The major purpose of this study was to ascertain whether two patterns of writing practice dictation would produce different results in the development of shorthand writing achievement of Gregg Shorthand, Diamond Jubilee. The findings indicated that the rate pattern does not appear to affect the level of achievement in writing shorthand from dictation; therefore, shorthand teachers should have no hesitation in using the *aster practice pattern. Teachers should endeavor to assist students to set realistic goals that will permit continuous periods of success in writing shorthand from dictation. (Author)
A COMPARISON OF TWO PRACTICE PATTERNS USED FOR THE DEVELOPMENT OF SKILLS IN WRITING SHORTHAND DICTATION

By J. Lee Dye

Introduction and statement of the problem. One of the problems facing shorthand teachers is developing competent stenographers in the time allotted to shorthand instruction on an academic curriculum. Many students, because of other academic requirements or a late vocational goal decision, have only one year of shorthand instruction prior to vocational use.

Existing evidence indicates that only a small percentage of students who complete a one-year course in shorthand are vocationally competent to fulfill successfully the duties of a stenographer. Until multiple-channel dictation equipment became available for classroom instruction, teachers had difficulty providing various levels of dictation in the shorthand class. To use this equipment effectively to meet needs teachers must know the practice rates that will help students develop the skill of writing dictation in the most efficient manner.

Authorities differ as to the most appropriate speeds for dictation practice. Some writers believe that the students should be encouraged to practice at speeds below their three-minute dictation test rates; others feel that all the practice for speed building should be at least 20 to 40 words a minute above the rate the student is attempting to pass on a three-minute dictation test.

The problem with which the research study was concerned was to determine whether dictation development practice according to one rate pattern produced better results than practice at another rate pattern.
Purpose of the Study. The major purpose of the study as to ascertain whether the pattern of writing practice dictation at rates of 0 to 20 words per minute above the three-minute dictation test rate and the pattern of writing practice dictation at the rates of 20 to 40 words per minute above the three-minute dictation test rate would produce different results in the development of shorthand writing achievement of Gregg Shorthand, Diamond Jubilee.

A second purpose of the study was to ascertain whether the 0 to 20 or the 20 to 40 rate patterns used by the students for practice dictation had an effect on the students' attitudes toward the learning of shorthand.

A final purpose of the study was to determine whether the level of achievement on the shorthand dictation tests was significantly related to the students' attitudes toward the learning of shorthand.

The following five general attitude areas were analyzed:

1. Enjoyment the students expressed toward the learning of shorthand.
2. The speed level at which students preferred to take practice dictation.
3. Expressed adequacy of skill in writing shorthand from dictation as related to acceptance of an office position.
4. Future value the students expected to derive from the study of shorthand.
5. Improvement the students believed they had made in writing shorthand from dictation.

Hypotheses tested in the study. In order to determine the statistical significance of the data found in the study, the following null hypotheses were formulated tested:

1. There is no significant difference in the level achieved in writing
shorthand from dictation by the 0 to 20 practice pattern group and
the 20 to 40 practice pattern group.

2. There is no significant difference in the level achieved in writing
shorthand from dictation in either the 0 to 20 practice pattern group
or the 20 to 40 practice pattern group in relation to ability as de-
termined by the scholastic aptitude test.

3. There is no significant difference in the attitudes toward the learn-
ing of shorthand in the 0 to 20 practice group and the 20 to 40
practice pattern group.

4. There is no significant relationship between each of the areas on the
attitude inventory and the level of achievement on the shorthand
dictation tests.

Definition of terms. The following definition of terms were used in this
study:

Zero to 20 practice pattern refers to the rate pattern that was used for
practice dictation. When a student was attempting to develop skill in writing
shorthand from dictation to pass a three-minute dictation test, all dictation
practice for speed development during the week was from 0 to 20 words per
minute above the three-minute dictation test rate to be attempted on the next
dictation test. A repetitive dictation plan, with each step of the dictation
being approximately one minute in length, was used.

Twenty to 40 practice pattern refers to the rate pattern that was used for
practice dictation. When a student was attempting to develop skill in writing
shorthand from dictation to pass a three-minute dictation test, all dictation
practice for speed development during the week was from 20 to 40 words per
minute above the three-minute dictation test rate to be attempted on the next
A repetitive dictation plan, with each step of the dictation being approximately one minute in length, was used.

High and low ability subgroups were formed by ranking students on the basis of their college entrance SAT scores. The upper one-third of the students with the highest college entrance SAT scores within each practice pattern group comprised the 0 to 20 and the 20 to 40 high ability subgroups. The lower one-third of the students with the lowest college entrance SAT scores within each practice pattern group comprised the 0 to 20 and the 20 to 40 low ability subgroups.

Methods and Procedures. The investigation for this experimental research was limited to a study of two matched groups of 19 students each. All participants were Ball State University, Muncie, Indiana, freshmen shorthand students during the fall and winter quarters of the 1969-70 school year. Students were matched on the basis of the college entrance Scholastic Aptitude Test (SAT) scores and a shorthand dictation pretest. The difference in treatment between the two matched groups was in the rate patterns at which dictation was practiced.

The basic tests used to analyze the data were the following: the t test for the difference between means of the achievement level on the shorthand dictation tests, and the t test for the difference between means of expressed attitudes, the Pearson product-moment correlation for relationships between the attitudes and the level of achievement on the dictation tests, and t test for the significance of the correlations.

Summary of Findings. The results of the findings were summarized to each hypothesis tested.

Hypothesis 1. The data indicated that although 40 practice pattern group mean scores on the shorthand pretest were less than the
shorthand pretest mean score of the 0 to 20 practice pattern group, the 20 to 40 practice pattern group had a higher mean score on the level of achievement than did the 0 to 20 practice pattern group following each set of shorthand dictation tests. These differences were not significant; therefore, the first null hypothesis was not rejected.

Hypothesis 2. The data indicated that the high and low subgroups of the 20 to 40 practice pattern group (based on a scholastic aptitude test) had the same, as well as the highest, level of achievement on the shorthand dictation tests at the end of the study. The next highest level of achievement was made by the high subgroup of the 0 to 20 practice pattern group. The low subgroup of 0 to 20 practice pattern group had the lowest level of achievement of the four ability subgroups.

The data also indicated that the 20 to 40 practice pattern high ability subgroup mean score on the shorthand pretest was slightly less than the mean score of the 0 to 20 practice pattern high ability subgroup. Even so, following each set of shorthand dictation tests, the 20 to 40 high ability subgroup had a higher mean score on the level of achievement than did the 0 to 20 high ability subgroup.

The 20 to 40 practice pattern low ability subgroup mean score on the shorthand pretest was slightly greater than the mean score of the 0 to 20 practice pattern low ability subgroup. The 20 to 40 low ability subgroup had a higher mean score on the level of achievement than did the 0 to 20 low ability subgroup following each set of shorthand dictation tests. These differences between the levels of achievement attained on the shorthand dictation tests at various measurement periods of the study of the students of either high ability subgroup over the students of the other high ability subgroup, or by the students
of either low ability subgroup over the students of the other low ability subgroup were not significant; therefore, the second null hypothesis was not rejected.

**Hypothesis 3.** During the study there were significant differences between the expressed attitudes of the students of the 0 to 20 and the 20 to 40 practice pattern groups. At the start of the winter quarter the students of the 20 to 40 practice pattern group expressed a significantly more favorable attitude toward the study of shorthand than was expressed by the students of the 0 to 20 practice pattern group. At the middle and end of the fall quarter the students of the 20 to 40 practice pattern group expressed a significantly more favorable attitude toward the speed at which they preferred to take practice dictation than was expressed by the students of the 0 to 20 practice pattern group. Students of the 20 to 40 practice pattern group also expressed significantly more confidence in the adequacy of their shorthand dictation skill as related to acceptance of an office position than was expressed by the students of the 0 to 20 practice pattern group at the end of the fall quarter and the start of the winter quarter. The difference between the attitude mean scores for each of the five areas of the attitude inventory was not significant at either the start of the study or the end of the study; therefore, the third null hypothesis was not rejected.

**Hypothesis 4.** The correlations showed a fair degree of relationship between each area of the attitude inventory and the level of achievement on the shorthand dictation tests. At the end of the study the correlation between the level of achievement on the shorthand dictation tests, the attitude relating to the speed at which students preferred to take dictation practice, and the correlation between the level of achievement on the shorthand dictation tests and
and the attitude relating to the adequacy of shorthand dictation skill as related to acceptance of an office position showed a moderate to marked relationship. Throughout the study, the relationship between each of the five areas of the attitude inventory and the level of shorthand dictation achievement was significant; therefore, the fourth null hypothesis was rejected.

Conclusions. With the increasing emphasis on effective use of teaching time and media, teachers should use methods and procedures that will lead to the greatest progress in the development of skill in writing shorthand from dictation in the least amount of time. The following is a list of conclusions that were drawn from the study:

1. The rate pattern at which practice dictation is given in a shorthand class does not appear to affect the level of achievement in writing shorthand from dictation.

2. The rate pattern at which practice dictation is given in a shorthand class does not appear to affect the level of achievement in writing shorthand from dictation when related to the abilities of the students.

3. The rate pattern at which practice dictation is given in a shorthand class has no apparent overall effect on attitudes.

4. The attitudes of the students may affect their achievement in writing shorthand from dictation. It may be, however, that the level of achievement affects the attitudes of the students and accounts for the significant relationship that existed between attitudes and the level of achievement.

The results of the study indicated that the students were able to achieve equally well in writing shorthand from dictation by using either the 0 to 20 or the 20 to 40 practice pattern. Too, the study indicated that the teacher
may not need to be overly concerned that each student have a specific dictation rate for practice. The data also indicated that the teacher needs to be aware of the achievement level of each student, including aspirations and motivations, as student attitudes appeared to be related to achievement levels.

Recommendations. If the shorthand teacher is to prepare competent stenographers in the time available, innovative teaching methods must be employed. The following teaching implementations are recommended:

1. The 20 to 40 practice pattern was the faster of the two rate patterns used in this study and forced the student to practice at higher speed levels than did the 0 to 20 practice pattern. Teachers should have no hesitation, however, to use the 20 to 40 practice pattern since this pattern seems to be favorable to the learning of shorthand.

2. The attitudes of students toward the learning of shorthand appeared to be related to the level of achievement on the shorthand dictation tests; therefore, teachers should endeavor to help students set realistic goals that will permit continuous periods of success in writing shorthand from dictation.