assume, resumed, self-made, circulating, self-styled, transact, presume, postal, congratulate, superstition,

consumer, transportation, circumstances, justification,
self-defense, calculation, superficially, consumption,
circumvent, transparent, selfish, speculation, supersede,
self-contained, ratification

Theory Test 15

neighborhood, culminate, electrically, superintendent,
awkwardly, worthwhile, stimulated, presumably, electricity,
manhood, postponed, within, population, backward, superior,
ultimate, radiogram, culture, however, self-educated,
onward, accumulated, telegram, self-supporting, adults

DICTATION-TRANSCRIPTION

Fall Term

(Three, Minute Letters at 60 wpm)

Take 1

Dear Sir:

I have your nice letter of the fifteenth in which you ask that we send you a copy of our mailing list. / I regret that I cannot do this. For years it has been our policy not to give the list to other firms.

If you have a service to offer, then I think you should place an ad in a magazine or the paper.

Yours truly,

Dear Sir:

Thank you for your letter enclosing your check for the desks that we sent to you. We are / happy you are happy with them and feel that they are worth the price you paid.

We make steel chairs / to go with the desks you bought. We will send you our catalog right away. Thank you for your quick check.

Yours truly,

Dear Sir:

Late next year or early next summer we shall open our motor bank at 500 1st Street in / Jackson. In this motor bank you will be able to drive right up to the bank teller's cage during / banking hours and carry on your banking business if it is necessary for you to go to the bank.

Yours truly,

Take 2

Dear Sir:

The analysis of our finances is not ready. I know the cashier asked to have the analysis / by March 10, but I am afraid I cannot oblige him. As my clerk Harry Stevens is on sick leave, I am / preparing the analysis with no help. I shall try to have it ready by March 20.

Yours truly,

Dear Sir:

With this letter I am enclosing my check for the chairs you sent. I am very happy / with them and am glad to tell you that I believe they are well worth the price.

I think it will be necessary / for me to buy a steel desk during the next three days. Does your store make steel desks? If it does, send me your catalog.

Yours truly,

Dear Sir:

I am not able to come back today for there is a great deal to be done here. I am working long hours for / these people, trying with great odds to give them some relief; but there is just so much that / three doctors can do.

It has been said that we are to get more help in about three days.

Yours truly,

Take 3

Dear Sir:

You are aware that there is a very important matter we must discuss with you very / soon if we are to make a decision in the airplane rates. When goods have to be delivered most / people make use of the Main Airplane Service. We hope to hear from you very soon.

Yours truly,

Dear Sir:

Your book revision must be here in a matter of 3 days so that we will be able to have / it ready in the fall. Because of the importance of this matter, I would appreciate it very much / if you would make plans to come to see me. I will be in every day. Please call.

Yours truly,

Dear Sir:

Have you discussed the important matter of your drivers licenses with your people? / Be sure that no one forgets to look at his license before it is cancelled on April 30. To avoid / delay, be sure to fill in the enclosed card and send it with your check for \$2 as soon as possible.

Yours truly,

Take 4

Dear Sir:

Your wire addressed to Mr. Cook asked for the cooperation of our store in helping you / move your home-appliance business from Dallas to Troy. Our price for stores is / \$10 for each mile. We would appreciate an opportunity to discuss this matter more fully. /

Yours truly,

Dear Sir:

As you know, our appliance truck hit a bus on March 15. You will be happy to know that / only one person was badly hurt. We realize that it was our drivers fault; but just to be / fair would you talk to the person who was hurt? We would appreciate having your help.

Yours truly,

Dear Sir:

It has been good doing business with the Main Book Supply Store during the past / twenty-five years. We would appreciate your shipping us ten cases of your new book "How to prevent fear." / Thank you for your cooperation during the many years we have been doing business with you.

Yours truly,

Take 5

Dear Sir:

The head of the United Printing Company has made the general remark that the board / needs some new members to carry on the business for the coming year. The opportunities in this new job / are so great that I am sure you will want to accept. We would appreciate hearing of your decision soon.

Yours truly,

Dear Sir:

This letter is to tell you that Mr. Jones will be resigning as general credit / manager of the Main Heating Company. We feel that we will be losing an important part of / our company when Mr. Jones resigns. I will tell you when the new general credit manager will be named.

Yours truly,

Dear Sir:

I would like to take this opportunity to tell you of my appreciation of the way your / men handled my heating bill. The members of my entire family want to thank your company for helping / to make our home warm. If I can tell people of the fine service I received, I shall be happy to.

Yours truly,

Take 6

Dear Sir:

Many large stores have a credit manager who makes it his job to keep us posted on the many / people who owe us money. It would be easier to write us a check for the money you owe us than to have / us take any legal steps to settle your debt. We would appreciate your check right now.

Yours truly,

Dear Sir:

I received your business papers in the mail today which told about the many researches / and studies being carried on with stores today. I feel that you should place all stores and store managers / on your list to receive a copy each week. I appreciate very much your sending these papers to me.

Yours truly,

Dear Sir:

This is just a note to tell you that your May bill of \$150 is due. We / do not like to ask you for this money, but we cannot pay our own bills until we get this money from you. / If you cannot pay us, we will have to get money from others. Please pay us today.

Yours truly,

Take 7

Dear Sir:

As an official of the Troy Railway, do you have to sign all the checks that are / mailed from your place of Business. You will be very happy to learn that with a Royal Check Signer / you can do away with this task. We would appreciate an opportunity to show you the Royal.

Yours truly,

Dear Sir:

Please send us your check for \$50 for the three books which were shipped to you March 25. / You know, I am sure, that the Smith Book Store needs to have your check before it can send you any more books. / We would appreciate receiving your check for \$50 in the mail today.

Yours truly,

Dear Sir:

We are very happy to have received your check for \$200 in answer to our appeal on / behalf of the special campaign to check cancer. When could we talk to you about the plans for this year's campaign. / We appreciate the help you have given us in this year's appeal and hope to hear from you soon.

Yours truly,

Take 8

Dear Sir:

During the week of May 2 you will receive a letter from the Smith National Bank telling you about / a man who will be coming in to see you. He will not be able to receive his promotion if he / cannot pass your check-up. Our policy makes it necessary for him to get this check-up right now.

Yours truly,

Dear Sir:

We appreciate your letter of June 15 asking about your heating bill. During the week of July 10 a man by the name of John Smith will call to discuss your bill with you. Your heating bill will be cut in the / fall while other bills are going up. It has been a pleasure hearing from you. We appreciate your letter.

Yours truly,

Dear Sir:

Has my case been received in your office or will it be necessary for me to send a man to check / on it? I will send, if necessary, a person from our delivery truck who is reliable and will be / able to describe it for you. I would appreciate hearing about this problem as soon as possible.

Yours truly,

Take 9

Dear Sir:

Our records show that on May 9 at eight a meeting of the Air Travel Board will be held / to discuss holders for the air travel card which will be mailed to you. The meeting will be held on the third floor of / our building, and we should like you to come to discuss this very good thought with all of us.

Yours truly,

Dear Sir:

I am sure you will know that this letter is to state our appreciation to your / company for the way you settled our claim for the \$1,000 that was taken from the safe in our home at / 316 Main Street. Please feel free to call us as soon as possible if we can be of any help to you.

Yours truly,

Dear Sir:

As I am sure you know, keeping a mailing list in good shape is a hard job. To keep our / mailing list, we must have your help and that of other builders in the city. Would you do us a favor by / looking at the enclosed card to see whether your company name and address are right. Thank you for your help.

Yours truly,

Take 10

Dear Sir:

In June we started to push a new low-priced magazine in Troy and Dayton. / We are sure you will be very pleased to hear that our ads in the Troy News on Monday, June 8, and / Friday, June 12, have helped us greatly in our campaign. Our Dayton stores are open all day Saturday.

Yours truly,

Dear Sir:

In the months of October, November, and December, I have had many letters saying that your pens scratch. / I have checked several of the pens, and in my view there has been a real mistake. Can you stop in to / see me and help me decide what we should do to prevent this mistake from going any further.

Yours truly,

Dear Sir:

On October 20 you wrote for a room at the new Hotel Troy for the week of November 16. / Which type of room did you desire? All the rooms are equipped with radio and phone. Decide which room you desire / and let us begin helping you plan your week's vacation. You will be making a real mistake if you delay. /

Yours truly,

Take 11

Dear Sir:

Of course I know that you are a general land owner in this city. There is a matter that should be / important to you. Do you want large businesses to take over the general land owners? You can be of help / if you will call on me Monday morning when I will tell you how you can help us. Please call me.

Yours truly,

Dear Sir:

May I take this opportunity to thank you for your letter of April 27. We are / working quickly on your company's bills and should have the matter in good shape by the end of the week.

If / you wish to make any more suggestions please be at my office during the morning of May 10.

Yours truly,

Dear Sir:

This morning I had to make a date with your company doctor for late this week because I was not able / to be at his office this morning. I hope your office will not be disturbed by this matter.

Will you wish me to / pay the bill or should my office pay it. I should appreciate hearing from you as soon as possible.

Yours truly,

DICTATION-TRANSCRIPTION

Winter Term

(Three-Minute Letters at 60 wpm)

Take 1

Dear Mr. Brown:

I am sorry to have to say that the Smith School of Dancing will / have to close its doors at the end of this school year. We have reached this decision after / many meetings with the Board of Directors. We have told the staff of this decision, / and we are helping all its members to find new jobs. Because (1) of the fine feeling that our staff has earned through the years, finding new / jobs for them will not be difficult.

It is our sincere feeling that a school of / this type should be a part of our village. But, our costs have been rising / so rapidly that we just could not carry on without raising our rates considerably. (2)

As you may know, last year we made quite a drive for funds. In this drive, we received the / help of many of the prominent people in the village. While many people / gave, the total amount that we received was only enough to enable / us to complete the present school year.

We are doing our best to carry on.

Yours truly, (3)

Take 2

Dear Mrs. Cook:

It has been a few months since you have used your charge account at our store. / We certainly trust that your not having used your account recently does not mean that / you are unhappy with our goods or our service. Please let us know about it if / anything has gone wrong, for we want to clear up the trouble if any has arisen. (1)

Our first concern is to satisfy you. We try to earn your business by employing / a good staff and providing the latest and finest fashions from which you / can make your selections. Our desire is to offer good dresses to women / who like outstanding clothes and styles that are different.

Right now, we know you would (2) enjoy seeing our new collection of smart spring fashions. For instance, we have suits / for every business occasion in the most attractive fabrics that it is / possible to obtain today.

Our fur department will announce some special fall-end / bargains in a few days. You will be amazed at the values that will be offered.

Sincerely, (3)

Take 3

Dear Madam:

I am sending you, as a new customer, a friendly greeting at the / beginning of this new school year. For many years, the Davis Company has been serving / this

city giving special attention to school clothes for children from six to twelve / years of age. We have many of your neighbors and friends on our list of customers. They (1) have found our goods and service satisfactory for more than 25 years. /

Today, we want to bring to your attention our unusual line of fall and winter / coats for boys and girls in school. They are made of fine woolens. They will wear / well and will keep your children warm and happy.

Our prices are reasonable. For (2) instance, one boy's coat that we are showing at present is priced at \$25. / Why don't you come in some day this week and bring the children? Our salespeople will do / their utmost to please you and you can be sure of getting good material at / fair prices. Your charge account is ready for your use at all times.

Yours truly, (3)

Take 4

Gentlemen:

Today I received your bill for the month of December. On checking over / the purchases listed, I noted one charge of \$89.50. / I immediately called your Credit Department as I made no purchase amounting / to that figure.

One of the clerks in the Credit Department checked my account and (1) said that there is an \$89.50 desk charged to me.

A mistake has / certainly been made, because I have not bought any desks at your store or / elsewhere in the city. I sometimes use my account for the purchase of / clothing but nothing more. According to my figures, my bill should be only (2) \$35.90 this month.

The office clerk with whom I talked this afternoon could / offer no reason for this charge. She suggested that I write you, calling your / attention to the facts I have mentioned.

If you will adjust the matter as soon as / possible, I will then send you a check for the correct amount.

Very truly yours, (3)

Take 5

Dear Sir:

Mr. Robert Smith, our representative in Texas City, has written / us that your last premium payment on the policy carried with us was made by / check to our branch office in Dallas.

A thorough search of our records does not show any / evidence that this payment was ever received at our Dallas branch. It will be (1) necessary for us to ask you for some additional information in order / to find out where the error may have occurred.

Your cancelled check has, undoubtedly, been / sent to you by now. Please give us the bank number of the stamp / on the back of it and the date the check was cashed. Also, please let us know the name of (2) the person who signed it.

The information we have asked for is essential / to us in order to trace the lost payment. You have not indicated that you wish / to have your policy go on. Therefore, this missing payment will have to be found / and your account corrected before any refund can be made.

Very truly yours, (3)

Take 6

Dear Mr. James:

Many people would like to invest in stocks and bonds, but they feel / they do not have an understanding of the subject. That is true and certainly a / person should be informed on the subject if he is to make sound investments. Therefore, / we have published the booklet which is enclosed to explain some of the principles of good (1) investing.

Some people think you have to be rich to buy stocks and bonds. That is not so. / Millions of people of moderate means have been able to save enough / extra money to become investors and millions more could with a little / planning. However, you must remember that investing is

recommended simply as (2) a way of using your money to earn a reasonable sum. It is not a way / of getting rich quick.

If you are tempted, you should read the enclosed booklet carefully. / If you have any other questions, please do not wait / to write us. Answering questions about investing is an essential part of our business.

Very truly yours, (3)

Take 7

Dear Fred:

As you requested when I talked to you on the phone last evening, I am sending / you the information that you will need for the meeting of the Mason's Lodge / on November 24.

We meet in our conference room in the Smith Building / at seven on Thursday evening. This meeting on November 24 is our (1) regular monthly meeting. The Committee on Public Relations will have charge of that / program and is very glad to have a newspaper editor as guest speaker.

We / should like to have you talk to our group about public relations. Tell us what businessmen / can do to co-operation with newspapers. Give us the inside information. (2) Perhaps you can tell our group just how a large daily newspaper is produced.

Our staff / photographer will take some pictures at the meeting for use in our own publication. / Possibly

you could use a few of them in your paper, too. We want the community / to become familiar with the work of our Mason's Lodge.

Yours truly, (3)

Take 8

Dear Mr. Samuels:

You have always been one of our best customers, and we consider / you an excellent credit risk. However, we are at a loss to understand / why you have not paid your bill. The bill is now three months past due, and we have sent you two / letters asking for payment.

We want to continue to extend credit to our (1) customers, but we must collect outstanding debts within a reasonable length of time / in order to meet our expenses. We think you understand our position.

Why / don't you make arrangements to settle your account today. A prompt payment of the enclosed / statement will restore your excellent credit standing with our company.

If you (2) are unable to pay the full amount at this time, we will be happy to allow / you to satisfy the debt by payments in monthly installments. We value your / business, but we want to do everything to retain our pleasant / relations.

We look to hearing from you within a few days.

Sincerely yours, (3)

Take 9

Dear Mr. Jones:

I am sorry for the delay in answering your letter of October / 28. I have been away from the office on a business / trip, and my secretary thought it best to wait for my return so that I might answer your / letter personally.

You stated in your letter that you are interested in (1) purchasing more insurance. Many people do not understand the importance of / good insurance protection. Consequently, they buy less than they need.

Insurance / serves more than one purpose. It is not only protection for you and your / family, but it can also be a means of saving money. If you need money for any (2) reason, you can borrow on your insurance, also.

In order to explain / the details involved in increasing your insurance, our representative will call on / you next week. He will be able to answer your questions and make suggestions for your / insurance program. I am sure you will find him very helpful.

Sincerely yours, (3)

Take 10

Gentlemen:

Thank you for the fine order you gave our representative, Mr. Green, / several days ago. We are happy to have you join our family of dealers / who have supplied the public with fine furniture for more than eighty years.

I am sure / you will find your relations with our company and our dealers to be (1) pleasant and profitable ones.

As Mr. Green has explained to you, we shall help / you introduce our furniture to your customers. In a few days, we shall start a / program of advertising in your local newspaper which should bring many customers / to your store.

In addition, one of our display experts will visit you next week (2) to help you arrange your furniture samples in the most attractive way. He will remain / at your store for several days to help your salesmen in talking with customers. /

If any problems develop, do not hesitate to write or call us. We shall / be very glad to help you with them in any way that we can.

Sincerely yours, (3)

Take 11

Dear Mr. Allen:

Thank you for your recent order. We are preparing the material / for shipment, and you can expect to receive it before the first of June. I / am writing this letter because you are one of our best customers, and we value / the business relations that have developed between us. Prices on all our (1) merchandise will increase by about 10 percent after July 1. If you / will need additional goods this summer, I suggest you order before this price / increase goes into effect.

Because the price change has not been announced to the public, we / should appreciate your considering this letter as confidential. Only three (2) other merchants in your area are being informed about the price revisions. / We want our best customers to be able to take advantage of these savings.

We / are truly sorry that this price increase was necessary; we can, however, still / offer the greatest values for the least amount of money.

Very truly yours, (3)

Take 12

Gentlemen:

I ordered a portable typewriter from your company about three / weeks ago. The express agency delivered it today. However, it was / evidently damaged during shipment. There are a number of deep scratches on the / typewriter, and several of the keys will not move.

I called the express company and (1) reported the condition of the machine. They suggested that I contact you / immediately so that some adjustment could be made. Would you send a man to / determine whether the damage occurred during shipment? I realize that some companies / have a policy of making cash allowances to cover the cost of repairs (2) to damaged items. However, the damages are so severe that it would be / extremely difficult to make good repairs. I would prefer to return the / machine and receive a new typewriter.

Your company has a reputation for fairness, / and
I am sure you will make a satisfactory adjustment.

Sincerely yours, (3)

Take 13

Dear Mr. Day:

We understand that you are preparing to place a new product on / the market in the very near future. We are sure you realize that the way you / package your product is very important in selling it. The package does not have / to be expensive, but it must be outstanding in order to get its share of (1) attention. It will have to compete with similar products for the attention of your / customers. You must be sure that your package will stand out when it is placed with other / merchandise.

Our company has made a thorough study of packaging all types of / merchandise. We have promoted some of the most famous trade names now being sold all (2) over the United States. Our designers are the best in the profession. They know / what will appeal to the public. They know what will build a large column of sales.

Why not / let our representative call someday next week? We are sure that he will be able / to suggest ideas that will assure you of instant success.

Very truly yours, (3)

Take 14

Dear Club Member:

We made a survey a few months ago to determine how many / Club members would like our travel bureau to make available all kinds of information / about vacation trips. The survey showed that most Club members would appreciate / the additional service.

As a result, the travel bureau has been reorganized (1) into a travel department. The / services formerly offered by the old travel bureau will be offered now by / the new trip bureau. The second bureau is the new vacation bureau, which will be / managed by James Green.

Mr. Green's vacation bureau is now ready for business. (2) He has obtained all kinds of vacation information. He can tell you about / train and plane schedules, about hotel and motel charges. He can make your reservations / for you. The only thing he cannot do for you is to take your vacation for / you.

Be sure to call this new bureau whenever it can be of service.

Cordially, (3)

Take 15

Dear Mr. Smith:

I expect to be in New York for a few days next week and I should / appreciate it very much if you could give me about half an hour of your time. / If you are not too

busy, could you arrange to see me on Wednesday morning about 10 o'clock?

I have a plan worked out that I believe will interest you for it may (1) save considerable money for your company. It won't take longer than a half / hour, I'm sure, for you to decide whether or not this new idea of mine can be / useful to you. I believe you will want to see the detailed facts and figures that I / will bring with me.

When your representative called on me last month, he told me about (2) some new products that you are adding to your line. I am very much interested / in these and should like to discuss them with you, too.

Let me know whether Wednesday is a / convenient day. If it is not, I can come to see you Thursday or Friday morning. / I will phone you at your office when I arrive in New York.

Very sincerely yours, (3)

Take 16

Dear Mr. Ames:

You will, I know, be pleased to learn that arrangements have almost been / completed for the sales meeting in September. Our committees have worked hard, and the program / should be one of the best in years.

The Program Committee decided that the / selection of a speaker for the opening address should be delayed

until we knew (1) whether you would be able to attend the meeting. We have been informed by the director / that you will be in attendance. It is a pleasure to extend an invitation / to you to deliver the opening address. All of us remember the / outstanding contribution you made at last year's meeting. I heard many of the salesmen (2) say it was the best speech they ever heard.

We are sure you could get our convention off / to a wonderful start, and our salesmen would gain a great deal from your comments. Would you / let us know whether you will be able to accept this assignment? It would be / appreciated if you would let us know as soon as possible.

Sincerely yours, (3)

DICTATION-TRANSCRIPTION

Winter Term

(Three-Minute Letters at 80 wpm)

Take 1

Dear Mr. Smith:

About five months past, I asked one of your salesmen, John B. Jones, for facts about a / new type of insurance that I had heard your company is now issuing. After his remarks, which took / but five minutes, I knew it was not the kind of policy that I wished and I told him so. He insisted, / nevertheless, on giving me a sales talk on why it was just the policy for me and how happy I (1) would be ten years from now if I bought it. I had to stop him with the plea that I had another engagement.

Since / then, I have had several telephone calls from that salesman, either at my home or at my office at least once a month, / in spite of my definite statement to him that I was not likely to buy.

I would have overlooked this annoyance / had it not been for what occurred last week.

For more than six months, I have been trying to get an important (2) person of our company to sign a contract that meant several hundred thousand dollars to us. I / had just persuaded him to close the deal and I was just placing the papers before him for his signing / when my

secretary called me to say that I had a visitor who would not give his name but who insisted / he had to see me immediately. You can imagine my state when I found Mr. Jones sitting there.

Yours truly, (3)

Take 2

Dear Miss Lee:

The enclosed item that I am sending you with this letter is one of the new training aids for typists / that I mentioned to you in our conference last week.

The item is a copy of a magazine story / I read last week. I am sure you will find it an aid in solving the problems connected with your / routine office work. I know you want to make your work as neat and correct as possible. This story gives (1) some very definite rules for improving the appearance of your work and shows you how to get it done / in an efficient manner. The rules for doing this will prove invaluable in setting up the many / financial studies you have to type.

I know that this information will help you clear up the difficulties / we discussed. I think that your problems will disappear as soon as you have learned to plan your work and to follow your (2) plan.

I appreciate the fact that you are willing to learn and that you are eager to improve your work. I plan / to watch your work closely for the next few weeks. Please

do not fail to ask me for additional help / that I may be able to give you. We are looking for capable workers who are worthy of advancement / and promotion. I feel that you have a fine life here, and I would like to help you attain it.

Sincerely yours, (3)

Take 3

Dear Madam:

If you have been thinking about new chairs but don't know whether to buy them just now, may I / give you my opinion?

Any time is a good time to buy when you receive real value for the money you / spend. I believe sincerely that no purchase gives you such value and lasting satisfaction as today's new / chairs do.

During the last few years, the chair industry has made great progress in production methods and (1) has reduced the price of chairs. New chairs that sell for \$100 today could / not have been made for that price a few years back.

Our company has been a leader in this recent development. / In the space of fifty years, we have become the state's largest maker of high-grade wood chairs. During / that time we have even lowered our prices rather than increased them, yet we give you more fashion and (2) style for your money.

That is why I say there is no better time than right now to buy the new chairs you want. / Your dealer can show you chairs made by our company that I know will meet your most demanding ideas / for style, for fashion, and for price.

A set of folders that describes our newest chairs can be yours for just / the cost of shipping and handling; 25 cents in stamps will bring them to you immediately.

Sincerely yours, (3)

Take 4

Dear Sir:

The newspapers tell us daily of the increase in car accidents. Because / of this rise in the accident rate, most car drivers are forced to pay a higher rate of car insurance. /

Should you, as a careful driver, be forced to pay the same rate of car insurance that the driver / involved in accidents pays? Of course you shouldn't. You should be able to insure your car at a lower cost, and (1) that is what you do when you obtain your policy from our insurance company.

You, as a careful / driver, will have to pay less because we are cutting our rates. You can obtain this lower rate because we refuse / to insure the poor driver. Good drivers who are insured by our company receive a large cash dividend, / which cuts down to a great degree

the cost of their insurance. Poor drivers cannot buy a policy from (2) us and therefore cannot receive this dividend.

How do you profit by buying one of our policies? You are / associated with careful drivers who are carefully selected. They are the most careful drivers in the / country. So, you do not have to help pay for costly accidents caused by drivers who take chances.

You do not pay / a big sales commission, either.

Why not let our man call and tell you about our policies in detail?

Cordially yours, (3)

Take 5

Dear Miss Smith:

The man whom we sent out to your home in response to your asking that we check your gas meter, / stated that he could find no trouble. He says that the meter is working perfectly. Therefore, it must / be registering correctly the amount of gas you are using.

As you asked, we checked / your bills for November and December. In November you paid \$7.75, and in (1) December you paid \$8.50. We also checked your gas bills for the same months last year, and / we find that the ones for this year show only a small increase. As your meter is not out of order and there has / been no error made by our Accounting Department, we believe that you have paid the correct amount for November / and December.

Perhaps you have some new appliance in your home that has increased the use of gas. (2) We would suggest that you have a repair man check the appliances in your home and also your gas pipes. / Perhaps he can make suggestions that will help you in using these appliances more cheaply. /

We are very glad to be of service to our customers. We will check the meter again at any time you / feel that it is not working properly. Please let us know whenever we can of service.

Very truly yours, (3)

Take 6

Dear Mr. Green:

Do you realize that Christmas is only two weeks away?

If all your Christmas shopping is finished / and the packages are neatly wrapped, the following information will be of no value to you. In / that case, please discard this letter. However, if you are one of those people who have left all or part of their / shopping to the last minute, you will want to read the rest of the letter.

As you know, Bell's Department Store is (1) one of the oldest and finest stores in this city. We have a reputation for selling good merchandise / at reasonable prices. In other words, we give the customer what he wants. It is for this reason that / over the time of forty years, Bell's has grown from a small general store to one of the biggest department / stores in Chicago.

With Christmas only ten shopping days away, you may find that the supply of merchandise (2) in other stores is low or incomplete. That situation does not exist at Bell's. Our large purchasing power / enables us to keep our shelves filled at all times. In addition, there is a shopping service available to / all customers who would like some help in selecting the proper gifts for the people on their shopping lists.

Remember, / if you have not completed your Christmas shopping, come to Bell's. We shall be happy to see you.

Very truly yours, (3)

Take 7

Dear Mrs. Temple:

As you have been one of our charge customers for some time, we are pleased to present you with your / own personal credit card which we are sure will be a great help to you.

This newly designed credit card will add / greatly to your buying pleasure and to the efficiency of your shopping in any one of our five easily / located stores. Simply present it when you make your charge purchases. Be sure to sign it as this is necessary (1) to make it valid. The signature will enable us to make certain that you are billed only for / authorized charges.

If you wish an additional card for any member of your family, please notify our / credit office.

In connection with the installation of our new credit card plan, we are making a special / offer to our charge customers. We will allow you \$1 discount on any charge purchase of \$10 (2) or more made before January 25, 1970.

You are of course well aware of our high value / merchandise. We have a brand new line of spring and summer shoes which will please you and the members of your family. Prices / have been reduced so buy now and save.

Stop in to see us soon. It is pleasant to shop at the Capital Shoe / Store and using your credit card will make it easier for you. Please ask for me when you come in.

Yours truly, (3)

Take 8

Dear Miss Adams:

Do you realize that the letters sent out by your company are really representatives / of the firm? Did you ever stop to think that, no matter how well it is worded, your letter will make a poor / impression on the person who receives it if it is carelessly typed?

You can gain or lose customers for your / company by the letters you write and your letters probably reach more people than the salesmen your company (1) sends out.

Be sure to proofread every letter carefully before you take it out of the typewriter. You should / also check the accuracy of all data such as amounts of money,

dates and other figures. Check the address / to see that all names have been spelled correctly; and be sure, too, that you have prepared the necessary enclosures / and carbon copies.

Remember, the letters cost the company a great deal of money. It has been estimated (2) that every letter sent out by a business firm costs from \$1.75 to \$2. / That is another important reason why your letters should be carefully typed and checked in every detail. /

Perhaps you are hoping for a promotion this month. You will be much more likely to receive that promotion if / you are a careful and accurate typist, for your letters represent the company by mail.

Sincerely yours, (3)

Take 9

Dear Mr. Jones:

As you know, we have been advertising in your newspaper for many years. We placed our first / advertisement in the May 15, 1920 issue. There is a definite reason why we have / advertised regularly in your newspaper. This advertising has enabled us to double our sales since we / placed the first advertisement. Because of the nature of our products, we have been able to trace most of the sales (1) that have come directly from our advertising in your paper. So we know it brings returns.

I cannot put my / finger on the exact reason why our copy in your newspaper is so effective. I do know

this, however, / your newspaper seems to reach just the people who are interested in our products and who have the money / with which to buy them.

During the years, we have used advertisements of various sizes. On several occasions (2) we have taken full pages. On other occasions we have taken as little as half a column. But no / matter how big or how small our advertisement has been, we have always been happy with the returns and the / orders received from it. We are still talking about the results from one advertisement that we placed last month. We / were able definitely to trace more than \$10,000 worth of orders to that one advertisement.

Yours truly, (3)

Take 10

Dear Friend:

The Ames Shipping Company is beginning its tenth year of service to this community. Many people / have aided its success and growth over the years, and we should like to take this opportunity / to thank you for your business and aid.

We are pleased to announce that we have been able to reduce prices / by about 10 percent. These new prices will enable you to ship materials to any (1) place in the state at a considerable savings. In fact, a study of the rates charged by other firms indicates / that we offer the lowest prices in this area.

Of course, we still offer the same high-level service / that has satisfied so many of the merchants in this city. You will find that we can deliver goods to / any part of the state within three days. We also insure any material shipped in our trucks against damage. (2) If goods are damaged in shipment, you can be sure of a quick and fair settlement of your claim.

If you are / interested in shipping goods with our company, call our offices. We will be glad to send one of our men to / give you an estimate. You will be under no obligation, and you may be able to make a real saving / on your shipping costs.

Remember that no order is too large or too small for our company.

Very truly yours, (3)

Take 11

Dear Mr. Jones:

No doubt, as an officer of your company, you must make many speeches during the year. After / you have completed a speech, do you leave with the feeling that you have made a good impression on your audience? / Do you feel that you have put across your message clearly and effectively? If not, may we recommend to / you our new book entitled HOW TO MAKE AN EFFECTIVE SPEECH.

In this book the author lists the many reasons why (1) bright people are very often a failure as speakers.

He then goes on to suggest ways and means / to correct these difficulties.

As every man realizes, being able to speak well is a great / asset. The man who can speak convincingly has a great advantage over the man who has trouble expressing / his ideas.

HOW TO MAKE AN EFFECTIVE SPEECH is much more than a book. It is really a course in public speaking. (2) It tells you how you can determine what your weak points are. It then gives definite suggestions on how you should proceed. / You don't have to spend hours studying. A few minutes each day for the next month or two is all that is necessary. /

If you would like to have a copy of the book, return the enclosed card. We will then send you the book on / approval. You can keep the book for two weeks during which time you can work with the first three or four chapters.

Yours truly, (3)

Take 12

Dear Sir:

If you are faced with the problem of employing a top executive in the sales department, I / am sure you would prefer a man who knows something about your line of business. With that in mind, I submit my / application for the position of salesman in the oil division.

My first experience was gained / in the home office of the State Oil Company of Michigan. During the four years I was there, I collected all (1) types of sales data and made my own charts from the information. I worked under the guidance of Mr. / Frank Smith, and during my last two years I took over many of the routine details for him. In 1960 / the company moved their main office to Texas. I left them and found a similar position with / United Oil of Michigan.

Now, I want to advance, and I am confident that I am ready for more (2) responsibility. I have attended night school during the past four years, and this spring I received my college degree / in merchandising and selling.

I am 26 years old and in excellent health. A position offering / a future interests me more than a large beginning salary.

I shall be happy to come for an / interview at any time you indicate. My telephone number is 796-1233.

Very cordially yours, (3)

Take 13

Dear Miss Smith:

We understand that the American Office Club has chosen you as representative to their / national convention. Our reports indicate that the meeting will be held on January 25 in / Los Angeles.

Last year our agency planned the entire convention trip for Miss Snow, who represented your group. / May we plan your trip this year?

We have a new all-expense tour that starts from Chicago. It is moderate in price (1) and has proved very popular. It is a tour to which you may add several extra features at very / moderate cost. Page 3 of the enclosed folder shows the many side trips that are available.

During the winter / months, we recommend that persons take the southern route both coming and going. In the spring and summer / months, we suggest the southern route from Chicago and the northern route returning.

On arriving in Los Angeles, (2) you will be met by our special representative. Hotel and dining places will have been arranged. If you / can stay a few days following the close of your meeting, many types of fun can be provided. If the weather / is warm, your guide will arrange a trip to the beach. If the weather is cool, a drive through the outlying orange groves / will be taken instead.

An enjoyable side trip in Los Angeles can be made to the old Spanish section.

Yours truly,

Take 14

Dear Madam:

Have you heard about our great sale that is now going on? As you may know, it is a sale to win friends / for this new store. We are offering some of the finest values in women's clothing that this city has seen in /

a long time. Indeed, we believe you will find greater savings here than you have ever made on this kind of merchandise. /

Our store was opened only four weeks ago, and every item of stock is new. About a month before (1) we opened, we made an important purchase of women's dresses. Because of the savings on this large order, we / can offer you these dresses at a price far below the amount you would usually pay.

We are proving / to women that they can obtain style and service here at lower prices than they can anywhere else. This store not / only gives you more for your money, but better service and more courteous attention. Remember that we want (2) your friendship as much as we want your business. If we can give you fine values and save you money, we know you will / become a regular customer.

Our sale is proving a great success. Hundres of women have found just what they / want at substantial reductions. We are sure your experience will be the same. We hope to see you in our store / this week. Satisfied customers are making Kane's Fashion Shop more popular every day.

Very truly yours, (3)

Take 15

Dear Mr. Ramsey:

When you have had visitors, have you ever¹ found it necessary to close your office door / in an attempt to

shut out office noises that interfered with important business meetings? I feel certain that / you, like most of us, have found this to be true too often.

There is no secret or mystery about / how you can make sure that these office noises are stopped. You can do away with most of them by merely installing (1) our new soundless tiles and doors.

After many years of research, the staff of Wilson and Company has developed / tiles and doors that will now eliminate up to 65 percent of all office noises. Not only has / Wilson made this possible, but they have also made it available at prices that are very fair. Now small / companies like yours can afford to install our tiles and doors.

It is a simple matter to install these tiles and (2) doors. The whole job can be done in two or three days. If you wish, the work can be done at night when your staff is not present. /

For further information, please fill out and return the enclosed card. At a time convenient for you, one of / our representatives will call to explain Wilson Tiles and Doors to you. He will call only at a time that you / choose.

So that you can soon be doing your vest best work, be sure to return the enclosed card today.

Yours truly, (3)

DICTATION-TRANSCRIPTION

Winter Term

(Three-Minute Letters at 100 wpm)

Take 1

Gentlemen:

It is only June now, that is true, but why wait until Christmas time comes around before solving the problem of what to give to / your staff and to your special customers. You would, no doubt, like to give something different this year. May we suggest the one perfect gift for / everyone on your list--the special gift edition of THE BOOK OF BUSINESS KNOWLEDGE which is now in preparation.

This edition is being / printed on thin paper with an index for ease in locating the data you want. The beautiful leather binding may be had in (1) a great variety of attractive colors. Each copy of THE BOOK OF BUSINESS KNOWLEDGE adds beauty to your office layout.

In the / preparation of THE BOOK OF BUSINESS KNOWLEDGE, our editors were encouraged to offer the most complete and up-to-date information / on topics carefully selected for their interest to the business world today. The editors are widely known for their experience / in the field of business books. You will therefore find in THE BOOK OF BUSINESS KNOWLEDGE the most recent important information, yet it is phrased (2) in words that are easy to understand.

THE BOOK OF BUSINESS KNOWLEDGE is the perfect gift for every office worker on your Christmas list. / But, best of all, the price is low for copies that are spoken for now before our printing order has been given to the press. The more copies / you buy, the lower the cost of each will be to you. For example, if you order 15, you pay only \$3 for each book.

A handy / order blank is enclosed. Select the color of binding you want, check the quantity, and enclose your check. We do the rest.

Sincerely yours, (3)

Take 2

Dear Mr. Price:

This letter is not for you if you are satisfied with the returns you are now getting from your advertisements. This letter / is for you, however, if you believe that your advertisements ought to be bringing you bigger and better returns. Ask yourself whether / your ads are doing the job you expect of them. Does your copy say what you really want it to say? Is it bringing in the business? /

Preparing advertising is a job for specialists such as the men in our firm, the Wells Agency. Our men know that people buy only what (1) they want to buy. To make advertising bring returns for your company, you must reach the reader through his desire for better things. Advertising / is selling in print. A good advertisement

is not a set of pretty pictures or a group of words but rather a combination / of pictures and words. Sometimes, you know, the words left out are more important than those left in. Our agency specializes in knowing what to / put in and what to leave out of advertisements in your product field.

There is no need to give you the history of our agency. You (2) probably know it well for we are one of the largest in the United States. It is highly important to remember, however, that we / can help you sell more of the fine clothing made by your firm.

I should like to suggest that you test us, Mr. Price. Write down a brief outline of one / of your advertising problems and send it to us. One of our men will look it over and send some solutions to you. If you find that you / are interested in them, we can set up a conference for further discussion all without obligation to you.

Yours very truly, (3)

Take 3

Dear Miss Jones:

This letter offers you THE WEEKLY RECORD at a special reduced rate. By acting promptly, you can save 25 percent / under the regular subscription price and 50 percent under the single-copy price.

Price should not be the only consideration, / though.. The important part of any offer is the product itself.

We are proud to be able to say that our publication is better / today than ever before in its history.

This high-class weekly is being made available to you at an extremely low rate.

Yours truly, (1)

Dear Miss Jones:

Recently we sent you a letter containing a special offer through which you could obtain 38 big issues of THE / WEEKLY RECORD for \$3. This would give you a cash saving of \$2.70 over the single-copy price.

As you no / doubt know, such an offer usually is made by a publisher for the express purpose of introducing his magazine to new / readers. But obviously that is not the theory behind this offer to you for you are certainly familiar with our magazine.

Yours truly, (2)

Dear Miss Jones:

Although THE WEEKLY RECORD now has more than 150,000 readers, we still get excited about a new one / --and that means you. No matter how large we grow, we still can't help feeling a personal satisfaction every time we make another friend. / To us you are more than a name, a check or a figure added to our subscriber list. You are the person we see in our mind's eye / each time an issue is being put together.

In other words, we are more than glad to have you with us.

Very cordially yours, (3)

Take 4

Dear Mr. Morris:

As you will recall, on December 1 you sent us an order for 150 boxes of our special clips. / The order amounted to \$85.60. I wrote you at that time that we were out of stock of that item but that we / would have the factory work overtime so that you would not be put out. Because of some other urgent work that was in the / factory at that time, it was not easy to do this, but, as you said that you needed the clips badly, we gave your job preference.

Although five (1) months have passed since you received the shipment, we have not received payment. Neither have we received an explanation of your reason for not / taking care of this account. This is very distressing to us as you have not even answered the three friendly letters that we have / written you. There may, of course, be a good reason why you have not taken care of this account. There cannot be any good reason, however, why / you have not at least answered our letters. If you cannot pay now, just tell us when you think you can take care of the matter. We will then be patient.

(2) You have done business with us long enough to know that we are always glad to co-operate with our customers.

But if you continue / to ignore our letters and our efforts to help you, the matter will pass out of our hands entirely. We shall have to refer the matter / to our

Legal Department which will have to take whatever steps are necessary to protect our interests. As you know, this is embarrassing / to everybody concerned. For one thing, we are all put to a great deal of unnecessary expense.

Yours truly, (3)

Take 5

Dear Mr. Jones:

Your letter arrived yesterday, and I was extremely interested in your ideas and recommendations for / improving the efficiency of our organization. Our office welcomes suggestions from everyone in the company. Many of / the improvements in the last ten years were made because people like you suggested them. All of your ideas are excellent, and we appreciate / receiving them. We will give all of the ideas our careful consideration; however, I should like to give the suggestion on (1) accounting systems my immediate attention. I plan to discuss it at our next regular monthly meeting.

Your ideas are sound, and I think / we could make a considerable saving in salaries if such a plan were put into operation. Before I present this / material at the meeting, I shall need more detailed information concerning methods of operation and estimated costs.

Would it be / possible for you to prepare a detailed report for me by September 1? I realize how busy you are; but if these (2) recommendations are adopted, you

would be well paid for your time and effort. It is possible that you might receive as much as \$500 for these ideas. Please make at least fifteen copies of the report so that I can give a copy to each of the officers / in the organization.

I shall be in the city on July 1, and I should like to pick up the report at that time. Of course, we should / have some time to discuss it together. Please reserve an hour for our meeting and do plan to have lunch with me.

Very truly yours, (3)

Take 6

Gentlemen:

It is certainly a happy occasion to arrange a charge account for your use. We shall do everything that we can to make / this the beginning of a long and pleasant relationship.

To assure a basis for friendly and lasting co-operation in matters / of credit, we both should have a clear understanding as to credit terms. Our regular policy is that all charges are due and payable / 30 days after the date of the invoice. For your aid, statements are mailed promptly on the last day of each month.

Very truly yours, (1)

Gentlemen:

We have not yet received a remittance from you to take care of our invoices dated March 3 and March 20. Furthermore, we / have not yet had any reply to the three letters we have written you concerning these invoices.

In each letter we asked that you tell us / when your account would be paid. The last letter went registered mail to assure your getting it.

Since you have ignored the letters as well as the / invoices, we are forced to take more drastic measures to effect a settlement. We must have your check for \$575 by June 1.

Yours truly, (2)

Gentlemen:

On May 29 we notified you that your check for \$575, which had not been honored previously, was being returned to the Merchants National Bank.

We thought that such an important matter would receive your immediate attention. / Evidently, however, you have failed again to honor the check on presentation. We must insist that you now take steps to honor the / check this week.

The bank has been given instructions to hold your check for five days more. This gives you ample time.

Yours truly, (3)

Take 7

Dear Miss Summers:

We shall be very glad to co-operate with you in arranging an exhibit of office supplies at the workshop you / are planning to hold at the Johnson Hotel on May 5.

If you will let us know who the other exhibitors are, when you have a complete / list, we shall plan to exhibit

something that will be different. This will widen the range of products available for the secretaries / to examine.

We should also appreciate knowing how much space will be allowed us and when we will be able to set up our display.

Yours truly, (1)

Dear Miss Summers:

In connection with the display of office supplies that you are planning to have during your secretarial workshop on / May 5, we should like to offer samples of a new typewriter eraser that has just come on the market. We can make enough of these / available so that each secretary attending the workshop may have one.

We also have a new type of automatic pencil that could / serve as one of the favors at the luncheon. These, too, we can provide in as large a number as you need.

Let us hear from you.

Yours truly, (2)

Dear Miss Summers:

We have completed plans for our exhibit at your secretarial workshop on May 5. Mr. James Carpenter will be / the representative in charge of our booth. He will call you this week to be sure that all of our arrangements are satisfactory.

On Thursday, / we shipped you a supply of the erasers and pencils that we offered you to give to the secretaries. If you need more, just let / us know.

We are happy to have this opportunity to co-operate with you. You are providing an excellent service.

Yours truly, (3)

Take 8

Gentlemen:

Advertising in America is very important at present. It is the most effective means that the world has ever / seen for the communicating of knowledge, and this means of communication is being used as effectively in the public interest / as it has been used in the interest of private business. Millions of dollars are spent every month on advertising.

Advertising / has been used successfully to promote public welfare projects and to give information about organizations that are working (1) for the public good. Through advertising, many national problems have been brought up for the public's consideration; and many programs / have been presented for help. Advertising has helped in appeals for funds needed in national emergencies.

Advertising has been / used to inform people about education in this country. This has aided in the formation of state school committees and in an / increased interest in improving education in the United States.

One of the largest and oldest campaigns is that in aid of (2) the United States Treasury for the sale of savings bonds. You have probably purchased bonds for yourself, and this brings benefit to you and / to your Government.

A short time ago an advertising campaign told Americans why they were justified in having confidence in / the prosperity and stability of our country. Government and business leaders say it helped to improve business conditions.

I / sincerely hope that this information will be of some value to you in preparing the term paper that you are writing.

Very truly yours, (3)

Take 9

Dear Customer:

You are invited to attend a private sale of furs at the Davis Department Store. This is one of the most exciting / opportunities that we have been able to offer our customers for a long time.

This is definitely the largest selection of / furs that we have ever assembled in our store for your shopping convenience. Our own buyer, who has been a fur expert for over twenty- / five years, personally selected this wonderful collection. It consists of \$100,000 worth of fur fashions for the (1) customers of the Davis Department Store.

Our regular salespeople will be ready to serve you. They will be glad to help you make a selection / that will please you. I am sure that you know our reputation for fine merchandise. Quality is evident in every article / that will be on sale next week.

For this special event, you are receiving advance notice before our advertising is given to the / newspapers. Look over the items described in the enclosed folder and notice the unusually low prices.

To make this a really (2) private sale for you, we are enclosing a ticket that will serve as your card of admission. Present your ticket at the entrance to our fur / department for an early look at these extraordinary fur fashions.

Our credit representative will be in the department to arrange / convenient terms if you wish to make special payment plans.

Our store will be open for this sale from 9:30 in the morning until 9 / in the evening. This is a rare opportunity to save on furs, and we hope our customers will take advantage of it.

Sincerely yours, (3)

DICTATION-TRANSCRIPTION FINAL EXAMINATION

Take 150 wpm - 3 min.

Dear Miss Jones:

Do you feel that you can write but are afraid that a beginner does not have a chance? Let me assure you that there is no reason for this feeling. There is more room for beginners in the field of writing today than ever before.

You may make sure that you can write before (1) you enter the field by taking our Writing Aptitude Test.

Not all persons who take the test pass it by any means. Last year, more than five hundred persons tried the test, but only a fraction of them were successful in passing it. Those persons who pass the test are then qualified to take (2) the Smith Course in Writing, offered by the Writers Institute of America. This course has trained thousands of beginners to use their writing ability to increase their earnings.

The Smith Course teaches you to write by developing your individual style instead of having you copy the styles of others. (3) (1.36)

Take 260 wpm - 3 min.

Dear Miss Jones:

I recently learned from a mutual friend that you are planning to build a new house in the near future in White

Plains. I wish it were possible for me to sit down and talk with you about it. I am sure I could make many suggestions that would make your new house the "dream house" that you have always wanted.

If you are like most people, (1) this will probably be the only house you will build during your lifetime. Consequently, you will want to be sure that it has all the modern features that transform an ordinary house into a real home.

One of the matters to which you should give careful attention is the type of windows you will install. Before you reach a final (2) decision on that matter, I hope you will take time to read the literature that I have enclosed explaining Johnson windows. After you have read this literature, I am confident that you will instruct your builder to install Johnson windows in your new home. These windows will insure that you home will have plenty of light and proper ventilation. (3) (1.32)

Take 3

70 wpm - 3 min.

Dear Mr. James:

The paint book that you asked us to send you was mailed yesterday.

If you will follow the suggestions in that paint book, you will find that you will be able to save a good deal of money on your paint bills.

As you look through the pages of the book, you will notice that you will not have to pay high prices to get the best paint.

Our paint is made for us by one of the best-known paint manufacturers (1) in the country. The paint you buy is handled only once in its journey from the manufacturer to you. Selling expense is very low. The price you pay does not include any useless handling costs. The saving that is brought about by this method of handling paint is passed on to you.

For your house, it occurs to us that you would be interested in the paint described on page 16 (2) of the paint book. This paint costs \$3 a gallon, and we pay the freight charges.

Why not select the paint you need and order it today while our stock of all colors is still complete? Because of uncertain conditions, we cannot be sure that we shall be able to get all colors in the future. You do not have to send money with your order. We shall be glad to ship your paint c.o.d. (3) (1.28)

Take 4

80 wpm - 3 min.

Dear Mr. Drake:

We understand that you are a member of the American Gun Society and that you have a large collection of guns.. Perhaps you have often wondered how much your guns are really worth at today's prices. Perhaps there are times

when you would like to sell a few of your guns because you do not have the space to store them or because you need cash to meet your immediate needs.

You will be interested to know that this store is (1) now organizing a gun brokerage service, the first and only one of its kind. What is behind this new service? It is all very simple. Many persons, like yourself, have guns or rifles that they never use and would like to sell them. Then there are thousands of persons who want to buy good guns. For the first time, there will be a service that will bring these people together. We will see to it that the seller gets a good price for his gun. For this service (2) we will charge just a small fee. We will also see to it that the buyer gets good value for the money that he pays.

This service will enable you to get a fair appraisal of your guns based on today's prices. Acting as your agent, we put your guns on sale. As soon as a gun is sold, you will receive a check. If you should change your mind about selling your guns before we have obtained a purchaser, you can call for them at any time you want them. (3) (1.32)

Take 5

90 wpm - 3 min.

Dear Sir:

You will be glad to know that most of the lots at the north end of the estate have now been sold at fairly good

prices. In the majority of cases, the purchasers have made a down payment of 10 percent.

That part of the property facing on Main Street that was reserved for stores still remains unsold. Although there have been some inquiries about these lots, the prices we asked have been far too high. We are offered much less. You will remember that at our interview I expressed the opinion that the (1) prices we asked would be considered too high, and this has turned out to be the case. I suggest that they be revised. My own impression is that a reduction of perhaps 25 percent will have to be made before they can be sold.

The trees on the property have been removed and sold. We managed to get \$500 for them, as will be seen in the accounts.

The row of houses along the river has been put up for auction. I have tried to sell them by private arrangements, but without success. From (2) my knowledge of conditions at the present time, I am afraid they will bring no more than their value as old materials.

Sincerely yours,

Dear Madam:

In response to your request, we are sending you, under separate cover, several sets of letters. Many of them are written on illustrated letterheads. These are the form letters that we write to business houses in

various lines of business throughout the country. You will also find in these folders letters taken from our daily correspondence. (3) (1.31)

Take 6

100 wpm - 3 min.

Dear Friend:

Twenty years ago, people in my town laughed at me. I had just announced my intention to plant evergreen trees and seel them by mail all over the country.

They asked why I was planting evergreens when the country all around was covered with them. They thought I had lost my mind when I decided to guarantee that my trees would live. They pointed out that my customers might not plant them correctly or might let the roots get dry or do any one of a thousand different things that would kill the trees. They were sure that I would lose every penny that I (1) invested in the business. My best friends advised me to forget the whole matter and go into some other line of business.

I knew that my trees would be strong and that almost anyone could plant them successfully with a few simple instructions. But most of all, I had faith in the people who plant trees. I was sure that men and women who love trees would take good care of them. I was sure that if I were honest with them, they would be honest with me.

I am glad to say that my faith was justified. I have sent thousands of trees to my customers. Very few write

me for (2) replacements because trees have died. Whey they do, they usually tell me that one tree has died out of a shipment of perhaps fifty or one hundred. Some people have planted as many as one thousand or more and have written me that every one of them lived.

Of course, I cannot take too much credit for that. Nature is especially kind to trees here in Maine and makes them healthy and strong. The trees have to stand some hot summers and very cold winters. I do not give the trees any special care after the first year, except transplant them at the right time. (3) (1.31)

COMPREHENSIVE THEORY FINAL EXAMINATION

- | | |
|-----------------------|------------------------|
| 1. efficient _____ | 26. recent _____ |
| 2. personality _____ | 27. requirement _____ |
| 3. supersede _____ | 28. businessmen _____ |
| 4. necessary _____ | 29. popularity _____ |
| 5. postdate _____ | 30. verification _____ |
| 6. container _____ | 31. claimed _____ |
| 7. proper _____ | 32. cablegram _____ |
| 8. expect _____ | 33. supervision _____ |
| 9. insulted _____ | 34. afterward _____ |
| 10. choice _____ | 35. stimulating _____ |
| 11. index _____ | 36. harmony _____ |
| 12. contemplate _____ | 37. electrical _____ |
| 13. initially _____ | 38. lecture _____ |
| 14. heavily _____ | 39. seldom _____ |
| 15. danger _____ | 40. theory _____ |
| 16. guarded _____ | 41. increasingly _____ |
| 17. alter _____ | 42. banquet _____ |
| 18. beyond _____ | 43. culture _____ |
| 19. badly _____ | 44. finally _____ |
| 20. suburb _____ | 45. majority _____ |
| 21. helpfulness _____ | 46. consistent _____ |
| 22. look _____ | 47. spring _____ |
| 23. misprint _____ | 48. staged _____ |
| 24. spend _____ | 49. embarrass _____ |
| 25. transported _____ | 50. eventual _____ |

- | | |
|-------------------------|------------------------|
| 51. wants _____ | 76. concrete _____ |
| 52. reliable _____ | 77. assignment _____ |
| 53. yourself _____ | 78. hired _____ |
| 54. gold _____ | 79. enterprise _____ |
| 55. self-defense _____ | 80. visited _____ |
| 56. relationship _____ | 81. considerable _____ |
| 57. distribute _____ | 82. destination _____ |
| 58. attempt _____ | 83. compose _____ |
| 59. proceedings _____ | 84. informed _____ |
| 60. persisted _____ | 85. critical _____ |
| 61. allow _____ | 86. holdings _____ |
| 62. unique _____ | 87. powerful _____ |
| 63. dispute _____ | 88. committee _____ |
| 64. division _____ | 89. admission _____ |
| 65. except _____ | 90. portable _____ |
| 66. differences _____ | 91. induce _____ |
| 67. determination _____ | 92. interrupt _____ |
| 68. remit _____ | 93. amount _____ |
| 69. evident _____ | 94. quit _____ |
| 70. manner _____ | 95. shipment _____ |
| 71. together _____ | 96. deduction _____ |
| 72. derive _____ | 97. prompt _____ |
| 73. encouragement _____ | 98. troubled _____ |
| 74. urgent _____ | 99. controlled _____ |
| 75. variation _____ | 100. overdo _____ |

STUDENT QUESTIONNAIRE

1. Do you like using the visual presentation machine in developing your shorthand skill?

1
like very
much

2
tend to
like it

3
don't have an
opinion for or
against right
now

4
tend not to
like it

5
don't like
at all

2. Regardless of your response to question 1, do you feel that the use of the visual presentation machine for skill development is helping you increase your shorthand writing speed?

1
definitely feel
that it is helping

2
tend to think
that it is
helping

3
don't have an
opinion now

4
tend to think
that it isn't
helping

5
definitely
feel that it
isn't helping

3. Regardless of your response to question 1, do you feel that the use of the visual presentation machine for skill development is helping you acquire shorthand theory mastery?

1
definitely feel
that it is
helping

2
tend to think
that it is
helping

3
don't have an
opinion now

4
tend to think
that it isn't
helping

5
definitely
feel that it
isn't helping

STUDENT QUESTIONNAIRE

1. Please rate the tension you have felt in class in regard to developing your shorthand skill.

1
have not felt
tense in class

2
have felt a little
tense at times

3
have felt some-
what tense in
class regularly

4
have felt a great
deal of tension in
class regularly

2. Please rate the frustration you have felt in class in regard to developing your shorthand skill.

1
have not felt
frustrated in class

2
have felt a little
frustrated at times

3
have felt some-
what frustrated in
class regularly

4
have felt a great
deal of frustration in
class regularly

TABLE 35

NUMBER OF ABSENCES ACCRUED BY MEMBERS OF BOTH GROUPS

Experimental Group		Control Group	
Fall Term	Winter Term	Fall Term	Winter Term
6	9	7	12
6	8	7	12
5	5	7	6
5	5	4	4
2	4	4	3
1	4	3	3
1	1	1	1
0	1	0	1
0	1	0	1
0	0	0	0

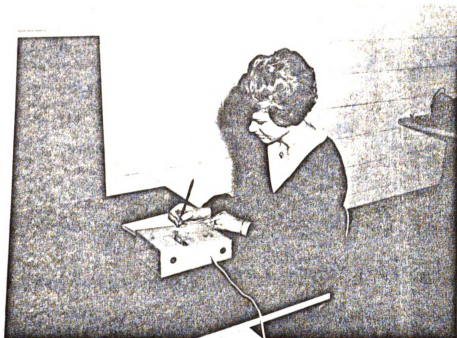
Mean No. of Absences: Experimental Group--Fall Term 2.6,
 Winter Term 3.8; Control Group--Fall Term 3.3, Winter
 Term 4.3.

TABLE 36

REPORTED NUMBER OF HOURS PER WEEK MEMBERS OF BOTH
GROUPS SPENT STUDYING SHORTHAND OUT OF CLASS

Experimental Group		Control Group	
Fall Term	Winter Term	Fall Term	Winter Term
14	10	14	10
14	10	12	9
14	10	12	9
12	9	10	8
10	8	9	7
8	8	7	7
8	8	7	6
5	7	5	5
5	6	5	5
4	4	4	4

Mean No. of Study Hours: Experimental Group--Fall Term 9.4,
Winter Term 8.0; Control Group--Fall Term 8.5, Winter
Term 7.0.

Photograph of the Visual-Presentation Machine in Use

Sample of Tape Used on the Visual-Presentation Machine

(Tape has been cut for presentation on these pages)

71. / f: s a
 / n . p
 . r e a g d o r
 g u n p - a
 - h 10. i o. n
 o r d o " d i
 i n - i n e
 - , n o y l
 ? 4 l o g 2
 h o - - r e
 i g d o - f
 g d o i n e
 a 1955 - , b d
 / a - e b f
 - o y o r 2
 - r e f l
 a - f h

72. / b o o
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 a l y " b
 m " , m
 a d " d
 g l o b - o r e o
 o b b u d p
 g . - r e
 b , i n i
 - e i f i
 g h . o . r
 " - y > o y
 " b . z " b
 m " ; , m
 3 / . 2 (80)

73 / - of 201
 2 m - 02
 8. 6 7 "
 4 m m. 02-
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 re s. m
 2; 0. 4, 6 >
 0 20 m - 0
 02 9. 2. 0 "
 6 6 0 6.
 m m 02 2, 0
 m - 0, 20
 02 2 4, m
 - 0 2 > 0. m
 0 20 0 ...
 m 2; 6 2 2
 1 850/ 2 - 0
 2 7. 50 - 6 89
 m 0 0. 2 (124)

74 m - 0: 2
 1 2 - 02
 0. 2, 6 m 0
 0 2. 6 0 6
 m. 0 6
 m - 5 6
 - > . 6 ,
 80/ 19 6 m ,
 0. 6 2 0 6
 6, m. 2
 6 0 1. 2 0
 0 2 6 1. 0 2
 . 0 (70)

BIBLIOGRAPHY

BIBLIOGRAPHY

Books

- Games, Paul and George Klare. Elementary Statistics. New York: McGraw-Hill Book Company, Inc., 1967.
- Harms, Harm and B. W. Stehr. Methods in Vocational Business Education. Cincinnati, Ohio: South-Western Publishing Co., 1963.
- Leslie, Louis A. Methods of Teaching Gregg Shorthand. New York: Gregg Division, McGraw-Hill Book Company, Inc., 1953.
- Leslie, Louis A., Charles E. Zoubek, and Russell J. Hosler. Gregg Shorthand for Colleges--Diamond Jubilee Series. Volume I. New York: Gregg Division, McGraw-Hill Book Company, Inc., 1965.
- Russon, Allien R. The Psychology of Skill Applied to the Teaching of Shorthand. The University of Utah Press, 1966.
- Spiegel, Murray R. Theory and Problems of Statistics. New York: McGraw-Hill Book Company, Inc., 1961.
- Wert, James E., Charles O. Neidt, and J. Stanley Ahmann. Statistical Methods in Educational and Psychological Research. New York: Appleton-Centruy-Crofts, Inc., 1954.

Articles, Periodicals, and Monographs

- Condon, Arnold. "Principles for the Development of Theory and the Building of Writing Skills in First-Year Shorthand," Secondary Education With a Future, pp. 137-148. American Business Education Yearbook, Vol. XIX. Somerville, New Jersey: Somerset Press, 1962.
- Crunk, Dorothy E. "Learning Psychology and Shorthand," Business Education Forum, 23 (November 1968), pp. 17-18.
- Danielson, Harriet A. "Shorthand Vocabulary's Relationship to Dictation Achievement," The Business Education Forum, 15 (February 1961), pp. 21, 27.
- Frink, Inez. "Shorthand and Transcription: Some Research Findings and Observations," Business Education Forum (October 1961), pp. 14-15.

Hillestad, Mildred. "Learning Difficulties in Shorthand," Business Education Forum, 16 (October 1961), pp. 15-16.

Jester, Donald D. "The Shorthand Transcription Process and Its Teaching Implications," Monograph 108. Cincinnati, Ohio: South-Western Publishing Company, 1963.

Liles, Parker. "Issues in Teaching Shorthand," The Balance Sheet, XLV (October 1963), pp. 52-57.

Ruegg, Robert J. "Skill Building Through Reading Instruments," Selected Readings in Business and Office Occupations, pp. 252-259. National Business Education Yearbook, No. 5. Washington, D.C.: National Business Education Association, 1967.

Russon, Allien R. "Let's Start New-Matter Dictation Early," Business Education World, 44 (October 1963), pp. 16, 34-35.

Schloemer, Carolyn. "Approaches to Teaching Beginning Shorthand," The Balance Sheet, XLVI (March 1965), pp. 299, 332.

Wagoner, George A. "Improving Efficiency of Teaching Business Subjects--Especially Shorthand," Journal of Business Education, 5 (May 1964), pp. 330-332.

West, Leonard J. "The Acquisition of Stenographic Skills: A Psychological Analysis," Business Education Forum (October 1963), p. 7.

Unpublished Materials

Barber, Shirley. "An Experimental Study in Teaching Shorthand Using the Tachistoscope." Unpublished Doctor's dissertation, Colorado State College, Greeley, 1961.

Danielson, Harriet Ann. "The Relationship Between Competency in Shorthand Vocabulary and Achievement in Shorthand Dictation." Unpublished Doctor's dissertation, Indiana University, Bloomington, 1959.

Goety, Leo G. "The Relationship Between Symbol Mastery and Selected Dictation Speeds." Unpublished Doctor's dissertation, University of North Dakota, Grand Forks, 1966.

Hanson, Robert Nelton. "Visual Stimulus Versus Combined Audio-Visual Stimuli for Out-of-Class Practice in First-Semester College Gregg Shorthand." Unpublished Doctor's dissertation, University of North Dakota, Grand Forks, 1966. Cited in The National Business Education Quarterly, Fall 1967.

- Lusk, Norman Malcolm. "A Study of the Comparison Between Construction of Shorthand Outlines According to Theory and the Accuracy of Transcription." Unpublished Master's thesis, University of Washington, Seattle, 1959. Cited in The National Business Education Quarterly, Fall 1960.
- McKenna, Margaret Ann. "An Experiment to Determine the Effect of the Early Introduction of New-Matter Dictation in the Teaching of Beginning Shorthand to College Students." Unpublished Doctor's dissertation, Michigan State University, East Lansing, 1966.
- Nixdorf, Marion E. "A Study to Determine the Effect of Using the Skill-Builder Controlled Reader in the Teaching of Beginning Shorthand." Unpublished Master's thesis, University of Wisconsin, Madison, 1962.
- O'Connell, Mary Margaret. "An Experimental Study to Determine the Effectiveness of Programmed Gregg Shorthand Materials." Unpublished Doctor's dissertation, University of Wisconsin, Madison, 1967. Cited in The Journal of Business Education, December 1968.
- Pullis, Joe. "The Relationship Between Competency in Shorthand Accuracy and Achievement in Shorthand Dictation." Unpublished Doctor's dissertation, North Texas State University, Denton, 1966. Cited in The National Business Education Quarterly, Spring 1968.
- Varah, Leonard James. "Effect of Academic Motivation and Other Selected Criteria on Achievement of First and Second Semester Shorthand Students." Unpublished Doctor's dissertation, Michigan State University, East Lansing, 1966.
- Whittle, Marie. "The Relationship Between Certain Variables and Achievement in Beginning Shorthand at the University of Texas." Unpublished Master's thesis, University of Texas, Austin, 1959. Cited in The Business Education Forum, March 1962.

A SUBJECTIVE PRESENTATION OF SOME OF THE
OPINIONS AND IMPRESSIONS OF THE
RESEARCHER RELATIVE TO THIS EXPERIMENTAL STUDY

This presentation represents an attempt on the part of the researcher to discuss briefly some of the opinions and impressions formed during the time that this study was being carried out. Some of these opinions and impressions can be categorized simply as hunches; and, therefore, could not be reported in the formal part of the thesis. The reader should clearly understand that, for the most part, objective evidence does not exist at this time to back up the following statements; but the researcher feels they are important enough to be included at this point, as they may, in fact, add additional perspective to the study.

1. The researcher believes that one of the main benefits of the visual-presentation machine is that it presents a form of disciplined activity for the student to engage in and this results in a most efficient use of time and effort in the learning situation.

2. The researcher believes that the constant imitating of the desired shorthand product through the use of the visual-presentation machine gives the student greater confidence in his ability to succeed in the early parts of the instructional program when he constantly needs to know how well he is doing.

3. The researcher believes that the visual-presentation machine can provide the stimulus and guidance needed by many students to see them through a learning task. This machine, in effect, organizes a student's approach to the learning situation and saves him the inefficiency and frustration of much trial-and-error learning.

4. The researcher believes that many of the results obtained from the use of the visual-presentation machine could also be obtained through a great deal of forced reading and copying from shorthand plates in the textbook. However, the machine pacing of such material is probably much more effective from the standpoint that control comes from outside of the student.

5. The researcher believes that the students and the teacher must have confidence that machine pacing of practice material will help them develop their skill. In some ways the machine presentation seems to be too simple a solution to a complex learning situation, and thus students who use the machine could conceivably develop some doubts at times as to whether it is helping them.

6. The researcher believes that students who use the visual-presentation machine to develop their skill actually develop a stronger overall skill, and that this would show up in high competence in turning out acceptable transcripts on the job along with high confidence in the ability to do a good job.

7. The researcher believes that the use of the visual-presentation machine over the whole instructional program in shorthand would result in higher-level speed attainment at the end of the program along with an actual savings in the amount of time required to reach particular speed and accuracy goals.

8. The researcher believes that the visual-presentation machine represents a much more efficient method of acquiring shorthand skill than a teacher-directed approach. However, the researcher recognizes that the exclusive use of this machine in the learning process could actually be detrimental. In effect, the right mix must be worked out to maximize growth in skill development.

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