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ABSTRACT

Electronically paced materials for teaching blind students to typewrite were written and taped. The effectiveness of the materials was tested, and a teacher's manual prepared. A control group was taught by conventional methods, while an experimental group used the electronically paced materials. These consisted of ten audio-taped programs for mastery of the alphabetic keyboard, 16 programs for skill development, and one program for the number keys. All students, who ranged from grades 6 through 10, moved at their own paces. Test results showed that the experimental group achieved greater understanding of the typewriter and how to manipulate it, demonstrated superior posture and stroking techniques, learned faster, and developed greater typing proficiency, speed and control. Since these new instructional materials provided students with an effective means of communication and a marketable job skill, it was recommended that schools and counselors for the blind be informed of their availability and that additional programs be developed for teaching blind students to apply these typewriting skills for a variety of specific business and personal purposes. (Author/LB)

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A STUDY TO DETERMINE THE EFFECTIVENESS OF ELECTRONICALLY  
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Contract No. OEC-6-72-0724-(509)

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The University of Texas at Austin  
Austin, Texas 78712

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March 15, 1973

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HEALTH, EDUCATION, AND WELFARE

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National Center for Educational Research and Development

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## ABSTRACT

### A STUDY TO DETERMINE THE EFFECTIVENESS OF ELECTRONICALLY PACED TYPEWRITING INSTRUCTION FOR BLIND STUDENTS

#### Purpose of Study

The purpose of this study was to write and tape electronically paced instructional materials specifically designed for teaching blind students to typewrite; to test the effectiveness of the instructional materials; and to write a teacher's manual for training teachers of the blind in this method of teaching typing skills.

This study was aimed at the teaching of blind students to typewrite at a rapid rate of speed with accuracy--not to apply the skill.

#### Methods and Procedures

After writing the instructional materials that consist of ten audio-taped electronically paced programs for mastery of the alphabetic keyboard, sixteen electronically paced programs for skill development, and one program for teaching the top row or number keys, their effectiveness was evaluated by teaching two groups of blind students--control and experimental.

The control group was taught by using conventional methods and materials available, while the newly developed electronically paced instructional materials were used in teaching the experimental group. Each class met for a period of eight weeks. Following the first ten days, the keyboard mastery period, students were able to move at their own rate of speed by using multiple-channel dictation equipment.

#### Summary of Findings

Students in the experimental group were far superior straight-copy typists. The typing speed rate ranged from 14 to 44 words per minute, with the class average being 29.63 words per minute. Students demonstrated good technique while typing and found individualized programmed instructional materials, electronically paced, a great and interesting challenge.

## INTRODUCTION

Typewriting skills are extremely important to the blind person. Braille skills, of course, are also important, but they are more of a means for the blind person to communicate with himself rather than others. It is a common practice not to teach a congenitally blind person to write or print but rather he is taught to use the typewriter. Thus, a blind person's typewriting skill becomes his sole means of written communication between himself and sighted persons.

Individualization of instruction in typewriting is becoming an increasingly integral part of many education programs. When a student can progress at his own speed, he feels comfortable not having to compete with the rate of his classmates. Since the teacher is not totally occupied with class presentation, he can offer assistance immediately; he can spot possible difficulties as they develop--and often before they develop. A student welcomes the opportunity to receive individual help from his teacher. Furthermore, assistance is provided exactly when it is needed--not later, when the problem has passed.

As the concept of individual progress education develops, the teacher becomes more important. His first role is to provide motivation, which he can do because he is able to spend more time with each student. Words of approval, a pat on the back, a gentle pointer about an incorrect technique--all become easier for the teacher to accomplish.

Another function of the teacher is that of counseling and guidance. With individual instruction, it is much simpler to identify those students who need special attention as well as those who are exceptionally good prospects for business office positions. It also becomes easier to spot those whose talents should lead them in other directions.

This program is excellent from the standpoint of teacher training, since there are no courses offered, to the author's knowledge, for use in teaching typewriting to the visually handicapped person by use of individualized programmed instruction using electronically paced dictation. Because of the lack of experimental research in teaching blind students, it has been necessary for teachers of typewriting to devise their own methods, using what limited literature is available in the field and their own initiative. This oftentimes becomes a trial-and-error, time-consuming method of teaching. The use of electronically controlled teaching materials will give the instructor a proven technique, enhancing his skill and allowing him to spend more time in overall help. For example, many congenitally blind students have extremely poor posture

and other distracting personal habits. When the teacher is free to work individually with a student, as he is when using electronically paced typewriting instructional materials, these personal habits can easily be observed and corrected by the instructor during the class period.

In the past, most blind students have taken typewriting each semester they are in high school. This study has revealed a marked decrease in training time for blind students in learning to typewrite.

### Purpose of the Study

The purpose of this study was to write and tape electronically paced instructional materials specifically designed for teaching blind students to typewrite, to test the effectiveness of the instructional materials, and to write a teacher's manual for training teachers of the blind in this method of teaching typing skills.

This study was aimed at the teaching of blind students to typewrite at a rapid rate of speed with accuracy--not to apply the skill. Teachers have difficulty and need help in developing rapid speed with accuracy rather than in teaching the application of the skill.

### Review of Related Literature

Probably, the lack of training for the preparation of teachers to teach typewriting to blind students is why such a very limited amount of literature on the subject is available for review. None of the articles found explained how the keyboard is presented and mastered nor how a skill with accuracy is developed when teaching blind students to typewrite. The articles did, however, explain thoroughly how to teach the different parts of the typewriter, insertion of paper into the machine, centering, and when the student is nearing the end of the page.

Lovitt<sup>1</sup> states that, before teaching the visually handicapped, the teacher must gain an understanding of the handicap. In her article, she emphasizes the ways to acquaint the blind student with the typewriter before the instruction begins and that the teacher of blind students should expect high standards to be maintained. No mention was made of the use of paced dictation in teaching typewriting.

In her article, "Teaching the Blind to Type," Richardson<sup>2</sup> states that the degree of success that is to be attained will depend on careful planning by the teacher, his understanding of the student and his needs, and his ability to motivate students to want to learn to typewrite. She reminds the teacher that, when one of the vital senses is lost, one or more of the remaining senses will be developed sufficiently to carry the necessary work load. Richardson explains paper

insertion, margin setting, assembling the work for typing, and teaching the blind to erase but does not explain ways to teach the alphabetic keyboard nor how to develop a typewriting skill.

Reis<sup>3</sup> prepared tapes to be used by sighted students in building speed and accuracy. The student marks his copy in the textbook for each one-fourth of a minute and strives to reach the indicated point in the copy as the instructor calls out on the tape one-fourth, one-half, etc. He recommends that they be used after the first half of the first semester. He makes no mention of paced dictation.

Schmidt<sup>4</sup> was asked to teach typing to blind students during the summer term. Being a completely new experience and with no training in how to work with blind students, he had to rely to a great extent on his methods and techniques for teaching typewriting to sighted students. After some false starts and using the trial-and-error method, techniques were devised to teach centering, setting of margins, vertical placement, and when to take the paper out of the machine. Schmidt recommends one blind student to five sighted students for class size. No mention was made of the typewriting skill achieved from the summer course. In summation, however, mention was made that the class seemed to be successful--it taught the teachers a great deal; and even though it left many questions unanswered, it was a valuable experience for the teacher.

Berry<sup>5</sup> in her article explained her experiences when teaching typewriting to one blind student in a class of sighted students. The blind student could already type when he entered the class. Individualizing the instruction for the blind student stems from the fact that the teacher dictated much of the time to him. Other times the blind student typed short sentences from memory. Most of Berry's article was devoted to teaching the setting of margins, spelling at the typewriter, typing letters, and typing manuscripts.

Lamb<sup>6</sup> presented suggestions for instructing blind and other visually handicapped persons in the use of the typewriter without employing artificial aids. Her suggestions were discussed in the following order: provide orientation to the blind student the first day; teach parts of the typewriter--paper guide, paper bail, carriage return, carriage release, margin release, and margin setting; set the paper edge guide at zero; paper insertion; and home key position. No mention was made of how to teach the alphabetic keyboard or how to develop a typing skill.

Etier<sup>7</sup> has found through research that by using electronically paced instructional material in teaching typewriting sighted students learn to typewrite in less than half the time than when using conventional methods. By use of electronically paced materials, the student is permitted to move at his own rate of speed, which keeps him challenged and motivated to want to typewrite. The methods for teaching locational security at the keyboard are built into each

of the twenty-four modules, which means that all students get the same instruction. Once the keyboard is correctly automatized, skill building at the typewriter becomes a much easier process, especially when the material is properly designed and recorded at different rates of speed and degrees of difficulty--an essential for the development of a typing speed with accuracy within a reasonable time limit. Etier believes that electronically paced dictation is a breakthrough in the teaching of typewriting.

After two and one-half years of teaching typewriting by use of electronically paced dictation at varying rates of speed, comfortable for the students, and after working with three blind students who partially knew the typewriter keyboard for three weeks, the Project Director believes that this proposed project is a worthy one for equipping blind students with a communicative skill to enable them to communicate by the written word with the sighted world.

Morton<sup>8</sup> found from her study that blind transcribers are accurate and meet the same performance standards in the business office as sighted transcribers. The purpose of the Morton study was to develop effective guidelines and teaching suggestions that would enable blind students enrolled in secondary and postsecondary schools to obtain vocational competence as transcription typists.

Morton interviewed forty blind transcribers and their employers from eight states to determine the type of work performed by the blind and the type and extent of training needed for top-level performance. The range in the number of months for the forty blind transcribers to develop their typing speed using conventional methods was twelve to one hundred months. The average number of months of training to obtain their typing speed before employment was thirty-eight months or three years and two months. The average typing speed of the forty transcribers was 63 words per minute. Training time in teaching how to apply the typing skills in office situations was much the same as training sighted transcribers.

The Hadley School for the Blind, Winnetka, Illinois, was contacted to learn about the typing courses that they offer blind students. It was learned that they offer one course that consists of four brailled volumes of seventy-five lessons and one other course of forty-two lessons that includes two volumes in braille and on records. The Hadley approach to teaching typewriting to blind students is completely different from the approach recommended in this proposed project.

## METHODS AND PROCEDURES

### Description of Activities

This study was accomplished in eight phases as follows:

PHASE 1. Instructional materials were written, and ten electronically paced audio tapes--lesson by lesson in 45-minute modules--for teaching the alphabetic typewriter keyboard were prepared.

PHASE 2. The effectiveness of the ten modules, or lessons, of electronically paced instruction for teaching the alphabetic keyboard to blind students was assessed and evaluated.

PHASE 3. Instructional material of syllabic intensity suited to the blind student was written, and electronically paced audio tapes for sixteen 45-minute modules were prepared.

PHASE 4. The sixteen modules, or lessons, of electronically paced typewriting instruction prepared in Phase 3 for skill development were assessed and evaluated.

PHASE 5. Instructional materials were written, and one electronically paced audio tape for teaching the numbers, or top row of keys, was prepared.

PHASE 6. The number module for teaching the numbers, or top row of keys, was assessed and evaluated.

PHASE 7. The effectiveness of electronically paced typewriting instruction for blind students was compared with the effectiveness of conventional methods of teaching typewriting to blind students.

PHASE 8. An instructor's manual for use by teachers when teaching blind students to typewrite using electronically paced instructional materials was written.

### Work Accomplished in Phases One through Eight

PHASE 1. Instructional materials were written and ten electronically paced audio tapes--lesson by lesson in 45-minute modules--for teaching the alphabetic typewriter keyboard were prepared. The prerecorded programmed instruction incorporates the latest advances in learning technology and tutorial devices. Through the kinesthetic approach to learning, the student feels the letter to be learned or typed, hears the letter called, and strikes the letter or key upon the command "type."

At the beginning of the first class, the teacher explained the parts of the typewriter the student would be using that day as the student placed his hands on each part to get a mental picture of the machine. The teacher explained that for the first few days the student would be using only the lower three rows of keys, and he described the home position keys and how to locate them. Following this short explanation, the console was turned on, and the programmed instruction led the student in locating the home position keys in a normal tempo--the home keys to be struck with the left hand--a, s, d, f, and those to be struck with the right hand--j, k, l, ;.

The procedure to be followed in striking the keys is explained and demonstrated for the student to hear the sound of each stroke of the key. A short demonstration on the home position keys was given (while the students listened) for one line across the page, followed by an explanation of how to return the carriage at the end of the line. Here the teacher stopped the console while he led the class in a demonstration on the carriage return on the machine being used by the class (manuals and/or electrics) and how to strike the space bar. Following this brief demonstration, the instructor again started the console.

With paper already in his typewriter and with preset margins, the student (beginning with the left hand) typed as the console slowly called out rhythmically, unfalteringly, untiringly, and unhaltingly, "f . . . type . . . d . . . type . . . s . . . type . . . a . . . type; now your right hand; ready, begin-- . . . j . . . type . . . k . . . type . . . l . . . type . . . ; . . . type." After three lines across the page of striking the home position keys, providing the student with the necessary practice to develop the correct technique in striking the keys, fingers curved, and good wrist position, the student typed words such as fall, ask, lad, and alfalfa containing the letters that he had learned.

Before typing each word for the first time, the teacher reviewed the location of each letter and called the letter. For example, using the word fall, the teacher first asked the student to think the word to be typed, then reminded him that the f key is struck with the first finger of his left hand; the a with the little finger left hand; and the l with the third finger right hand. He then said, "Now, let's type the word fall. Ready, begin--f . . . type . . . a . . . type . . . l . . . type . . . l . . . type . . . space . . . type," and continued for one line across the page. This procedure was followed with each of the above words, giving a good drill over the alphabetic letters taught the first day.

The last drill for the first day was an adjacent letter drill alternating from the left hand to the right hand, beginning with the first finger left hand. "Ready, begin--f . . . type . . . d . . . type . . . s . . . type . . . a . . . type. Now your right

hand; ready, begin: j . . . type . . . k . . . type . . . l . . . type . . . ; . . . type." This drill was used for two lines across the page to give the student a good command of the home position keys. The student was reminded to strike the keys sharply on the word type; to keep wrists up, fingers normally curved; and to "think" the letter being typed.

At the beginning of the second day, the student was taught how to insert paper into the machine before the programmed lesson was begun. When the console was turned on, the student was drilled on the home position keys as he was at the end of lesson one for approximately 15 minutes, using adjacent letter drills and words.

Two new alphabetic keys were taught the second day--the g and h. First, the reach from the f to g and back to f was presented slowly, followed by intensive drill from f to g and back to f. The electronically paced instruction was as follows: "f . . . type . . . g . . . type . . . f . . . type . . . space . . . type" for one short line across the page. A word containing g as gas was used for reinforcement of the letter g. Additional words used for practicing the g key were gal, jag, lag, and glad. Each word was typed eight to ten times before the next word was presented.

The h key was presented and drilled in the same way as the g key. Practice words used for the h key were had, has, half, ash, and hall.

One of the secrets to keyboard mastery was that when a new letter or key was presented, words containing only the new letter or key were used. All other letters in the word were taught and drilled on the previous day. By following this practice, the memory load of the student is lessened. Available textbooks do not follow this principle.

The instructor briefly observed each student during the beginning lessons to check correct fingering of the keyboard. He gave remedial help during the lesson, if possible, or immediately after the lesson.

At the beginning of the third lesson, paper insertion was reviewed and margin setting was taught before the programmed lesson was started. By the third lesson the student was stroking the keys with confidence, which enabled the instruction to be at a nice rhythmic tempo. The electronically paced tempo is a fascinating motivational device in teaching typing. It involves 100 percent concentration on the part of the student.

Three to four additional keys were taught in each of the following lessons with the necessary drills--locational security drills, adjacent letter drills, balanced-hand words, and easy sentences to develop locational security and tactile memory until the alphabetic keyboard was mastered.

Before typing a drill, word, or short sentence, the instructor explained the drill as the student listened and was led in typing

the drill. The same was true in typing words. When sentences were typed, the instructor stated or read the sentences as the student listened; then he was asked to type the sentence as it was electronically paced.

At the end of Lesson 7, all twenty-six alphabetic keys, the period, word capitalization, and margin setting are mastered.

Following the fingering of several warm-up exercises learned on previous days at varying speeds (8 to 16 words per minute), the major portion of Lesson 8 was devoted to the typing of short, easy sentences. The word type was eliminated following the first 20 minutes of instruction in Lesson 8. The student hereafter stroked each letter as it was called. Remember that the teacher read the sentences, words, and drills as the student listened and then paced the dictation metronomically as the student typed. Near the end of Lesson 8, the dictation was paced at varying speeds. For example, an easy sentence that was used for practice in previous modules was paced at 8 wam, a rate that the students can type with control, then at 10 wam to force the student to reach out slightly faster, then up to 12 wam, and back to 10 wam for control. The next sentence might begin at 10 wam, go to 12 wam, then 14 wam, and back to 12 wam for control. The student was instructed in how to type the sentences. Attempting to type the sentence accurately at its highest speed enabled the student to type the same sentence with control when it was dictated at a slightly slower speed. Students typed at a range from 8 to 16 wam during Lesson 8. During the first ten lessons, while learning the keyboard, a student who needed a review lesson or who was absent for one day from the class was scheduled for the needed lesson at a free period, after school, or before the beginning of school the following day.

During the first ten modules, while mastering the keyboard, the student was instructed not to practice outside the classroom. This breaks the cadence introduced by the electronically paced instruction. Besides, with the student typing virtually the entire class session, additional practice was not warranted.

PHASE 2. Eleven blind students were provided by the Texas School for the Blind for the purpose of assessment and evaluation of the instructional materials written and electronically paced for the keyboard mastery modules in Phase 1. Since the Texas School for the Blind was able to supply only eleven blind students for the experimental typing class, it was necessary for the materials in Phase 1 to be evaluated by using sighted students. However, the eleven blind students participated in the experimental class as will be explained in Phase 7.

Ten twelve-year-old, seventh-grade, sighted students were selected for a typewriting class for the purpose of evaluating the materials in Phase 1 to make sure that the instructions were clear and at a satisfactory rate for beginning typists. The ten students were blindfolded as soon as they were seated in the classroom each day before the instruction began. The sighted students had no difficulty in following the instructions; however, they did become extremely tired the first two or three days in becoming adjusted to the blinders. The Project Director determined that, if the sighted students were able to follow the instructions, blind students would have no difficulty in typing the material.

PHASE 3. Instructional material of syllabic intensity suited to the blind student was written, and electronically paced audio tapes for sixteen 45-minute modules were prepared. One of the major principles in teaching the typewriting keyboard and in developing a typewriting speed is selecting the correct degree of difficulty of copy and knowing when to use easy versus difficult practice material.

After the first ten 45-minute class sessions, the student has (perhaps without realizing it) a knowledge of the keyboard. Since typewriting is an individual matter, a student progresses at his own speed. Beginning on the eleventh day, each student received his instruction from a different console. Each lesson from here on was referred to as Channel 1, 2, 3, etc. The console has three tape decks with four-track tapes enabling twelve levels of instruction to be in progress at the same time. This, of course, permits each student to advance at his own rate of speed following the first ten lessons.

Each student's station was wired to receive twelve levels of electronically paced dictation at any one time as he advanced in the course. On the eleventh day, the student was issued earphones. The teacher explained and assisted the student in how to use the earphones, how to select or turn to the different channels, and how to adjust the volume that was best for him. With the typewriter adjusted, the student first listened to the dictated material through his earphones and then typed the same material as it was again dictated at an electronically paced rate. The material for Channel 1 ranges from 8 words a minute to 12 words a minute. The material was first paced at a speed comfortable for the student to maintain control or achieve accuracy, then slightly faster, then back to control. This process was followed throughout the class period. The teacher evaluated the accuracy of each student's paper at the end of the class period and indicated when the student was to move to the next channel. The instructional material for Channels 1 and 2 has a range of 4 words a minute rate. For the remaining channels, there was a range of 8 words a minute. Each class period consisted of 45 minutes of uninterrupted, purposeful, repetitive drill. On Channel 1, the student must type 10 wam with reasonable accuracy in order to move up to Channel 2 the following day.

Each channel was recorded progressively faster so that the student must listen more and more closely. The speeds of the channels are as follows:

Channel 1	8 - 12 wam	Channel 9	36 - 44 wam
2	10 - 14 wam	10	40 - 48 wam
3	12 - 20 wam	11	44 - 52 wam
4	16 - 24 wam	12	48 - 56 wam
5	20 - 28 wam	13	52 - 60 wam
6	24 - 32 wam	14	56 - 64 wam
7	28 - 36 wam	15	60 - 68 wam
8	32 - 40 wam	16	64 - 72 wam

Each 50-minute class period consisted of 45 minutes of uninterrupted, purposeful, repetitive drill. Upon entering the classroom, the student

was given paper and told the channel he would be typing that day. The student then typed his name and the channel he would be typing at the top of the page. An evaluation of yesterday's paper was given to the student before he began his work for the day.

After the teacher had turned on the console to begin the lesson, he proceeded to check each student to see if he had dialed the correct channel. Through his headset the teacher listened to the lesson while watching the student's finger movement. At this point the teacher gave the student individual help to correct bad technique, bad habits, and errors. The teacher continually moved among the students, observing their techniques and giving help when necessary. In this way, it was not necessary to stop the entire class while helping an individual student--no time was lost!

At the end of each lesson, the student gave his paper to the instructor for evaluation before the next class day. The teacher was free to comment daily on any observation of the student's performance.

A student was expected to type with reasonable accuracy, demonstrating good technique, at the beginning speed of the next channel before he was permitted to move on. (Reasonable accuracy is determined by the number of days of instruction. A student was permitted no more than two errors per minute during the eight-week experimental class. Only one error per minute should be permitted at the end of a semester course in determining a student's rate of speed.)

PHASE 4. The sixteen modules of electronically paced typewriting instruction prepared in Phase 3 for skill development were assessed and evaluated. The assessment and evaluation of Phase 4 had to be delayed until the experimental class was conducted as a part of Phase 7. However, the sixteen modules were used in a typewriting class of sighted students with average typing skills to discover any clumsy fingering patterns in the copy that needed to be eliminated.

PHASE 5. Instructional materials were written, and one electronically paced audio tape for teaching the numbers, or top row of keys, was prepared. In addition to the ten modules for keyboard mastery and sixteen modules for skill development, one module for developing top-row proficiency was written and recorded on tape. This instruction was delayed until the students had developed a confident attitude toward the alphabetic keyboard.

One key at a time was presented in the same manner as each new alphabetic key was presented in the first few modules for keyboard mastery. For example, after the teacher explained the reach from f to the number 4 key and back to f and the student made the reach two or three times, the student was led in practice by typing a short, easy sentence four or five times containing the number 4. Sentences and paragraphs in the module were recorded at 20 wpm. This practice was followed until all numbers were presented and drilled on. The following drills were used at intervals following the typing of sentences containing the numbers:

1 and 2 and 3 and 4 and 5 and 6 and 7 and 8 and 9 and 10

1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10

1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Practice on numbers for approximately 5 minutes became a part of the daily warm-up when students were able to type approximately 30 to 40 words per minute. The module for teaching the numbers included a short paragraph containing all of the numbers. Typing this paragraph for 5 minutes each day as a part of the daily warm-up provided the necessary training for developing top-row proficiency.

PHASE 6. The number module was assessed and evaluated. Since it is recommended that students be able to type the alphabetic keyboard at least 30 wpm before teaching them the number keys, only one student in the experimental class was permitted to type the module containing the numbers. However, that student had no difficulty. The number module was evaluated in a class of sighted students who typed between 30 and 40 wpm with no difficulty. It is believed that from this assessment, blind students will be able to learn the number keys with ease.

PHASE 7. The effectiveness of electronically paced typewriting instruction for blind students was compared with the effectiveness of conventional methods of teaching typewriting to blind students. To accomplish this objective, two groups of blind students were used--one a control group and the other an experimental group. Each class met for 50 minutes each day, five days each week, for a period of eight weeks.

Texas School for the Blind supplied twenty-two blind students for this research project--eleven for the control group and eleven for the experimental group--for use in evaluating the effectiveness of electronically paced instructional materials for teaching blind students to typewrite as compared to the effectiveness of teaching typewriting to blind students by use of conventional methods.

#### Design of the Research

Students in the experimental and control groups were blind, ranging in age from eleven to fifteen years; and, even though there is very little correlation between the ability level of a student and his being able to learn to typewrite at a rapid and accurate rate, the ability level of each student was taken into consideration when grouping the two classes of students for this research study.

Tables I and II show the age, sex, and ability level of each student in the experimental and control classes.

TABLE I  
AGE, SEX, AND ABILITY LEVEL OF EACH STUDENT  
IN THE EXPERIMENTAL CLASS

STUDENT	AGE	SEX	ABILITY LEVEL*
1	11	M	VS
2	12	M	A
3	15	M	A
4	13	M	B
5	14	M	HN+
6	13	F	A
7	13	M	A
8	15	M	DN
9	15	M	B
10	13	M	A
11	15	M	DN

\*VS, Very Superior; A, Average; B, Border Line; HN+, High Normal Plus; DN, Dull Normal; S, Superior; HA, High Average; DN+, Dull Normal Plus; and DN-B, Dull Normal Minus Border Line (From David Wechsler, Measurement and Appraisal of Adult Intelligence).

### Control Class

The control class of eleven blind students--nine boys and two girls--using the conventional approach to teaching typewriting began January 24, 1972.

The first class period was devoted to assisting each student to his typewriting station and introducing him to the following parts of the typewriter:

Carriage	Line space release
Carriage return lever	Paper bail
Carriage release levers	Paper guide
Cylinder	Paper rest
Cylinder knobs	Printing point
Line space regulator	Paper release
Space bar	

On the second day, the teacher reviewed the parts of the typewriter taught the first day and taught margin setting for the Underwood and Olivetti manual typewriters used in the course.

The beginning of the third day was spent reviewing the machine parts taught the first day and of margin setting, followed by introducing the a, s, d, and f keys. The teacher called the individual letters, and the students stroked the keys.

The j, k, l, and ;, were introduced on Thursday. The teacher called the new keys as the students stroked them. A thorough review of the four keys taught on Wednesday was given.

On Friday, the end of the first week, a test was given over the parts of the typewriter introduced, the keys introduced, and margin setting.

The second and third weeks were quite similar as the first week in introducing the remainder of the twenty-six alphabetic letters on the keyboard, shift keys, period, colon, semicolon, and comma. Short sentences were used on Thursday and Friday of the second week. The third week ended with a test over margin setting, machine parts, and keys learned.

TABLE II  
AGE, SEX, AND ABILITY LEVEL OF EACH STUDENT  
IN THE CONTROL CLASS

STUDENT	AGE	SEX	ABILITY LEVEL*
1	11	F	S
2	12	M	S
3	12	M	A
4	13	M	HA
5	13	M	A
6	14	M	DN
7	14	M	A
8	14	M	DN
9	14	M	DN+
10	15	M	A-
11	15	F	DN-B

\*VS, Very Superior; A, Average; B, Border Line; HN+, High Normal Plus; DN, Dull Normal; S, Superior; HA, High Average; DN+, Dull Normal Plus; and DN-B, Dull Normal Minus Border Line (From David Wechsler, Measurement and Appraisal of Adult Intelligence).

Following the three weeks in covering the alphabetic keyboard, the students were issued a typewriting textbook in braille for the next five weeks. Each student was permitted to advance through the book from lesson to lesson beginning at lesson six at his own rate of speed. The students would read a word or phrase in braille and return their fingers to the typewriter keys and type the word or phrase and then read another word or phrase and then again return to the typewriter keyboard.

At the end of the eight weeks of instruction, five of the eleven students could finger the keyboard accurately; however, they typed at a very low rate of speed. The teacher gave one-minute timed writings on simple four-letter words for use in measuring the typing speed of each student.

Table III shows the speed achieved by each of the eleven students at the end of the eight-week control class. As the students were timed, each student would read words from his braille textbook and then move his hands to the typewriter keyboard to type the words. He would then return his hand (some used both hands) to the braille textbook to read another word or two and then return his hands to the typewriter and type the word or words. Five of the eleven students typed with 100 percent accuracy.

TABLE III  
AGE, SEX, AND ABILITY LEVEL OF EACH STUDENT  
IN THE CONTROL CLASS

STUDENT	AGE	SEX	ABILITY LEVEL*	WORDS PER MINUTE
1	11	F	S	6
2	12	M	S	5
3	12	M	A	5
4	13	M	HA	5
5	13	M	A	6
6	14	M	DN	6
7	14	M	A	10
8	14	M	DN	5
9	14	M	DN+	6
10	15	M	A-	8
11	15	F	DN-B	10

\*VS, Very Superior; A, Average; B, Border Line; HN+, High Normal Plus; DN, Dull Normal; S, Superior; HA, High Average; DN+, Dull Normal Plus; and DN-B, Dull Normal Minus Border Line (From David Wechsler, Measurement and Appraisal of Adult Intelligence).

Conclusions drawn from the control class using the conventional methods of teaching typewriting are as follows:

1. By use of intensive drill on the part of the teacher calling letters and typing drills, students are able to learn the typewriting keyboard by touch.
2. Students are extremely slow to develop a typing speed when they move their hands from the typing keyboard to a braille textbook and then return to the typewriting keyboard.

#### Experimental Class

For the experimental class, the typewriting desks were placed back to back with students facing each other. This enabled the instructor to

watch the fingering of the keyboard of the students as new keys were introduced and drilled on.

The class met from 2:00 to 3:00 p.m., Monday through Friday, September 18 through November 10, 1972, in a small, unairconditioned classroom with only two small windows. Ten-year-old Underwood and Olivetti typewriters were used in teaching the course. Sometimes it was necessary to exchange a student's typewriter one or more times a day. All of the machines were badly in need of repair.

Before the first class began, the instructor had preset the margins of all typewriters and had paper inserted into each machine with the paper rolled around the cylinder. When the students entered the classroom, the instructor welcomed the class and asked that they return to the same machine each day.

The students were asked to "feel" the typewriter by placing their hands only on the parts to be used the first day such as the cylinder, cylinder knobs, and carriage return lever; this was accompanied by a demonstration of how to return the carriage.

The students were asked to place their hands on the four rows of keys and were told that for a few days they would be using only the lower three rows of keys. How to locate the "home position" keys was explained to the students with each student placing and removing his fingers on the "home position" keys three or four times.

Since the instructions would be referring to the first finger left hand, first finger right hand, left little finger, or the little finger right hand, a few minutes were devoted to a review of the students' right and left hands and the first, second, and third fingers of the right and left hands before the programmed instruction would begin. The use of the space bar was explained, and each student had an opportunity to strike the space bar a few times before the programmed instruction began.

The instructor orally asked each student to place his fingers on the home position keys with the instructor calling the f, d, s, a, and then the j, k, l, ; keys while the students would strike them as a short drill before starting Lesson 1. With the instructor directing the above instructions and praising their success, he was able to establish the proper rapport with the class, which is extremely important for a successful class period.

The above instructions took 20 minutes, leaving 25 minutes for the students to actually type using programmed instruction. The balance of Lesson 1 follows showing how the eight keys learned the first day were presented and drilled on.

"Now that we have reviewed the different parts of the typewriter, let's again place our fingers on the home position keys. Remember that your left little finger is on the first outside key, second row from the bottom--that is the a key. Now let your first, second, and third fingers of your left

hand fall naturally on the next three keys. Your first finger is on the f key, your second finger is on d, your third finger is on s, and your little finger is on a. This is 'home position' for your left hand. We always begin typing from home position.

"Now let's review the left-hand home keys. As I call each key, just feel the key without striking it. Your first finger left hand, is on f, your second finger is on d, your third finger is on s, and your little finger is on a.

"Now keep your left hand in home position as you place the fingers of your right hand on the home position keys. Put your first finger right hand, next to your first finger left hand--now skip two keys to the right and put your first finger on the third key. Your first finger right hand is now on the j key. Let your next three fingers fall naturally on the next three keys. Good! Your second finger right hand is on k, your third finger is on the l key, and your little finger is on the semicolon.

"Now let's review the right-hand home position keys without striking them--just as you did with your left hand. With your first finger right hand, just feel the j key, your second finger right hand is on k, your third finger is on l, and your right little finger is on the semicolon or semi key. Let's go through that again. Your first finger right hand is on j, your second finger is on k, your third finger is on l, and your little finger is on semi-colon.

"Remember that your thumb is above the space bar. When I say space, you will strike the space bar with your thumb to separate letters and words. Use the thumb that is most comfortable for you. Most right-handed people use their right thumb for spacing between words. Always, however, use the same thumb for spacing. The thumb not used for spacing should be curved under the fingers toward the palm of the hand.

"Before we begin, I want to explain the procedure that we will follow. First, I will call the letter for you, and second, I will say 'type' and that is when I want you to strike the key. Now listen to the procedure we will follow. You feel the keys as I call them but do not strike them. I will begin with the left hand first finger. Ready, begin--f type; now your second finger left hand, d type; now your third finger left hand, s type; your left little finger, a type. Again, ready--f type, d type, s type, a type. Now this time you strike the key when I say 'type'--not when I call the letter but on the word type.

"We will begin with the first finger left hand. Ready, begin--f type, d type, s type, a type. Good! Again, ready, begin--f type, d type, s type, a type. Again--f type, d type, s type, a type. Again--f type, d type, s type, a type. Very good!

"Please listen carefully and just feel each key as I demonstrate the home position keys to be struck with the right hand. Beginning with the first

finger right hand--j type; the second finger right hand, k type; third finger right hand, l type; little finger right hand, semicolon type. Listen to the procedure one more time and then we will all do it together. Beginning with the right hand first finger--j type, k type, l type, ; type.

"Now let's all strike the keys together. Remember to wait for the word 'type' before you strike the keys. This is very important. We will begin with the first finger right hand. Ready, begin--

j type, k type, l type, ; type. Again--  
j type, k type, l type, ; type. Again--  
j type, k type, l type, ; type. Again--  
j type, k type, l type, ; type. Very good!

"Now your left hand first finger. Ready, begin--

f type, d type, s type, a type. Right hand first finger, ready, begin--  
j type, k type, l type, ; type. Your left hand first finger, ready, begin--  
f type, d type, s type, a type. Right hand first finger, ready--  
j type, k type, l type, ; type. Left hand first finger, ready--  
f type, d type, s type, a type.

"I will now explain how to return the carriage. When I give the command 'Carriage return,' you will extend your left hand to the left and upward to the carriage return lever and push the carriage all the way to the right.

"Let's all do it together. Ready--'Carriage return.' Very good!

"Now sit tall with your feet flat on the floor, your wrists up, and we will again review the home position keys. This time we will space between the striking of the keys with the left hand and the right hand. We will begin with the left hand, f d s a keys. Remember to wait for the word type before you strike the keys. Ready, begin--

f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type  
Now extend your left hand up and to the left to the carriage return lever.  
"Carriage return.' Good!

"Again, ready, begin--

f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type  
Now extend your left hand to the left and up to the carriage return lever.  
"Carriage return.'

"We will now type one line of the word fall--f-a-l-l. Remember that the f is under the first finger left hand, the a is under the little finger left hand, and the l is under the third finger right hand. I will call each letter followed by the word type, and that is when you are to strike the letter.

"Ready, begin--

f type a type l type l type space type f type a type l type l type space type  
f type a type l type l type space type f type a type l type l type space type  
f type a type l type l type space type f type a type l type l type space type  
f type a type l type l type space type f type a type l type l type space type  
f type a type l type l type space type f type a type l type l type

Now extend your left hand up and to the left to the carriage return lever.

'Carriage return.'

"We will type one line of ask--a-s-k. Remember that a is under the little finger left hand, the s is under the third finger left hand, and k is under the second finger right hand. Remember to 'think' each letter as you strike it.

"Ready, begin--

a type s type k type space type a type s type k type space type  
a type s type k type space type a type s type k type space type  
a type s type k type space type a type s type k type space type  
a type s type k type space type a type s type k type space type  
a type s type k type space type a type s type k type space type  
a type s type k type space type a type s type k type

Now extend your left hand up and to the left to the carriage return lever.

'Carriage return.'

"We will now type one line of lad--l-a-d. Remember that the l is under the third finger right hand, the a is under the little finger left hand, and d is under the second finger left hand.

"Ready, begin--

l type a type d type space type l type a type d type space type  
l type a type d type space type l type a type d type space type  
l type a type d type space type l type a type d type space type  
l type a type d type space type l type a type d type space type  
l type a type d type space type l type a type d type

Now extend your left hand up and to the left to the carriage return lever.

'Carriage return.'

"This is the end of today's lesson."

Following an intensive review drill at the beginning of the second class period on the keys taught the first day, the g and h keys were presented and drilled on. Students typed 45 minutes of the 50 minutes they were in class. By the end of the second day of instruction, the students had a good command of the home row keys and carriage return lever.

Paper insertion was taught at the beginning of the third class period. Preceding the instruction of paper insertion, the purpose of the paper edge guide and paper bail were explained. From the third day on, students entered the room, inserted paper into the typewriter, and were ready for instruction as soon as it was time for the class to begin.

All alphabetic keys, comma, semicolon, period, margin setting, and shift keys were taught the next five days, making the total time to master the keyboard seven days as compared to fifteen days in the control group. By using the electronically paced practice material, students can type steadily for the entire period as the instructor moves around the room to provide assistance to students if and when needed.

At approximately the middle of Lesson 8, the word type is eliminated in the instructions, and students from then on strike each letter as it is dictated. Lessons 9 and 10 consist of a review of the entire alphabetic keyboard containing locational security drills, adjacent letter drills, alphabetic sentences, balanced-hand sentences, and words and phrases at a rapid tempo. Lesson 10 is dictated slightly faster than Lesson 9, but Lesson 9 is still faster than Channel 1 that the student will type from the following day, when they first use earphones.

Ten lessons were used for keyboard mastery with students then being issued earphones for use on multiple-channel dictation as was explained in Phase 3.

On the eleventh day, nine of the students had learned the keyboard and moved on to Channel 1 at a typing speed of between 8 and 12 words per minute. Two of the students were given a review over Lesson 9 and then on Lesson 10 the following day before they were permitted to begin on Channel 1.

Students enjoyed returning to class each day to see if they had typed the previous day's lesson with sufficient accuracy to be permitted to advance to the next channel, which is at a higher rate of speed.

Table IV shows the speed achieved by each student in the eight-week experimental class of blind students. Class average was 29.63 words per minute for the eight-week class.

Each of the channels of electronically paced dictation for skill development beyond Channel 2 has a word range of eight words. For example, Channel 8 has a speed range of 32 to 40 words per minute. To type Channel 8 successfully and to be able to move up to Channel 9 the following day, the student must type accurately (two or less errors per minute during the first eight weeks) 36 words per minute. Within Channel 8, there are four paragraphs 2 and 3 minutes in length electronically paced at 36 words per minute near the end of the program.

The instructor evaluates these paragraphs, and if correctly typed, the student is permitted to move up to Channel 9 the following day.

Students typed sixty to seventy-five lines across a page when typing electronically paced dictation as compared to from four to ten lines across a page typed by the control group within a class period at the end of the eight-week class.

TABLE IV  
AGE, SEX, ABILITY LEVEL, AND TYPING SPEED OF EACH STUDENT  
IN THE EXPERIMENTAL CLASS

STUDENT	AGE	SEX	ABILITY LEVEL	WORDS PER MINUTE
1	11	M	VS	32
2	12	M	A	32
3	15	M	A	24
4	13	M	B	32
5	14	M	HN+	32
6	13	F	A	44
7	13	M	A	28
8	15	M	DN	24
9	15	M	B	14
10	13	M	A	32
11	15	M	DN	32

\*VS, Very Superior; A, Average; B, Border Line; HN+, High Normal Plus; DN, Dull Normal; S, Superior; HA, High Average; DN+, Dull Normal Plus, and DN-B, Dull Normal Minus Border Line (From David Wechsler, Measurement and Appraisal of Adult Intelligence).

## Conclusions

Evaluation of the effectiveness of electronically paced instructional materials reveals that the program is a worthwhile contribution to the education of the blind student. Educational outcomes resulting from the study are as follows:

1. The blind student can learn a good typing skill with accuracy in a shorter period of time.
2. Having a typewriting skill with accuracy enhances the blind worker's employment opportunities.
3. The instructor is provided training to teach typewriting to blind students.
4. The program provides individualized instruction, enabling the student to advance at his own rate of speed.
5. The blind student is equipped with a communicative skill for furthering his academic education beyond high school.
6. The blind student develops a skill that enables him to communicate by the written word with the sighted world.
7. The blind student can develop increased typewriting proficiency, speed, and control through continued use of drill material devised to fit individual needs.
8. The blind student can develop the ability to compose at the typewriter.
9. The blind student gains knowledge and understanding of the typewriter and its uses.
10. The blind student learns to manipulate the mechanism of the typewriter properly.
11. The blind student masters the key locations and correct typewriting techniques in posture and stroking.

## Recommendations

Because of the typewriting skill developed with accuracy within such a short period of time by use of electronically paced instructional materials, it is recommended that all schools be informed of the availability of the newly developed materials. The instructional materials include ten programs for keyboard mastery; sixteen programs for skill development; one program for teaching the top row or number keys; and an instructor's manual.

It is recommended also that (1) additional programs be developed for training the students to apply the skill in personal and business situations, such as vertical and horizontal centering, simple tabulations, letter formats and the typing of letters, and manuscript typing; (2) electric typewriters be used when typewriting is offered below the tenth-grade level (as a general rule, the cartilage in the hands is not developed sufficiently for correct, sustained stroking required for skill development under sixteen years of age); (3) counselors of blind students be informed of employment opportunities available for blind transcription typists; and (4) class periods shorter than 50 minutes be used when teaching typewriting below the junior high school level. If periods must be the same length as other classes, it is suggested that a 5- to 10-minute rest period be given midpoint of the class period.

When typewriting by electronically paced dictation is provided blind students, it is believed by the Project Director that the training period for developing a personal typewriting skill as well as an employable typewriting skill will be cut in half.

## Notes

1. Elizabeth T. Lovitt, "Typewriting Training for the Disadvantaged, Physically Handicapped, Visually Handicapped, and Slow Learners," Balance Sheet, November, 1968, pp. 112-116.
2. Nina K. Richardson, "Teaching the Blind to Type," Balance Sheet, February, 1961, pp. 257-259.
3. Edward J. Reis, "Taped Drills to Develop Speed and Accuracy," Balance Sheet, November, 1967, pp. 100-102.
4. N. B. Schmidt, "I Taught Typing to Blind Students," Business Education World, September, 1964, pp. 24-25.
5. Beverly Berry, "Individualizing Typewriting Instruction for Blind Students," The Balance Sheet, May, 1954, pp. 397-398.
6. Marrienne Lamb, "Teaching Typing to the Visually Handicapped," Business Education World, April, 1966, pp. 23-24.
7. A. Faborn Etier, "Typewriting by Electronics," Business Education Forum, November, 1971, pp. 20-24.
8. Margaret Ann Morton, "Vocational Education Needs of Blind Machine Transcribers," Unpublished Ph.D dissertation, University of North Dakota, 1972.

APPENDIX I

INSTRUCTOR'S MANUAL

## PREFACE

Individualized instruction has become an increasingly integral part of many education programs and is particularly effective for teaching typewriting to blind students. This program, which teaches typewriting by electronically paced dictation, permits each student to progress at his own rate of speed and allows the instructor more time for each student.

The student feels more comfortable not having to compete with the progress rate of his classmates. Since the teacher is not totally occupied with class presentation, he can offer assistance immediately; he can spot possible difficulties as they develop--and often before they develop. A student welcomes the opportunity to receive individual help from his teacher. Furthermore, assistance is provided exactly when it is needed--not later when the problem has passed.

As the concept of individual-progress education develops, the teacher becomes more important, especially to the blind student. His first role is to provide motivation, which he can do because he is now able to spend more time with each student. Words of approval, a pat on the back, a gentle pointer about an incorrect technique--all become easier for the teacher to accomplish. Individual-progress work is a challenge to both student and teacher.

Faborn Etier

## INTRODUCTION

### The Program

Typewriting by electronically paced dictation has proved to be an effective method of teaching blind students to typewrite. The program consists of ten audio-taped programs for keyboard mastery; sixteen programs for skill development to between 60 and 70 words per minute; and one program for teaching the top row or number keys.

The first ten 45-minute modules of prerecorded programmed instruction incorporates the latest advances in learning technology and tutorial devices. Through the kinesthetic approach to learning, the student feels the letter to be learned or typed, hears the letter called, and strikes the letter or key upon the command "type."

At the end of Lesson 7, all twenty-six alphabetic keys, word capitalization, the period, margin setting, and the comma are learned through the typing of words, phrases, locational and adjacent-letter drills, and sentences.

Following the fingering of several warm-up exercises learned on previous days at varying speeds (8 to 16 words per minute), the major portion of Lesson 8 is devoted to the typing of short, easy sentences. The word type is eliminated following the first 20 minutes of instruction in Lesson 8. The student thereafter strokes each letter as it is called. The teacher reads the sentences, words, and drills as the student listens and then paces the dictation metronomically as the student types. Near the end of Lesson 8, the dictation is paced at varying speeds. For example, an easy sentence that was used for practice in previous modules is paced at eight words a minute (wam), a rate that the student can type with control, then at 10 wam to force the student to reach out slightly faster, then up to 12 wam, and back to 10 wam for control. The student is instructed in how to type the sentences. Attempting to type the sentences accurately at their highest speed with errors will enable the student to type the same sentences with control when they are dictated at a slightly lower speed. Students type at a range from 8 to 16 wam during Lesson 8. During the first ten modules, while learning the keyboard, a student who needs a review lesson or who is absent for one day from the class is scheduled for the needed lesson at a free period, after school, or before the beginning of school the following day.

During the first ten lessons, while mastering the keyboard, the students are instructed not to practice outside the classroom. This breaks the cadence introduced by the electronically paced instruction. Besides, with the student typing virtually the entire class session, additional practice is not warranted.

After the first ten 45-minute class sessions, the student has (perhaps without realizing it) a knowledge of the keyboard. Since typewriting is an individual matter, a student progresses at his own speed. Beginning on the eleventh day, each student receives his instruction from a different console. Each lesson from here on is referred to as Channel 1, 2, 3, etc. The console enables several levels (six to twelve) of instruction to be in progress at the same time. This, of course, permits each student to advance at his own rate of speed following the first ten lessons.

### The Student

The blindness of a student should not be minimized or emphasized; it is a fact about the student that must be accepted just as individual characteristics of other students are accepted.

An awareness of when the student can and should be independent is essential. Blind students must be encouraged to think and act independently insofar as possible. However, the student cannot ignore his need for help in instruction or in the accomplishment of some tasks. Therefore, part of the training--from beginning to end--must be building the realization that there is a proper time, person, and place for seeking help.

Directions to the blind student must be more explicit and descriptive than those ordinarily given.

## LESSON 1

Always PLAN your first day of typewriting instruction as though it were the first class you ever taught. Being adequately prepared for your first lesson is extremely important!

Instruction for the first half of the beginning typewriting class period is given orally by the typewriting teacher. Students need to become familiar with the teacher's voice and his manner of speaking. The rapport established by the teacher the first day is extremely important for the success of the first and succeeding lessons.

A 50- to 55-minute period is long enough for giving the oral instructions the first half of the period and the twenty-three minute programmed typewriting lesson, provided you have carefully planned your instructions step-by-step. However, you may have administrative duties to perform the first day before your class can begin. If this happens, do not rush your instruction, cover as much as you can the first day and devote two days to Lesson 2 if you feel it necessary.

Teach the parts of the typewriter that will be used the first day. Have students feel the parts as you slowly explain their location and use.

### Preparation

1. Have margins preset on all typewriters before the class assembles--single spacing (left margin at 6 and the right margin to the extreme right.)
2. Have paper inserted in the typewriter--rolled around the cylinder out of the way of the student when he is feeling of the different parts of the typewriter.
3. Have all covers, if used, off the machines and out of the way of the students. If covers are kept over the typewriters, the student can be taught to remove and cover the machines the second or third day of class. It is extremely important that the students type something the first day of class.
4. Have chairs and desks adjusted to the students as much as possible before they arrive.

## Procedure

1. Greet each student as he enters your classroom, make him feel that you are glad to have him in your typing class, and assist him to his type-writing station.
2. Tell the students they are going to find learning to typewrite interesting and easy.
3. Have students feel the entire machine, explaining that they will be learning the various parts of the typewriter as they progress.
4. Help students locate cylinder or platen. Ask each student to place both hands on the rubber roll (the cylinder) on top of the machine and move his left hand to the left and his right hand to the right until he finds two knobs--one on the left and one on the right.  
Explain:

---

*These are called cylinder knobs. We use the cylinder knobs when inserting paper into the machine. You will notice from feeling of the cylinder that the paper has already been inserted into your machine, and it will roll around the cylinder as you type to avoid being in the way as you place your hands on the different parts of the typewriter. We will learn how to put paper into the machine in Lesson 2.*

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5. Explain that there are four rows of keys on the typewriter, allowing time for the students to discover the four rows of keys as you explain their location:

---

*The lower three rows are the alphabetic keys. The top row of keys contains the numbers. For the first few days we will be using only the lower three rows of keys.*

---

6. Be certain that the students know their right hand from their left hand as the instructions will refer to the first finger left hand, etc. Review the right and left hands of the students--first finger left hand, first finger right hand, second and third finger left hand, etc.
7. Explain that we have a home row of keys, and that we always begin typing from home position.
8. Explain that the second row of keys from the bottom is called the home position keys.
9. Help students locate the left-hand home position keys:

---

To locate the home position keys, we first place our left little finger on the first outside key on the left side of the typewriter, second row from the bottom, which is the a key. Explain slowly how to locate the key and check to see that each student has located the a key. When each student has his little finger on the a key, you then say, "Let your first, second, and third fingers of your left hand fall naturally on the next three keys. Your left little finger is on a, your third finger is on the s key, your second finger is on the d, and your first finger left hand is on f. This is home position for your left hand. We always begin typing from home position."

---

10. Review the left-hand home position keys:

---

Now let's review the left-hand home keys. As I call each key, just feel the key without striking it. Your first finger left hand, is on f, your second finger is on d, your third finger is on s, and your little finger is on a. Again--your first finger is on f, your second finger is on d, your third finger is on s, and your little finger is on a. That's very good!

---

11. Help students locate the right-hand home position keys:

---

Now keep your left hand in home position as we place the fingers of our right hand on the home position keys. Put your first finger right hand next to your first finger left hand; skip two keys, and put your first finger on the third key to the right of your first finger left hand. Your first finger right hand is now on the j key. Let your next three fingers fall naturally on the next three keys. Good! Your second finger right hand is on k, your third finger is on the l key, and your left little finger is on the i.

---

Check to see that everyone is on home position.

12. Review the right-hand home position keys:

---

Now let's review the right-hand home position keys without striking them--just as we did with our left hand. With your first finger right hand, just feel the j key; your second finger right hand is on k, your third finger is on l, and your right little finger is on the semicolon or semi key. Let's go through that again. Your first finger is on j, your second finger is on k, your third finger is on l, and your little finger is on i.

---

13. Explain the location of the space bar and tell when it is used. Have each student strike the space bar with his thumb--left or right--whichever is most natural for him to use, but to use only one thumb.
14. Explain the location and use of the carriage return lever and have each student extend his left hand slightly to the left and upward to the carriage return lever and push it to the right. If electric machines are being used, explain how to extend the right little finger and tap the return key.
15. At this point in the instruction, the teacher should place his hands on the home position keys of a typewriter (from a demonstration stand if one is available) and let the students "hear" the sound of the keys as he slowly calls and strikes sharply f, d, s, a with the left hand, and the j, k, l, ; with right hand while the students listen.
16. Explain the procedure that will be followed in striking the keys. Ask each student to place his hands in his lap and to pay close attention as you explain the procedure to be followed in striking the keys.

---

*First, I will call the letter for you, and second, I will say "type" and that is when I want you to strike the key. I will begin with the left hand first finger. Ready, begin . . . f type; now your second finger left hand, d type; now your third finger left hand; s type; your left little finger, a type. Now you place your fingers on the home keys and just feel the keys as I call them but do not strike them.*

---

Pause to allow time.

---

*Ready . . . f type, d type, s type, a type. Now this time you strike the key when I say "type"; not when I call the letter, but on the word type.*

*We will begin with the first finger left hand. Ready, begin . . . f type, d type, s type, a type. Good! Again, in the same way: ready begin . . . f type, d type, s type, a type. Again . . . f type, d type, s type, a type. Again . . . f type, d type, s type, a type. Very good!*

---

As you call the letters, watch to see if anyone is having difficulty; if so, provide assistance.

---

*Now please listen carefully and just feel each key as I demonstrate the home position keys to be struck with the right hand. Beginning with the first finger right hand, j type; the second finger right hand, k type; third finger right hand, l type; little finger right hand, ; type. Listen to the procedure one*

more time, and then we will all do it together. Beginning with the right hand first finger . . . j type, k type, l type, ; type.

Now let's all strike the keys together. Remember to wait for the word type before you strike the keys. This is very important. We will begin with the first finger right hand. Ready, begin . . .  
j type, k type, l type, ; type. Again . . .  
j type, k type, l type, ; type. Again . . .  
j type, k type, l type, ; type.

Now your left hand first finger. Ready, begin . . .  
f type, d type, s type, a type. Right hand, ready, begin . . .  
j type, k type, l type, ; type. Your left hand, ready, begin . . .  
f type, d type, s type, a type. Right hand, ready . . .  
j type, k type, l type, ; type. Left hand, ready . . .  
f type, d type, s type, a type.

---

17. Explain how to return the carriage:

---

I will explain how to return the carriage. When I give the command, "Carriage return", you will extend your left hand upward and to the left to the carriage return lever and push the carriage all the way to the right. (If you are using electric machines, have them to extend their right little finger to the return key and tap it on the command "Carriage return.")

Let's all do it together. Ready . . . "Carriage return." Very good!

---

18. Review the home position keys by using adjacent letter drills:

---

Now sit tall with your feet flat on the floor, your wrists up, and we will again review the home position keys. This time we will space between the striking of the keys with the left hand and the right hand. We will begin with the f d s a keys. Remember to wait for the word type before you strike the keys. Ready, begin . . .

f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type space type  
f type d type s type a type space type j type k type l type ; type

Now extend your left hand up and to the left to the carriage return lever. "Carriage return." Good.

19. Review, using console:

---

*I will now turn on the console for a review of the things we have learned. Listen carefully to the instructions as they are given. If you make an error, do not let it bother you; just stop and listen, and you will be able to pick up the rhythm with the other members of the class. Errors are unimportant at this point. Just remember that I am here to assist you.*

---

Turn on the console and stand in various side and back-of-class positions to check the students' progress. Assist students only when necessary. (Overchecking or fussing with students at this stage can be very detrimental.)

20. At the end of the lesson, stop the console and give words of praise and encouragement to each student.
21. Ask the students to return to the same machine tomorrow. Remember that the paper is wrapped around the cylinder. The teacher will remove the paper after the students have left the classroom.

## LESSON 2

### Preparation

1. Preset margins on all typewriters before the class assembles--left margin at 6 and the right margin to the extreme right--and set for single spacing.
2. Place paper by the side of each typewriter before students enter the classroom.
3. Have Lesson 2 on the console ready to begin the lesson.

### Procedure

1. After welcoming the students to their second lesson, explain the location of the paper-edge guide, its purpose, and where it should be placed each day. Tell them that they are going to learn two new keys today--the g and h.
2. Teach students how to insert and remove paper from the typewriter:
  - a. The first step to follow in inserting paper into the typewriter is to pull the paper bail forward.
  - b. Hold the paper in the left hand and insert into position against the paper table, adjacent to the paper guide.
  - c. If using an electric machine, the carriage return key should be depressed with the little finger of the right hand until the top and bottom edge of the paper are approximately together. If using a manual typewriter, turn the left cylinder knob forward until the top and bottom edge of the paper are approximately together.
  - d. The paper release should be disengaged.
  - e. The corners of the paper should be squared.
  - f. The paper release should be returned to locked position.
  - g. The sides of the paper should be felt to verify that the paper is evenly placed.
  - h. The paper should be rolled down with the cylinder knob until the top of the paper is just under the paper bail.
  - i. The paper bail should be placed into position for typewriting.
3. Make the following standard introduction before turning on the console.

---

*Before we begin the lesson, please remember to:*

- a. *Strike the keys sharply. By keeping your wrists up and your fingers curved, you will find it much easier to type.*

- b. *Strike the key ONLY on the word type. Errors are unimportant at this stage, but rhythm is very important.*
  - c. *"Think" the key being struck.*
  - d. *Return ALL fingers to the home keys after every movement.  
This is most important.*
- 

4. Switch on the console for the lesson to begin. Move around the room to be sure students are using good technique in striking the keys.
5. Assist students who have incorrect finger movements while class is in progress. Remember that overchecking or "fussing" over students can have a detrimental effect on their general progress and performance. Stay on your feet and observe the techniques being used by the students. The first six weeks of any typewriting class will determine its success!
6. If a student is lacking in finger dexterity and in need of your help move him quickly and quietly to a less distracting location in the room.
7. Have each student remove his paper from the machine at the end of the class period. (Make certain that he uses the paper-release lever.)
8. Give much encouragement and praise to each student.

## LESSON 3

### Preparation

1. Preset margins on all typewriters before the class assembles--left margin at 6 and the right margin to the extreme right--and set for single spacing.
2. Place paper by the side of each typewriter before students enter the classroom.
3. Have Lesson 3 on the console ready to begin the lesson.

### Procedure

1. Greet students; make each one feel that you are aware of his presence.
2. Be enthusiastic about today's lesson. Tell the students that they are going to learn three new keys today--t, u, and e.
3. Briefly review paper insertion into the machine.
4. Before switching on the console, make the following standard introduction.

---

*Before we begin the lesson, please remember to:*

- a. *Strike the keys sharply. By keeping your wrists up and your fingers curved, you will find it much easier to type.*
  - b. *Strike the key ONLY on the word type. Errors are unimportant at this stage, but rhythm is very important.*
  - c. *"Think" the key being struck.*
  - d. *Return ALL fingers to the home keys after every movement. This is most important.*
- 

5. Observe each student's stroking when a new key is introduced to make sure he is using the correct finger to make the reach. Each new key is presented in such a way that you can quickly check, at least ten students if properly arranged in the classroom, to make sure that the correct reach is being made before a word using the new letter is typed.
6. Stay on your feet, move around the class, giving encouragement and praise and providing assistance when needed.
7. Remember that the success of your class depends on you!

## LESSON 4

### Preparation

1. Place paper by the side of each typewriter before students enter the classroom.
2. Have Lesson 4 on the console ready to begin the lesson.

### Procedure

1. Greet the students and tell them that they are going to learn three new keys today--the i, r, and n.
2. Teach margin setting. Tell the students that each day hereafter, they will set the left margin at 6 and the right margin to the extreme right.
3. Make the following standard introduction before turning on the console.

---

*Before we begin the lesson, please remember to:*

- a. Strike the keys sharply on the word type.*
  - b. Return fingers to home position after each movement.*
  - c. Keep wrists up, fingers normally curved.*
  - d. "Think" the letter being typed.*
- 

4. Give remedial help during the lesson if possible or immediately after the lesson. If not done at these times, plan to give help before the next lesson.
5. Observe students carefully while they are learning the keyboard to make certain they use the correct fingering for each reach as well as other good techniques--posture, stroking of keys, etc.

## LESSON 5

### Preparation

1. Have paper available for students--either by their machine or at a particular location for them to pick up as they enter the classroom.
2. Have Lesson 5 on the console ready to begin the lesson.

### Procedure

1. Greet the class and tell them that they are learning four new keys today--the v, o, w, and m.
2. Quickly review margin setting; then have the students set the left margin at 6 and the right margin to the extreme right.
3. Review standard introduction of student's performance.

---

*Before we begin the lesson, please remember to:*

- a. *Strike the keys sharply on the word type.*
- b. *Return fingers to the home keys after each movement.*
- c. *Keep wrists up, fingers normally curved.*
- d. *"Think" the letter being typed.*

- 
4. Give remedial help during the lesson if possible or immediately after class.
  5. Observe students carefully while they are typing to make certain they are using the correct stroking of the keys.
  6. Continue your words of praise and encouragement.

## LESSON 6

### Preparation

1. Have paper available for students as they enter the classroom.
2. Have Lesson 6 on the console ready to begin the lesson.

### Procedure

1. Greet the class and tell the students that they are learning four new keys today--the c, y, x, and q.
2. Have each student check to see that the margins are properly set on his machine.
3. Review standard introduction of student's performance.

---

*Before we begin the lesson, remember to:*

- a. Strike the keys sharply on the word type.*
- b. Return fingers to the home position after each movement.*
- c. Keep wrists up, fingers normally curved.*
- d. "Think" the letter being typed.*

- 
4. Switch on console for the lesson to begin. Move around the room to be sure that the students are using good technique in striking the keys.
  5. Assist students who have incorrect finger movements while the class is in progress. Remember that overchecking or "fussing" over students can be detrimental to their general progress and performance. Stay on your feet and observe the techniques being used by the students.
  6. Give much encouragement and praise to each student.

## LESSON 7

### Preparation

1. Have paper available for students as they enter the classroom.
2. Have Lesson 7 on the console ready to begin the lesson.

### Procedure

1. Greet the students and tell them that today they are going to learn the b, p, z, s, and the ..
2. Have each student check to see that the margins are properly set on his machine.
3. Teach students how to capitalize words before turning on the console.

---

*I will now teach you how to capitalize letters. There are two shift keys on your typewriter--one on the lower right end of the bottom row of keys and one on the lower left end of the bottom row of keys. We use these keys to capitalize letters.*

*Let's practice the reach from home position to the left shift key and back to home position. With fingers on the home keys, extend your left little finger down and to the left of z to the shift key and back to a. a-shift-a. Now you practice the reach as I call the drill. Ready . . . extend your left little finger down and to the left of z to shift and back to a. Again . . . extend your left little finger to shift and back to a.*

*We depress the left shift key with our left little finger when we capitalize a letter to be struck with the right hand. To type capital J, you will extend your left little finger down and to the left and depress the shift key. While holding the shift key down, you will strike the J key and immediately return the little finger to home position. You are to strike the J as I say the letter. I will not give the command "type" when we are typing capitals. Now let's try that. We will type the words Jess, Ken, and Mark. We will follow this example in typing Jess.*

*When I say "capital," you extend your left little finger and depress the left shift key. When I say "j," you strike the J, then immediately return your little finger to home position. I will then say "e type, s type, s type." Now, you do it . . .*

Ready, capital Je type, s type, s type, space type. Again, capital Je type, s type, s type, space type. We will type K-e-n the same way. Ready . . . capital Ke type, n type, space type. Again, capital Ke type, n type, space type. Now, let's type M-a-r-k. Ready. capital Ma type, r type, k type, space type. Again, capital Ma type, r type, k type. Carriage return.

---

This small amount of practice will aid the student in following the programmed instruction near the end of the lesson.

4. Review the standard introduction of student's performance.
- 

*Before we begin the lesson, remember to:*

- a. *Strike the keys sharply on the word type.*
  - b. *Return fingers to the home position after each movement.*
  - c. *Keep wrists up, fingers normally curved.*
  - d. *"Think" the letter being typed.*
- 

5. Switch on the console for the lesson to begin.
6. Stay on your feet and assist each student when necessary.
7. Give much encouragement and praise to each student.

## LESSON 8

### Preparation

1. Have paper available for students as they enter the classroom.
2. Have Lesson 8 on the console ready to begin the lesson.

### Procedure

1. Greet the students and tell them that they have learned all of the twenty-six letters of the alphabet plus the period, comma, semi-colon, and how to capitalize words.
2. Briefly review capitalization by having the students type Jess, Ken, and Mark three times each.
3. Have each student check to see that the margins are properly set on his machine.
4. Review the standard introduction of student's performance.

---

*Before we begin our lesson, remember to:*

- a. Strike the keys sharply on the word type.*
  - b. Return fingers to the home position after each movement.*
  - c. Keep wrists up, fingers normally curved.*
  - d. "Think" the letter being typed.*
- 

5. Switch on the console for the lesson to begin.
6. Move around the classroom to assist the students when they need your help.
7. Give remedial help during the lesson if possible or immediately after the lesson. If not done at these times, do before the next lesson.

## LESSON 9

### Preparation

1. Have paper available for students as they enter the classroom.
2. Have Lesson 9 on the console ready to begin the lesson.

### Procedure

1. Greet your students and tell them that today they will be typing a large portion of the lesson without the command "type."

Assure the students that they will find it easy to type each letter as it is dictated.

Tell them that additional instruction will be given as the lesson progresses.

2. Have each student check to see that the margins are properly set on his machine.
3. Review the Standard Introduction of student's performance.

---

*Before we begin our lesson, remember to:*

- a. *Strike the keys sharply.*
  - b. *Return fingers to the home position after each movement.*
  - c. *Keep wrists up, fingers normally curved.*
  - d. *"Think" the letter being typed.*
- 

4. Switch on the console for lesson to begin. Move around the room to make sure that the students are using good technique in striking the keys.
5. Give remedial help when necessary.
6. Continue to give praise and encouragement!

## LESSON 10

### Preparation

1. Have paper available for the students as they enter the classroom.
2. Have Lesson 10 on the console ready to begin the lesson.

### Procedure

1. Greet the students and tell them that they will have a review of everything they have learned.
  2. Have each student check to see that the margins are properly set on his machine.
  3. Tell the students that from now on the word type will be eliminated from the instructions, and they will type each letter as it is dictated.
  4. Review the standard introduction of student's performance.
- 

*Before we begin our lesson, remember to:*

- a. *Strike the keys sharply.*
  - b. *Return fingers to the home position after each movement.*
  - c. *Keep wrists up, fingers normally curved.*
  - d. *"Think" the letter being typed.*
- 

5. Teach students how to double space between lines of writing.
6. Switch on the console for the lesson to begin. Move around the room to make sure that the students are typing correctly.
7. Give help only when needed.

## APPENDIX II

### TYPEOUTS FOR LESSONS 1-10

## LESSON 1

fdsafdsafdsafdsajkl;jkl;jkl;jkl;fdsajkl;fdsajkl;fdsa  
fdsa jkl;  
fdsa jkl; fdsa jkl; fdsa jkl; fdsa jkl; fdsa jkl; fdsa jkl; fdsa jkl;  
fall  
ask  
lad lad

## LESSON 2

asdf asdf asdf asdf ;lkj ;lkj ;lkj ;lkj  
asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj  
dad dad dad dad lass lass lass lass lass lass lass  
flask flask flask flask flask flask flask  
fgf fgf fgf fgf fgf fgf fgf fgf  
gas  
glad  
glass glass glass glass glass glass glass glass glass  
jhj  
had had had had had had had had had  
half  
ash ash ash ash ash ash  
hall hall hall hall hall hall  
asdfgfdsa asdfgfdsa ;lkjhjkl; asdfgfdsa ;lkjhjkl; asdfgfdsa ;lkjhjkl;  
fgf jhj dksla; fgf jhj dksla; fgf jhj dksla; fgf jhj dksla;  
ask a sad lass ask a sad lass ask a sad lass ask a sad lass  
alfalfa alfalfa alfalfa alfalfa alfalfa alfalfa  
fgfdsa jhjkl; fgfdsa jhjkl; fgfdsa jhjkl; fgfdsa  
asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf  
ask a sad lass ask a sad lass ask a sad lass ask a sad lass

### LESSON 3

fgfdsa jhkl; fgfdsa jhkl; fgfdsa jhkl;  
ftf  
sat  
tall  
task  
fast  
juj  
dull  
dusk  
sulk  
full  
asdfgftf asdfgftf asdfgftf asdfgftf asdfgftf  
;lkjhjuj ;lkjhjuj ;lkjhjuj ;lkjhjuj ;lkjhjuj  
dad had a full glass at last dad had a full glass at last  
dad had a full glass at last dad had a full glass at last  
ded ded ded ded led led led led led led  
leak  
elk elk elk elk see see see see see see  
fee fee fee fee fee sea sea sea sea sea sea  
a;sldkfjghfjdksla; a;sldkfjghfjdksla;  
a;sldkfjghfjdksla; a;sldkfjghfjdksla;

## LESSON 4

ded ftf juj  
kik kik kik kik kik did did did did did did  
laid  
hill hill hill hill hill hill hill hill lid lid lid lid  
list list list list list list jail jail jail jail jail jail  
frf frf frf frf rut rut rut rut rut rut rut rut rut  
rust rust rust rust rust rust rust rat rat rat rat rat rat  
jar jar jar jar jar jar jar jar star star star star star star  
jnj jnj jnj jnj jnj nut nut nut nut nut nut nut nut nut  
sand  
hang  
fun fun fun fun fun fun fun fun and and and and and and and  
the sand and sea are fun the sand and sea are fun  
the sand and sea are fun the sand and sea are fun  
the sand and sea are fun the sand and sea are fun  
the rat hid the nut in his nest the rat hid the nut in his nest  
the rat hid the nut in his nest the rat hid the nut in his nest  
the rat hid the nut in his nest the rat hid the nut in his nest

LESSON 5

asdfghtfrf ;lkjhjujh asdfgftfrf ;lkjhjujn  
fvf fvf fvf fvf save save save save save save save  
leave  
van van van van van van vale vale vale vale vale vale vale  
lol lol lol lol loan loan loan loan loan loan loan loan  
sold sold sold sold sold sold gold gold gold gold gold gold  
sws sws sws sws sws wake wake wake wake wake law law law law  
jnj jnj jnj jnj jnj lame lame lame lame lame lame lame lame  
make  
time time time time time time mark mark mark mark mark mark  
wait until it is time for us to leave  
wait until it is time for us to leave  
wait until it is time for us to leave  
we went into the house to get a saw  
we went into the house to get a saw  
we went into the house to get a saw  
jhj juj jnj jmj kik lol ; fgf ftf frf fvf ded sws a  
jhj juj jnj jmj kik lol ; fgf ftf frf fvf ded sws a  
jhj juj jnj jmj kik lol ; fgf ftf frf fvf ded sws a  
asdfgfsa ;lkjhjkl; asdfgfsa ;lkjhjkl;  
vain vain vain vain vain good good good good good good  
what what what what what what was was was was was was was was  
mean mean mean mean mean mean meek meek meek meek meek meek

LESSON 6

jhj juj jnj jmj kik lol ; fgf ftf frf fvf ded sws a  
jhj juj jnj jmj kik lol ; fgf ftf frf fvf ded sws a  
jhj juj jnj jmj kik lol ; fgf ftf frf fvf ded sws a  
asdfgdsa ;lkjhjkl; asdfgdsa ;lkjhjkl;  
lack  
cold  
cut cut cut cut cut cut cut cut ice ice ice ice ice ice ice  
jyj jyj jyj joy  
yell yell yell yell yell yell yoke yoke yoke yoke yoke yoke  
yellow yellow yellow yellow yellow yellow yellow yellow yellow  
sxs sxs sxs fix fix fix fix fix fix mix mix mix mix mix mix mix  
wax wax wax wax wax wax lax lax lax lax lax lax lax lax  
aqa aqa aqa quail quail quail quail quail quail quail quail quail  
quake  
ftf frf fgf fvf ftf frf fgf fvf ftf frf fgf fvf ftf frf fgf fvf  
jyj juj jhj jnj jmj jyj juj jhj jnj jmj jyj juj jhj jnj jmj  
yell at the man to stop his work yell at the man to stop his work  
yell at the man to stop his work yell at the man to stop his work

LESSON 7

ftf fgf frf fvf ded dcd sws sxs aqa jyj jhj juj jnj jmj kik lol  
ftf fgf frf fvf ded dcd sws sxs aqa jyj jhj juj jnj jmj kik lol  
fbf fbf fbf fbf big big big big boys boys boys boys  
ball ball ball ball box box box box box tab tab tab  
;p; ;p; ;p; top top top top top put put put put put cop cop cop  
play play play play play play reap reap reap reap reap reap  
aza aza aza aza zeal zeal zeal zeal zeal zone zone zone zone  
zinc  
aqaza swsxs dedcd aqaza swsxs dedcd aqaza swsxs dedcd  
k,k k,k k,k k,k a rag, jar, and rug a rag, jar, and rug  
l.l l.l l.l l.l k,k k,k k,k k,k l.l l.l l.l l.l k,k k,k k,k k,k  
jyj jhj juj jnj jmj kik k,k lol l.l ;p; jyj jhj juj jnj jmj kik k,k lol l.l ;p;  
Jess Jess Ken Ken Mark Mark  
Jess and Ken are my friends. Jess and Ken are my friends.  
Jess and Ken are my friends.  
Tom Tom abcdefghijklmnopqrstuvwxyz abcdefghijklmnopqrstuvwxyz  
abcdefghijklmnopqrstuvwxyzabcdefghijklmnopqrstuvwxyz

LESSON 8

abcdefghijklmnopqrstvwxyz abcdefghijklmnopqrstvwxyz  
ftf frf fgf fvf fbf jyj juj jhj jnj jmj ded kik dcd k,k sws lol  
ftf frf fgf fvf fbf jyj juj jhj jnj jmj ded kik dcd k,k sws lol  
abcdefghijklmnopqrstvwxyz abcdefghijklmnopqrstvwxyz  
abcdefghijklmnopqabcedfgabcdefghijklmnopqabcedfgabcdefghijklmnopq  
hijklmnopijklmnopijklmnopijklmnopijklmnopijklmnopijklmnop  
abcdefghijklmnop abcdefghijklmnop abcdefghijklmnop abcdefghijklmnop  
ftf jyj fgf jhj frf juj ded kik sws lol aqa ;p;  
ftf jyj fgf jhj frf juj ded kik sws lol aqa ;p;  
fbf jnj fvf jmj dcd k,k sxs l.l aza  
fbf jnj fvf jmj dcd k,k sxs l.l aza  
Don has a big book on jazz. Don has a big book on jazz.  
I must work hard to learn well. I must work hard to learn well.  
The world is like a silver coin. The world is like a silver coin.  
The world is like a silver coin. The world is like a silver coin.  
abcdefghijklmnopqrstvwxyz abcdefghijklmnopqrstvwxyz  
It is so easy to be good and kind. It is so easy to be good and kind.  
abcdefghijklmnopqrstvwxyz abcdefghijklmnopqrstvwxyz  
ftf jyj fgf jhj frf juj ded kik sws lol aqa ;p;

LESSON 9

abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy  
abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy  
Don has a big book on jazz. Don has a big book on jazz.  
Don has a big book on jazz. Don has a big book on jazz.  
qrstqrstqrstqrstqrstqrstqrstqrstqrstqrstqrstqrst  
qrstqrstqrstqrstqrstqrstqrstqrstqrstqrstqrstqrst  
uvwxyzuvwxyzuvwxyzuvwxyzuvwxyzuvwxyzuvwxyzuvwxyz  
I must work hard to learn well. I must work hard to learn well.  
The world is like a silver coin. The world is like a silver coin.  
ftf jyj fgf jhj frf juj ded kik sws lol aqa ;p;  
ftf jyj fgf jhj frf juj ded kik sws lol aqa ;p;  
fbf jnj fvf jmj dcd k,k sxs l.l aza  
fbf jnj fvf jmj dcd k,k sxs l.l aza  
abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy  
It is so easy to be good and kind. It is so easy to be good and kind.  
Don has a big book on jazz.  
Don has a big book on jazz.  
I must work hard to learn well.  
I must work hard to learn well.  
The world is like a silver coin.  
The world is like a silver coin.  
abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy  
ftf jyj fgf jhj frf juj ded kik sws lol aqa ;p;  
ftf jyj fgf jhj frf juj ded kik sws lol aqa ;p;  
fbf jnj fvf jmj dcd k,k sxs l.l aza  
fbf jnj fvf jmj dcd k,k sxs l.l aza  
abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy  
abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy  
The man who likes his work will do the best job.  
The man who likes his work will do the best job.  
The man who likes his work will do the best job.  
The man who likes his work will do the best job.  
Don has a big book on jazz.  
I must work hard to learn well.  
The world is like a silver coin.  
The man who likes his work will do the best job.



The rod is for his son.  
The rod is for his son.

abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy  
abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy  
He painted his car red.  
He painted his car red.  
A man is his own keeper.  
A man is his own keeper.

APPENDIX III

TYPEOUTS FOR  
SKILL DEVELOPMENT PROGRAM  
LESSONS 11-16  
AND  
NUMBER LESSON

LESSONS 11-16  
SKILL DEVELOPMENT PROGRAM

All students, after successfully completing Lesson 10, receive their instruction through earphones. Each student is permitted to advance through the balance of the skill development phase of the course at his own rate of speed.

Each lesson from this point is referred to as Channel 1, 2, 3, 4, etc. Each student's station is wired to receive six to twelve levels of electronically paced dictation at any one time as he advances in the course.

On the eleventh day, each student is issued a set of earphones. The teacher assists the student in learning how to use the earphones, how to select or turn to the different channels, and how to adjust the volume that is best for him. With the typewriter adjusted, the student first listens to the dictated material through his earphones and then types the same material as it is again dictated at an electronically paced rate. The material for Channel 1 ranges in speed from 8 words a minute to 12 words a minute. The material is first paced at a speed comfortable for the student to maintain control or achieve accuracy; it is then paced slightly faster, and then back to a controlled speed. This process is followed throughout the class period. The teacher will evaluate the accuracy of each student's paper at the end of each class period and indicate when the student is to move to the next channel. The instructional material for Channels 1 and 2 has a speed range of 4 words a minute. For the remaining channels, there is a speed range of 8 words a minute. Each class period consists of 45 minutes of uninterrupted, purposeful, repetitive drill. In Channel 1, the student must type 10 wam with reasonable accuracy in order to move up to Channel 2 on the following day.

Each of the sixteen channels is recorded progressively faster so that the student must listen more and more closely. The speeds of the channels are as follows:

Channel 1	8 - 12 wam	Channel 9	36 - 44 wam
2	10 - 14 wam	10	40 - 48 wam
3	12 - 20 wam	11	44 - 52 wam
4	16 - 24 wam	12	48 - 56 wam
5	20 - 28 wam	13	52 - 60 wam
6	24 - 32 wam	14	56 - 64 wam
7	28 - 36 wam	15	60 - 68 wam
8	32 - 40 wam	16	64 - 72 wam

## Daily Classroom Procedure

1. Give each student blank paper as he enters the classroom with the evaluation of yesterday's lesson and tell him the channel he will be typing that day.
2. Have each student type his name and the channel he will be typing that day at the top of his page.
3. Have each student plug the earphones that have been placed by his typewriter into the Channel Selector Box that is attached to his desk. Instruct him to turn the dial to the channel he is to type that day, adjust the volume, and be ready when the instructor turns on the console.
4. Turn on the console to begin the lesson and move around the classroom to see if each student has dialed the correct channel. While the class is in progress, move among the students, observing their techniques and giving help when necessary. In this way, the entire class is not stopped while you help an individual student.
5. At the end of each lesson, have the student give his paper to you for evaluation before the next class day. You are free to comment daily on any observation of the student's performance.
6. Evaluate each student's paper against the "typeout" of that particular channel as shown in the Instructor's Manual. The speed rate of each paragraph and sentence is indicated in the margin of the "typeout." For example, in Channel 1 the student must type the 10 wam material with reasonable accuracy before he is permitted to move up to Channel 2. In Channel 2, he must type the material at 12 wam with accuracy to be permitted to move up; and in Channel 3, he must type the 16 wam with reasonable accuracy to be able to move up to Channel 4 the following day. Make sure the student is typing with reasonable accuracy, demonstrating good technique, at the beginning speed of the next channel before he is permitted to move to the next channel. (Reasonable accuracy is determined by the number of days and weeks of instruction.)
7. The numbers should not be taught until the students are typing thirty or more words per minute with a reasonable degree of accuracy.

CHANNEL 1

ftf fgf frf ded sws aqa ftf fgf frf ded sws aqa  
jyj jhj juj kik lol ;p; jyj jhj juj kik lol ;p;  
abcdefghijklmnopqrstuvwxyz abcdefghiiklmnopqrstuvwxyz  
He painted his car red. He painted his car red.  
He painted his car red. He painted his car red.  
A man is his own keeper. A man is his own keeper.  
A man is his own keeper. A man is his own keeper.  
Jack types quite well. Jack types quite well.  
Jack types quite well. Jack types quite well.  
The new rod is for his son. The new rod is for his son.  
The new rod is for his son. The new rod is for his son.  
abcdefghijklmnopqrstuvwxyz abcdefghijklmnopqrstuvwxyz  
fbf fvf dcd sxs aza fbf fvf dcd sxs aza  
jnj jmj k,k l.l jnj jmj k,k l.l  
He painted his car red.  
A man is his own keeper.  
Jack types quite well.  
The new rod is for his son.  
It is a good thing to have a high goal in mind when we have work  
to do. It should be a goal that can be gained by hard work.  
It is a good thing to have a high goal in mind when we have work  
to do. It should be a goal that can be gained by hard work.  
It is a good thing to have a high goal in mind when we have work  
to do. It should be a goal that can be gained by hard work.  
abcdefghijklmnopqrstuvwxyz abcdefghijklmnopqrstuvwxyz  
Spring training should aid a team. Spring training should aid a team.  
Spring training should aid a team. Spring training should aid a team.

CHANNEL 2

abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy

This is my first try with this type of work.

This is my first try with this type of work.

This is my first try with this type of work.

This is my first try with this type of work.

This is my first try with this type of work.

This is my first try with this type of work.

It seems great to type words in the first class.

It seems great to type words in the first class.

It seems great to type words in the first class.

It seems great to type words in the first class.

It seems great to type words in the first class.

It seems great to type words in the first class.

We will soon start to type our work for the new class.

We will soon start to type our work for the new class.

We will soon start to type our work for the new class.

We will soon start to type our work for the new class.

We will soon start to type our work for the new class.

We will soon start to type our work for the new class.

abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy

quiz quiz quiz quiz quiz quiz quiz quiz quiz

Our school has always won the mile relay.

jinx jinx jinx jinx jinx jinx jinx jinx jinx jinx

The boys and girls had fun playing near the pond.

The boys and girls had fun playing near the pond.

The boys and girls had fun playing near the pond.

The boys and girls had fun playing near the pond.

The boys and girls had fun playing near the pond.

abcdefghijklmnopqrstuvwxyabcdefghijklmnopqrstuvwxy

Today is a perfect day for swimming. The water is calm and clear.

In two minutes the three children will run into the water.

Today is a perfect day for swimming. The water is calm and clear.

In two minutes the three children will run into the water.

Today is a perfect day for swimming. The water is calm and clear.

In two minutes the three children will run into the water.

Today is a perfect day for swimming. The water is calm and clear.

In two minutes the three children will run into the water.

Today is a perfect day for swimming. The water is calm and clear.

In two minutes the three children will run into the water.

CHANNEL 3

asdfgf;lkjhjasdfgf;lkjhjasdfgf;lkjhjasdfgf;lkjhj  
asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj asdfgf ;lkjhj  
Four jets left smoke trails in the sky.  
Four jets left smoke trails in the sky.

It is easy to be good and kind.  
It is easy to be good and kind.

The old man juggled the balls in the air.  
The old man juggled the balls in the air.  
The old man juggled the balls in the air.  
The old man juggled the balls in the air.  
The old man juggled the balls in the air.

The little old lady in the new car is my aunt.  
The little old lady in the new car is my aunt.  
The little old lady in the new car is my aunt.  
The little old lady in the new car is my aunt.  
The little old lady in the new car is my aunt.

The old man went down to the village to shop for groceries.  
The old man went down to the village to shop for groceries.  
The old man went down to the village to shop for groceries.  
The old man went down to the village to shop for groceries.  
The old man went down to the village to shop for groceries.

Four jets left smoke trails in the sky.  
It is easy to be good and kind.  
The old man juggled the balls in the air.  
The little old lady in the new car is my aunt.  
The old man went down to the village to shop for groceries.

Today is a perfect day for swimming. The water is calm and clear.  
In two minutes the three children will run into the water.  
Today is a perfect day for swimming. The water is calm and clear.  
In two minutes the three children will run into the water.  
Today is a perfect day for swimming. The water is calm and clear.  
In two minutes the three children will run into the water.  
Today is a perfect day for swimming. The water is calm and clear.  
In two minutes the three children will run into the water.  
Today is a perfect day for swimming. The water is calm and clear.  
In two minutes the three children will run into the water.

The book she read was a good one, but it took so long that all the joy was lost. The next time she chose a short story to read under a great old pecan tree.

The book she read was a good one, but it took so long that all the joy was lost. The next time she chose a short story to read under a great old pecan tree.

The book she read was a good one, but it took so long that all the joy was lost. The next time she chose a short story to read under a great old pecan tree.

The book she read was a good one, but it took so long that all the joy was lost. The next time she chose a short story to read under a great old pecan tree.

The book she read was a good one, but it took so long that all the joy was lost. The next time she chose a short story to read under a great old pecan tree.

CHANNEL 4

fbf jnj fvf jmj dcd k,k sxs l.l aza fbf jnj fvf jmj dcd k,k sxs l.l aza  
fbf jnj fvf jmj dcd k,k sxs l.l aza fbf jnj fvf jmj dcd k,k sxs l.l aza  
Many given jobs require extra zeal and perfect work habits.  
Many given jobs require extra zeal and perfect work habits.  
Many given jobs require extra zeal and perfect work habits.  
Many given jobs require extra zeal and perfect work habits.  
Many given jobs require extra zeal and perfect work habits.

The sun was out to give us that happy feeling.  
The sun was out to give us that happy feeling.  
The sun was out to give us that happy feeling.  
The sun was out to give us that happy feeling.  
The sun was out to give us that happy feeling.

Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.

We are learning touch typewriting in this class.  
We are learning touch typewriting in this class.

The two men got the day off and yet got their pay.  
The two men got the day off and yet got their pay.  
The two men got the day off and yet got their pay.  
The two men got the day off and yet got their pay.  
The two men got the day off and yet got their pay.

The boys played ball today and won by an easy field goal.  
It was a very exciting game. They practiced very hard so that they might win  
and give the other team a hard lesson.  
The boys played ball today and won by an easy field goal.  
It was a very exciting game. They practiced very hard so that they might win  
and give the other team a hard lesson.  
The boys played ball today and won by an easy field goal.  
It was a very exciting game. They practiced very hard so that they might win  
and give the other team a hard lesson.  
The boys played ball today and won by an easy field goal.  
It was a very exciting game. They practiced very hard so that they might win  
and give the other team a hard lesson.  
The boys played ball today and won by an easy field goal.  
It was a very exciting game. They practiced very hard so that they might win  
and give the other team a hard lesson.  
The boys played ball today and won by an easy field goal.  
It was a very exciting game. They practiced very hard so that they might win  
and give the other team a hard lesson.

I like to type with my eyes on the book and my feet  
flat on the floor. I can type well this way.  
My skill and speed will grow. My work will be the best.  
I like to type with my eyes on the book and my feet  
flat on the floor. I can type well this way.  
My skill and speed will grow. My work will be the best.  
I like to type with my eyes on the book and my feet  
flat on the floor. I can type well this way.  
My skill and speed will grow. My work will be the best.  
I like to type with my eyes on the book and my feet  
flat on the floor. I can type well this way.  
My skill and speed will grow. My work will be the best.  
I like to type with my eyes on the book and my feet  
flat on the floor. I can type well this way.  
My skill and speed will grow. My work will be the best.  
I like to type with my eyes on the book and my feet  
flat on the floor. I can type well this way.  
My skill and speed will grow. My work will be the best.

CHANNEL 5

ftf fgf frf ded sws aqa ftf fgf frf ded sws aqa  
jyj jhj juj kik lol ;p; jyj jhj juj kik lol ;p;  
It is fun to stand in the doorway and listen to a heavy rainfall.  
It is fun to stand in the doorway and listen to a heavy rainfall.  
It is fun to stand in the doorway and listen to a heavy rainfall.  
It is fun to stand in the doorway and listen to a heavy rainfall.  
It is fun to stand in the doorway and listen to a heavy rainfall.  
It is fun to stand in the doorway and listen to a heavy rainfall.

Small words move with ease where big words stand still.  
They have charm all their own. They can catch large thoughts and hold  
them up for us to hear. There is not much that small words will not say.  
Small words move with ease where big words stand still.  
They have charm all their own. They can catch large thoughts and hold  
them up for us to hear. There is not much that small words will not say.  
Small words move with ease where big words stand still.  
They have charm all their own. They can catch large thoughts and hold  
them up for us to hear. There is not much that small words will not say.  
Small words move with ease where big words stand still.  
They have charm all their own. They can catch large thoughts and hold  
them up for us to hear. There is not much that small words will not say.  
Small words move with ease where big words stand still.  
They have charm all their own. They can catch large thoughts and hold  
them up for us to hear. There is not much that small words will not say.

The business office needs typists who type with speed and accuracy.  
The drills you are typing now will help you attain this goal.  
They push for speed and then slow down for control.  
Do your very best.  
The business office needs typists who type with speed and accuracy.  
The drills you are typing now will help you attain this goal.  
They push for speed and then slow down for control.  
Do your very best.  
The business office needs typists who type with speed and accuracy.  
The drills you are typing now will help you attain this goal.  
They push for speed and then slow down for control.  
Do your very best.  
The business office needs typists who type with speed and accuracy.  
The drills you are typing now will help you attain this goal.  
They push for speed and then slow down for control.  
Do your very best.  
The business office needs typists who type with speed and accuracy.  
The drills you are typing now will help you attain this goal.  
They push for speed and then slow down for control.  
Do your very best.

The brown horse jumped the wooden fence quickly.  
The brown horse jumped the wooden fence quickly.

The tenth grade class went to the park to see the birds and bees.  
The eleventh grade girls saw two plays on the stage this noon.  
At the same time the boys had gone to the stands to see the game,  
while most of the school staff had to meet in the heat of the day.  
This is the way the school year goes past.

The tenth grade class went to the park to see the birds and bees.  
The eleventh grade girls saw two plays on the stage this noon.  
At the same time the boys had gone to the stands to see the game,  
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The tenth grade class went to the park to see the birds and bees.  
The eleventh grade girls saw two plays on the stage this noon.  
At the same time the boys had gone to the stands to see the game,  
while most of the school staff had to meet in the heat of the day.  
This is the way the school year goes past.

## CHANNEL 6

It is the duty of the girls to pay when they go to the lake.  
It is the duty of the girls to pay when they go to the lake.  
It is the duty of the girls to pay when they go to the lake.  
It is the duty of the girls to pay when they go to the lake.  
It is the duty of the girls to pay when they go to the lake.  
It is the duty of the girls to pay when they go to the lake.

These are our best boats. There is much room in them.  
Glance at them now and then. You will be glad you did.  
Our boats will be on sale next month.  
These are our best boats. There is much room in them.  
Glance at them now and then. You will be glad you did.  
Our boats will be on sale next month.  
These are our best boats. There is much room in them.  
Glance at them now and then. You will be glad you did.  
Our boats will be on sale next month.  
These are our best boats. There is much room in them.  
Glance at them now and then. You will be glad you did.  
Our boats will be on sale next month.  
These are our best boats. There is much room in them.  
Glance at them now and then. You will be glad you did.  
Our boats will be on sale next month.

A good education can help you later in life. Spare no efforts in your studies,  
it is well worth it. If you make every minute count, you will never be sorry  
for having done so.  
A good education can help you later in life. Spare no efforts in your studies,  
it is well worth it. If you make every minute count, you will never be sorry  
for having done so.  
A good education can help you later in life. Spare no efforts in your studies,  
it is well worth it. If you make every minute count, you will never be sorry  
for having done so.  
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it is well worth it. If you make every minute count, you will never be sorry  
for having done so.  
A good education can help you later in life. Spare no efforts in your studies,  
it is well worth it. If you make every minute count, you will never be sorry  
for having done so.

We had a wonderful boat trip. Everyone seemed happy upon coming back.  
The boat landed at two different places. We all had fun on our vacation.  
We had a wonderful boat trip. Everyone seemed happy upon coming back.  
The boat landed at two different places. We all had fun on our vacation.  
We had a wonderful boat trip. Everyone seemed happy upon coming back.  
The boat landed at two different places. We all had fun on our vacation.  
We had a wonderful boat trip. Everyone seemed happy upon coming back.  
The boat landed at two different places. We all had fun on our vacation.  
We had a wonderful boat trip. Everyone seemed happy upon coming back.  
The boat landed at two different places. We all had fun on our vacation.

We had a wonderful boat trip. Everyone seemed happy upon coming back. The boat landed at two different places. We all had fun on our vacation.

Writing letters is fun and you can type them to your friends to show them what you have been learning in school. Composing a letter for a class is fun when it can be typewritten. You would enjoy a course like it.

Writing letters is fun and you can type them to your friends to show them what you have been learning in school. Composing a letter for a class is fun when it can be typewritten. You would enjoy a course like it.

Writing letters is fun and you can type them to your friends to show them what you have been learning in school. Composing a letter for a class is fun when it can be typewritten. You would enjoy a course like it.

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Writing letters is fun and you can type them to your friends to show them what you have been learning in school. Composing a letter for a class is fun when it can be typewritten. You would enjoy a course like it.

This little boy plodded along the country alone. As he sauntered angrily, he kicked up clouds of dust with his bare feet.

This little boy plodded along the country alone. As he sauntered angrily, he kicked up clouds of dust with his bare feet.

This little boy plodded along the country alone. As he sauntered angrily, he kicked up clouds of dust with his bare feet.

This little boy plodded along the country alone. As he sauntered angrily, he kicked up clouds of dust with his bare feet.

This little boy plodded along the country alone. As he sauntered angrily, he kicked up clouds of dust with his bare feet.

## CHANNEL 7

Blue birds built nests in our oaks and elms this year.  
Blue birds built nests in our oaks and elms this year.  
Blue birds built nests in our oaks and elms this year.  
Blue birds built nests in our oaks and elms this year.  
Blue birds built nests in our oaks and elms this year.  
Blue birds built nests in our oaks and elms this year.  
Blue birds built nests in our oaks and elms this year.

This country is trying to keep pace with the times.  
This country is trying to keep pace with the times.  
This country is trying to keep pace with the times.  
This country is trying to keep pace with the times.  
This country is trying to keep pace with the times.  
This country is trying to keep pace with the times.

Those who typewrite many hours a day know the value of good posture.  
It helps them to typewrite for hours on end with ease and skill.  
It helps them to keep their minds on the alert. Good posture will  
help you build your skill at a much more rapid rate.

Those who typewrite many hours a day know the value of good posture.  
It helps them to typewrite for hours on end with ease and skill.  
It helps them to keep their minds on the alert. Good posture will  
help you build your skill at a much more rapid rate.

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It helps them to keep their minds on the alert. Good posture will  
help you build your skill at a much more rapid rate.

Those who typewrite many hours a day know the value of good posture.  
It helps them to typewrite for hours on end with ease and skill.  
It helps them to keep their minds on the alert. Good posture will  
help you build your skill at a much more rapid rate.

The day for the boatripe had come. It was a clear day in June.  
We were all eager to get started. All the members of the classes  
were on time. Soon all were on board sailing down the calm river.  
It was a clear day and we all had fun.

The day for the boatripe had come. It was a clear day in June.  
We were all eager to get started. All the members of the classes  
were on time. Soon all were on board sailing down the calm river.  
It was a clear day and we all had fun.

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We were all eager to get started. All the members of the classes  
were on time. Soon all were on board sailing down the calm river.  
It was a clear day and we all had fun.

The day for the boatribe had come. It was a clear day in June.  
We were all eager to get started. All the members of the classes  
were on time. Soon all were on board sailing down the calm river.  
It was a clear day and we all had fun.  
The day for the boatribe had come. It was a clear day in June.  
We were all eager to get started. All the members of the classes  
were on time. Soon all were on board sailing down the calm river.  
It was a clear day and we all had fun.

All of us like the very fine work that Tom did in revising the list  
of our students. I know that it must have been a difficult task  
for him to revise a roster of that size in just one day.  
It is quite hard for me to believe that he could do the job for us in that  
length of time.

All of us like the very fine work that Tom did in revising the list  
of our students. I know that it must have been a difficult task  
for him to revise a roster of that size in just one day.  
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All of us like the very fine work that Tom did in revising the list  
of our students. I know that it must have been a difficult task  
for him to revise a roster of that size in just one day.  
It is quite hard for me to believe that he could do the job for us in that  
length of time.

The tall green pine sways as the wind increases its tempo.  
The tall green pine sways as the wind increases its tempo.  
The tall green pine sways as the wind increases its tempo.

## CHANNEL 8

Much of the real joy in life comes from work well done.  
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Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.  
Remember that the purpose of our drill is to gain higher speed.

Boys and girls enjoy learning to typewrite. They like to hear the sound as words form on the sheet of paper before them. It is thrilling for them to know they can move their fingers quickly and speedily over the keys and still be able to turn out such a fine copy. It would be fun if everyone could type.

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You must do drills each day to become a good typist.  
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You must do drills each day to become a good typist.  
You must do drills each day to become a good typist.

If you are planning an exciting trip for you and your family this summer, be sure that you take time to check the tires on your car very carefully. Even the latest cars should be checked thoroughly to see that the tires are not worn beyond the point where they are considered really safe for driving. Before you start on your trip, you owe it to yourself and your family to check the advantages of the new tire which we have just introduced to the public.

If you are planning an exciting trip for you and your family this summer, be sure that you take time to check the tires on your car very carefully. Even the latest cars should be checked thoroughly to see that the tires are not worn beyond the point where they are considered really safe for driving. Before you start on your trip, you owe it to yourself and your family to check the advantages of the new tire which we have just introduced to the public.

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The team ran into a huddle and did a war dance to keep the other team guessing.  
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CHANNEL 9

	WAM
All the boys and girls in my classroom enjoyed helping with the display.	36
All the boys and girls in my classroom enjoyed helping with the display.	36
All the boys and girls in my classroom enjoyed helping with the display.	38
All the boys and girls in my classroom enjoyed helping with the display.	38
All the boys and girls in my classroom enjoyed helping with the display.	36
Not everyone can make the team, but everyone can be a loyal fan.	36
Not everyone can make the team, but everyone can be a loyal fan.	38
Not everyone can make the team, but everyone can be a loyal fan.	40
Not everyone can make the team, but everyone can be a loyal fan.	42
Not everyone can make the team, but everyone can be a loyal fan.	38
I plan to have the dancing class meet at my home starting tomorrow.	36
I will fix the hour of the day later. Make a note to be here tomorrow for a dancing lesson. Be on time.	
I plan to have the dancing class meet at my home starting tomorrow.	38
I will fix the hour of the day later. Make a note to be here tomorrow for a dancing lesson. Be on time.	
I plan to have the dancing class meet at my home starting tomorrow.	40
I will fix the hour of the day later. Make a note to be here tomorrow for a dancing lesson. Be on time.	
I plan to have the dancing class meet at my home starting tomorrow.	42
I will fix the hour of the day later. Make a note to be here tomorrow for a dancing lesson. Be on time.	
I plan to have the dancing class meet at my home starting tomorrow.	40
I will fix the hour of the day later. Make a note to be here tomorrow for a dancing lesson. Be on time.	
When chimes ring at the end of the day, we will proceed to the game.	38
When the game ends, we will all go home where we will arrange plans for the dance.	
Plan to be there to lend your support in making plans for the dance.	40
When chimes ring at the end of the day, we will proceed to the game.	40
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Plan to be there to lend your support in making plans for the dance.	42
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Plan to be there to lend your support in making plans for the dance.	38
On a humid summer day, a chirping bird flew through that gate and satisfied its thirst from the muddy water which runs near this old tree. The child would not wish to scare the bird so she was very quite and good. Her dad came by soon and only smiled.	

On a humid summer day, a chirping bird flew through that gate and satisfied its thirst from the muddy water which runs near this old tree. The child would not wish to scare the bird so she was very quite and good. Her dad came by soon and only smiled.

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My sisters and I would like to take a picnic lunch and walk in the woods. While we are there we shall wander around and perhaps pick some wild flowers. It will be a delightful experience, so mother and daddy may come along too.

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The young man who is determined to succeed in business will put forth much effort in preparing his future career. Sound character traits will be an asset to him. If he does his best every day as a student, he most likely will succeed as a businessman.

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CHANNEL 10

The cage contained thirteen yellow parakeets.  
The cage contained thirteen yellow parakeets.

WAM  
40  
42  
44  
46  
42

It is always exciting to go home after a long vacation.  
It is always exciting to go home after a long vacation.  
It is always exciting to go home after a long vacation.  
It is always exciting to go home after a long vacation.  
It is always exciting to go home after a long vacation.

42  
44  
46  
48  
44

Three boys are meeting at nine to plan a summer vacation for the group. They have combined their savings hoping to be able to go to camp for a month. Some want to go to a camp by the lake so they can go swimming every day. Others want to go to the mountains. Wherever they go they can be sure of fun.

42

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48

Three boys are meeting at nine to plan a summer vacation for the group. They have combined their savings hoping to be able to go to camp for a month. Some want to go to a camp by the lake so they can go swimming every day. Others want to go to the mountains. Wherever they go they can be sure of fun.

44

All of us like the very fine work that Tom did in revising the list of our students. I know that it must have been quite a difficult task for him to revise completely a roster of that size in just one day. It is quite hard for me to believe that he could do the job for us in that length of time.

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44

A young lady wishing to work in an office some day, hopes to be the ideal office worker. Her first step in reaching that goal is to get the right training. She tries to develop the fine traits that a good secretary should have. Her work has always been exact and honest.

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44

CHANNEL 11

Last night from my bunk I could see a faint speck in the sky.	WAM 44
Last night from my bunk I could see a faint speck in the sky.	44
Last night from my bunk I could see a faint speck in the sky.	46
Last night from my bunk I could see a faint speck in the sky.	48
Last night from my bunk I could see a faint speck in the sky.	44
When chimes ring at the close of the day, we will proceed to the game.	46
When chimes ring at the close of the day, we will proceed to the game.	46
When chimes ring at the close of the day, we will proceed to the game.	48
When chimes ring at the close of the day, we will proceed to the game.	50
When chimes ring at the close of the day, we will proceed to the game.	46
Our team had a nice day at the lake. They met at the hour of ten.	44
The boys thought they would swim all day, but beach games took up most of their day. They were glad to go home when the sun went down.	
Our team had a nice day at the lake. They met at the hour of ten.	46
The boys thought they would swim all day, but beach games took up most of their day. They were glad to go home when the sun went down.	
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She is going for a short walk to the park. I shall go, too.	46
The two of us plan to take a picnic lunch. Maybe the other girls will bring hot dogs. Some want candy and nuts.	
She is going for a short walk to the park. I shall go, too.	48
The two of us plan to take a picnic lunch. Maybe the other girls will bring hot dogs. Some want candy and nuts.	
She is going for a short walk to the park. I shall go, too.	50
The two of us plan to take a picnic lunch. Maybe the other girls will bring hot dogs. Some want candy and nuts.	
She is going for a short walk to the park. I shall go, too.	52
The two of us plan to take a picnic lunch. Maybe the other girls will bring hot dogs. Some want candy and nuts.	
She is going for a short walk to the park. I shall go, too.	48
The two of us plan to take a picnic lunch. Maybe the other girls will bring hot dogs. Some want candy and nuts.	
The efficient typist tries to learn new and better ways to improve her work. She works steadily and quickly. This type of worker is in demand. Work is the trick of success.	—48

The efficient typist tries to learn new and better ways to improve her work. She works steadily and quickly. This type of worker is in demand. Work is the trick of success.

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CHANNEL 12

The good typist will follow all rules to develop speed and accuracy.	WAM 48
The good typist will follow all rules to develop speed and accuracy.	48
The good typist will follow all rules to develop speed and accuracy.	50
The good typist will follow all rules to develop speed and accuracy.	52
The good typist will follow all rules to develop speed and accuracy.	48
John was very pleased to have been the one selected from our class.	50
John was very pleased to have been the one selected from our class.	52
John was very pleased to have been the one selected from our class.	54
John was very pleased to have been the one selected from our class.	56
John was very pleased to have been the one selected from our class.	52
Perhaps some day I shall take a long trip. It will be to a land of beauty and mystery. I can go by plane or ship. It would be fun on a ship and I can make more new friends.	50
Perhaps some day I shall take a long trip. It will be to a land of beauty and mystery. I can go by plane or ship. It would be fun on a ship and I can make more new friends.	52
All who wish to increase their speed must take great care of their posture. Good posture will also reap rich rewards in accuracy. Let us all strive toward that goal this day.	50
All who wish to increase their speed must take great care of their posture. Good posture will also reap rich rewards in accuracy. Let us all strive toward that goal this day.	52
All who wish to increase their speed must take great care of their posture. Good posture will also reap rich rewards in accuracy. Let us all strive toward that goal this day.	54
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All who wish to increase their speed must take great care of their posture. Good posture will also reap rich rewards in accuracy. Let us all strive toward that goal this day.	52
All who wish to increase their speed must take great care of their posture. Good posture will also reap rich rewards in accuracy. Let us all strive toward that goal this day.	52
Thank you for your letter asking for information about railroads. Since you did not specify the exact information you desired, I shall give you some general statements concerning railroads. Under separate cover, I shall send you booklets which will aid you in your project.	52
Thank you for your letter asking for information about railroads. Since you did not specify the exact information you desired, I shall give you some general statements concerning railroads. Under separate cover, I shall send you booklets which will aid you in your project.	54
Thank you for your letter asking for information about railroads. Since you did not specify the exact information you desired, I shall give you some general statements concerning railroads.	56

Under separate cover, I shall send you booklets which will aid you in your project.

Always plan your telephone calls so that you will have the necessary letters, reports or files you may need to refer to. Be sure to have a note pad and pencil handy at all times so that you can get down all the facts. Know your telephone directory so that you can refer to it quickly. 52

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Perhaps some day I shall take a long trip. It will be to a land of beauty and mystery. I can go by plane or ship. It would be fun on a ship and I can make more new friends. 52

All who wish to increase their speed must take great care of their posture. Good posture will also reap rich rewards in accuracy. Let us all strive toward that goal this day. 52

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CHANNEL 13

WAM

Most of us like to do the things we can do with ease. 52  
Most of us like to do the things we can do with ease. 54  
Most of us like to do the things we can do with ease. 56  
We are always looking for a good company like yours. 52  
We are always looking for a good company like yours. 54  
We are always looking for a good company like yours. 56  
Zane won the game by kicking a long field goal. 52  
Zane won the game by kicking a long field goal. 54  
Zane won the game by kicking a long field goal. 56

Welcoming you to this community of ours gives us a great 52  
deal of pleasure. We are now looking forward to the day  
when we will be able to count you as one of our customers.  
Welcoming you to this community of ours gives us a great 54  
deal of pleasure. We are now looking forward to the day  
when we will be able to count you as one of our customers.  
Welcoming you to this community of ours gives us a great 56  
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deal of pleasure. We are now looking forward to the day  
when we will be able to count you as one of our customers.

When chimes ring at the close of the day, we will proceed to the game. 54  
When the game ends, we will all go home where we will arrange  
plans for the dance. Plan to be here to lend your support  
in making plans for the dance.  
When chimes ring at the close of the day, we will proceed to the game. 56  
When the game ends, we will all go home where we will arrange  
plans for the dance. Plan to be here to lend your support  
in making plans for the dance.  
When chimes ring at the close of the day, we will proceed to the game. 60  
When the game ends, we will all go home where we will arrange  
plans for the dance. Plan to be here to lend your support  
in making plans for the dance.  
When chimes ring at the close of the day, we will proceed to the game. 56  
When the game ends, we will all go home where we will arrange  
plans for the dance. Plan to be here to lend your support  
in making plans for the dance.

We are enclosing a decal to apply to your car. Cars may be parked 54  
on the campus streets and campus lots only if they bear this decal.  
These decals must be applied properly to the front and back  
windshields of cars in accordance with directions which appear on  
each permit.

We are enclosing a decal to apply to your car. Cars may be parked 56  
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56

Betty was called from class to report to the office for a new job. She was given a job as office clerk. Her new duties are to sort and file cards and papers, type simple forms, and run errands. She was pleased to have been the one chosen from her class.

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60

We are always looking for a good company like yours.

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Zane won the game by kicking a long field goal.

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Welcoming you to this community of ours gives us a great deal of pleasure. We are now looking forward to the day when we will be able to count you as one of our customers.

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Betty was called from class to report to the office for a new job. She was given a job as office clerk. Her new duties are to sort and file cards and papers, type simple forms, and run errands. She was pleased to have been the one chosen from her class.

56

Welcoming you to this community of ours gives us a great deal of pleasure. We are now looking forward to the day when we will be able to count you as one of our customers.

WAM  
56

When chimes ring at the close of the day, we will proceed to the game. When the game ends, we will all go home where we will arrange plans for the dance. Plan to be here to lend your support in making plans for the dance.

58

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56

CHANNEL 14

	WAM
It is always exciting to go home after a long vacation.	56
It is always exciting to go home after a long vacation.	60
It is always exciting to go home after a long vacation.	56
Zane put the fox in the box and sent it to me.	58
Zane put the fox in the box and sent it to me.	60
Zane put the fox in the box and sent it to me.	58
I would like for you to go to town with my mother and me.	58
I would like for you to go to town with my mother and me.	62
I would like for you to go to town with my mother and me.	60
Thanks again for stopping at our hotel. We are looking forward to seeing you again in the very near future.	58
Thanks again for stopping at our hotel. We are looking forward to seeing you again in the very near future.	60
Thanks again for stopping at our hotel. We are looking forward to seeing you again in the very near future.	62
Thanks again for stopping at our hotel. We are looking forward to seeing you again in the very near future.	60
In our modern science age we hear so much about space, rocket operations, capsules, and the like. This country is trying to keep pace with the times.	58
In our modern science age we hear so much about space, rocket operations, capsules, and the like. This country is trying to keep pace with the times.	60
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In our modern science age we hear so much about space, rocket operations, capsules, and the like. This country is trying to keep pace with the times.	60
We think we have a long vacation and before we know it fishing time is past and it is school time again. Back to the books and back to the hurry and scurry of the busy days.	58
We think we have a long vacation and before we know it fishing time is past and it is school time again. Back to the books and back to the hurry and scurry of the busy days.	62
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We think we have a long vacation and before we know it fishing time is past and it is school time again. Back to the books and back to the hurry and scurry of the busy days.	60
The young man who wants to succeed in business will put forth much effort in preparing his future career. Sound character traits will be an asset to him. If he does his best every day as a student, he most likely will succeed as a businessman.	58
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Seven major fires in one month is indeed shocking. Yet, this is what happened to our city last month. The increasing number of fires indicates that fire safety in the construction of a building has been either neglected, overlooked, or ignored in recent years. As a result, seven lives have been lost; and priceless materials have been destroyed.

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Thanks again for stopping at our hotel. We are looking forward to seeing you again in the very near future.

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CHANNEL 15

Much of the real joy in life comes from work well done.	WAM 60
Much of the real joy in life comes from work well done.	62
Much of the real joy in life comes from work well done.	60
The team played the best game it has played in many years.	62
The team played the best game it has played in many years.	64
The team played the best game it has played in many years.	60
The team ran into a huddle and did a war dance.	62
The team ran into a huddle and did a war dance.	64
The team ran into a huddle and did a war dance.	62
The cage contained sixteen yellow, chattering parakeets.	62
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Boys and girls enjoy learning to typewrite. They like to hear the words appearing on the sheet of paper before them. It is thrilling for them to know they can move their fingers quickly and speedily over the keys and still be able to turn out such fine copy.	62
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If you are planning an exciting trip for you and your family this summer, be sure that you take time to check the tires on your car very carefully. Even the latest cars should be checked thoroughly to see that the tires are not worn beyond the point where they can be considered really safe for summer driving. Before you start on your trip, you owe it to yourself and your family to check the advantages of the new tire which we have just introduced to the public.	62
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If it is necessary for you to be away from your telephone, leave a message telling where you may be reached or when you will return. Give all of your attention to the person with whom you are talking. Even though the caller cannot see you, he can still sense whether he has your complete attention. 62

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Some people are lucky enough to work in companies that conduct training programs for them on company time. Some criticize these programs, saying they never amount to much except a little drill in typing, shorthand, or spelling. This is probably the fault of the people who work in the office. 64

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Much of the real joy in life comes from work well done. 64  
The team played the best game it has played in many years. 64  
The team ran into a huddle and did a war dance. 64  
The cage contained sixteen yellow, chattering parakeets. 64

CHANNEL 16

	WAM
Plan your work and your skill will be sure to grow.	64
Plan your work and your skill will be sure to grow.	66
Plan your work and your skill will be sure to grow.	64
We are going to pay you for your work with a check.	66
We are going to pay you for your work with a check.	68
We are going to pay you for your work with a check.	66
Discounts ranging from five to ten percent are sometimes allowed.	66
Discounts ranging from five to ten percent are sometimes allowed.	68
Discounts ranging from five to ten percent are sometimes allowed.	66
The little boys and girls had a good time playing near the pond.	70
The little boys and girls had a good time playing near the pond.	72
The little boys and girls had a good time playing near the pond.	70
Posture is one important factor in the learning process of typing.	70
Posture is one important factor in the learning process of typing.	72
Posture is one important factor in the learning process of typing.	70
We can type with confidence if we do not type too quickly. Build skill with purposeful, repetitive drills.	64
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We can type with confidence if we do not type too quickly. Build skill with purposeful, repetitive drills.	64
It is good to work hard and to do the best job you can. When a boy or girl does this he or she works toward a goal. Pick your goal now and work at it each day in this class.	66
It is good to work hard and to do the best job you can. When a boy or girl does this he or she works toward a goal. Pick your goal now and work at it each day in this class.	68
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It is good to work hard and to do the best job you can. When a boy or girl does this he or she works toward a goal. Pick your goal now and work at it each day in this class.	68
Miami seems to be a nice vacation spot for all folks living on the eastern coast. It can be reached by car, by plane, and by rail, and provides fine fun for all ages.	66
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Best results and skills are obtained from typing if you are completely relaxed and concentrate on your copy. Be sure to strike every key with a rapid snap or rapid stroke. 66

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Best results and skills are obtained from typing if you are completely relaxed and concentrate on your copy. Be sure to strike every key with a rapid snap or rapid stroke. 66

Green trees rustled in the breeze as large drops of spraying rain sprinkled gently on the golden tower as it rose high in the heavens off in the distance while the sound of bells was heard far and wide in the village by the farmer plowing, the sheep grazing, and the birds singing as they flew meadowward. 68

Green trees rustled in the breeze as large drops of spraying rain sprinkled gently on the golden tower as it rose high in the heavens off in the distance while the sound of bells was heard far and wide in the village by the farmer plowing, the sheep grazing, and the birds singing as they flew meadowward. 70

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Plan your work and your skill will be sure to grow. 68

We are going to pay you for your work with a check. 68

Discounts ranging from five to ten percent are sometimes allowed. 68

The little boys and girls had a good time playing near the pond. 68

Posture is one important factor in the learning process of typing. 68

NUMBER LESSON

WAM

fr4f fr4f fr4f f4f f4f f4f f4f f4f f4f f4f f4f  
 ft5f ft5f ft5f ft5f f5f f5f f5f f5f f5f f5f f5f  
 f4f5f f5f4f f4f5f f5f4f f4f5f f5f4f f4f5f f5f4f  
 Only 4 percent of a class of 44 passed the quiz. 20  
 Only 4 percent of a class of 44 passed the quiz. 20  
 Only 4 percent of a class of 44 passed the quiz. 20  
 I will take 5 of the dresses with me and return for the other 5 next week. 20  
 I will take 5 of the dresses with me and return for the other 5 next week. 20  
 I will take 5 of the dresses with me and return for the other 5 next week. 20

jy6j jy6j jy6j j6j j6j j6j j6j j6j j6j j6j j6j  
 ju7j ju7j ju7j j7j j7j j7j j7j j7j j7j j7j  
 j6j7j j7j6j j6j7j j7j6j j6j7j j7j6j j6j7j j7j6j  
 The company presented the 6 best salesmen from the 45 states. 20  
 The company presented the 6 best salesmen from the 45 states. 20  
 The company presented the 6 best salesmen from the 45 states. 20  
 The statement listed 7 items, but only 6 had been bought. 20  
 The statement listed 7 items, but only 6 had been bought. 20  
 The statement listed 7 items, but only 6 had been bought. 20

de3d de3d de3d d3d d3d d3d d3d d3d d3d d3d d3d  
 My classes during periods 3 and 7 are in room 37. 20  
 My classes during periods 3 and 7 are in room 37. 20  
 My classes during periods 3 and 7 are in room 37. 20  
 k18k k18k k18k k8k k8k k8k k8k k8k k8k k8k k8k  
 Please send me 8 pillow cases and 3 towels. 20  
 Please send me 8 pillow cases and 3 towels. 20  
 Please send me 8 pillow cases and 3 towels. 20

sw2s sw2s sw2s sw2s sw2s sw2s sw2s sw2s  
 The boys plan to visit 2 states every 2 weeks. 20  
 The boys plan to visit 2 states every 2 weeks. 20  
 The boys plan to visit 2 states every 2 weeks. 20

lo9l lo9l lo9l l9l l9l l9l l9l l9l l9l l9l l9l  
 The football team won 9 games this year. 20  
 The football team won 9 games this year. 20  
 The football team won 9 games this year. 20

;p0; ;p0; ;p0; ;0; ;0; ;0; ;0; ;0; ;0; ;0; ;0;  
 Only 1 of the men got sick from eating the 11 boxes of candy. 20  
 Only 1 of the men got sick from eating the 11 boxes of candy. 20  
 Only 1 of the men got sick from eating the 11 boxes of candy. 20  
 He has not received the 10 boxes of cigars he ordered 9 weeks ago. 20  
 He has not received the 10 boxes of cigars he ordered 9 weeks ago. 20  
 He has not received the 10 boxes of cigars he ordered 9 weeks ago. 20  
 1 and 2 and 3 and 4 and 5 and 6 and 7 and 8 and 9 and 10 20  
 1 and 2 and 3 and 4 and 5 and 6 and 7 and 8 and 9 and 10 20  
 1 and 2 and 3 and 4 and 5 and 6 and 7 and 8 and 9 and 10 20  
 1 and 2 and 3 and 4 and 5 and 6 and 7 and 8 and 9 and 10 20



Our basketball team has set an outstanding record during the past 4 years. This year, it won 29 out of 35 games. Each team member averaged 18 points per game. John Adams has an average of 27 points per game, and Jack Jones trails with 26. There were 10 boys who lettered this year.

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