

A COMPARATIVE STUDY BETWEEN THE  
EARLY-NEW-MATTER APPROACH AND THE WRITING APPROACH  
OF SHORTHAND INSTRUCTION AT SIDNEY SENIOR HIGH SCHOOL

by

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## CHAPTER I

### INTRODUCTION

Since the beginning of its existence, the teaching of shorthand has always been associated with the major problem of developing student competency in shorthand skills. Many teachers of shorthand have asked themselves this question: Have my shorthand students acquired the necessary skills in shorthand dictation and transcription for vocational competency after completion of the course? Too many times the answer to this question is "no".

This problem has been confronted many times by teachers and researchers alike:

Whether students who have completed a course in shorthand have enough competency in dictation for a stenographic position is also the subject of considerable controversy in the literature of business education. These controversies stem partly from disagreement on what is vocational competency, but they stem primarily on the amount of training necessary to obtain competency. (4:117)

To establish some point of reference in relation to what vocational competency is, Karaim stated:

Business education people, as a whole, are in accord with the premise that a minimum dictation skill of 100 words a minute should be attained before a person enters into an office situation. A doctoral dissertation by Green revealed that stenographers with 80 words a minute dictation skills were seldom advanced in a business office, whereas those with 100 or 120 words a minute skills were definitely of promotional caliber. (4:118)

Another reference is made to vocational competency by Moskovis when he states:

Research further indicates that only a small percentage of students who complete a one-year shorthand course are vocationally competent and that less than half of the students completing a two-year shorthand program are able to produce vocationally acceptable transcripts. (6:252)

The achievement level of stenographic graduates is generally quite low as is pointed out by Frink when she states:

In general, the achievement of stenographic graduates is considered low, and the findings of research tend to substantiate such a belief. Of those completing one year of instruction in the secondary school, from 11 to 20 per cent are reported capable of producing mailable transcripts from material dictated at 60 words a minute; of those completing two years, less than 50 per cent are reported capable of producing mailable transcripts from material dictated at 80 words a minute. (1:13)

The development of vocational competency will continue to plague shorthand teachers because shorthand, being the skill subject that it is and requiring the vocational competency that it does, will always necessitate that the students studying shorthand be able to consistently develop the required competency before application can be made in a job situation. This is very important because a large majority of the students studying shorthand do plan to use it in their attempt to find employment and in employment situations both now and in the future.

The existence of this problem has made it necessary that we, as shorthand teachers, first of all recognize the problem in its entirety and attempt to find a solution to the problem of developing the necessary competencies in our students to use shorthand in the jobs requiring shorthand skills.

#### Statement of the Problem

The problem in this study is to determine if either the early-new-matter approach or the writing approach of shorthand instruction at Sidney Senior High School shows that a higher level of competency in shorthand can be attained in a shorter period of time. There is generally a lack of methods and procedures used to develop this much needed high level of shorthand competency by the students who are studying shorthand. This is an attempt to find out if either of these two methods will sufficiently produce a high level of shorthand competency.

This problem is even more forcefully brought into focus when we begin to realize just how few of our students possess the necessary skills and competencies after completion of the shorthand course. In more instances than we like to admit, these students who have studied shorthand require additional training before they are sufficiently competent to use their skills on the job.

### Purpose

The major reason for conducting this study was to determine if there is any difference in the final outcomes of shorthand instruction when taught by the early-new-matter approach as compared to the teaching of shorthand by the writing approach. Specifically:

1. How do the results from teaching shorthand by these two methods compare in the speed with which the students can take dictation?
2. How do the results from teaching shorthand by these two methods compare in transcription speed and accuracy shown by the students?

In general it was an attempt to find a way to develop to the highest degree possible the skills required for vocational competency in the area of shorthand in the time that is allotted to a shorthand course. It was also an attempt to find some procedures in the teaching of shorthand which may be of value to the development of different aspects of shorthand which are encountered in the attempt to obtain the highest degree of shorthand competency.

### Design of Study

The data for this study was obtained by comparing the results achieved by the students who were taught by the writing approach of teaching shorthand and the results achieved by the students who were taught by the early-new-matter approach of teaching shorthand.

The reasons for selecting these two teaching approaches for this study were twofold. First, the writing approach was the method used by the investigator in all of his previous shorthand instruction; and secondly, the investigator was attempting to find a solution to the problem of developing vocational competency in the students studying shorthand.

The investigator's initial contact with the early-new-matter approach was in an Instructional Improvement in Vocational Business Education Workshop conducted at Montana State University by Dr. Allien R. Russon who developed this new approach to teaching shorthand. After completing this workshop, the investigator felt that this approach was a step in the right direction to developing in students a higher level of vocational competency in shorthand. This formulated the basis for conducting this study.

It seems appropriate at this point of the study to differentiate between the writing approach and the early-new-matter approach.

The first approach used in teaching shorthand was the writing approach. "This approach stresses the science of shorthand; that is, outlines are constructed after the rules have been learned." (9:10)

Characteristics of the writing approach as mentioned by Russon (9:10-11) are as follows:

1. Use of Rules. Knowledge of the rules of constructing outlines is considered important.



Usually the rule is presented, followed by words illustrating the application of the rule.

2. Use of Word Lists. Word lists are practiced extensively in the writing approach.
3. Early Introduction to Writing. Shorthand outlines are copied from the text on the second or third day of class instruction, usually.
4. Penmanship Drills. Penmanship is considered important in the writing approach. Special drills are practiced emphasizing the proportion of the strokes, relative size of the vowels, shorthand slant, and placement on the line of writing.
5. Vocabulary Tests. The student's ability to write accurate outlines is tested frequently. These tests may be given on words previously practiced or on new applications of rules that have been learned.
6. Use of Formal Reviews. Teachers using this approach often give formal review on previous lessons at regular intervals.
7. Extensive Reading and Writing. In this method the students are instructed to read and write certain letters in the text several times. They are not required to read and write as extensively as are students following the reading approach.
8. Varied Activities from the Beginning. From the first days of the shorthand course students perform many different activities. These activities include reading shorthand, copying shorthand plates from the text, recording practiced material from dictation, recording new-matter dictation, and transcribing plate material into longhand.
9. Homework. The writing approach emphasizes the spelling and reading of outlines as they are presented. This spelling and reading should be done aloud, both in class and for homework. In the writing approach there is one lesson assigned each day. The students spell and read the new outlines and write each outline. The connected matter is read and copied.

As was previously mentioned, Dr. Russon "developed the early-new-matter approach to the teaching of shorthand because it was believed that neither the reading nor the writing approach followed the known psychological principles of skill learning." (9:13)

The characteristics that differentiate the early-new-matter approach from the others are as follows:

1. Tracing. Tracing is demonstrated the third day of the shorthand course, using feather-weight onion-skin paper and a fine-point pen. The first two pages of the new lesson are traced in class, as the teacher and the students spell and read. After the demonstration, the class is instructed to trace the same lesson again and to turn in the onion-skin paper for homework. Tracing as a homework assignment is continued for six weeks. (9:14)
2. Automatization of Brief Forms with Folded Paper. As the second list of brief forms is presented, the students are instructed to fold a piece of typing paper into eight folds by folding it from the bottom to the top three times. The paper is then unfolded and the students write the two groups of brief forms in a column down the first fold, copying from their books, as the teacher dictates the brief forms slowly. When the two groups of brief forms are written, one below the other, in the first space, the students write the longhand transcription of each shorthand outline in a column in the second fold.

Next, the first column is folded back, leaving the column of longhand words visible. The students now write the shorthand for the brief forms as they read the longhand, checking with the book if necessary. Now the second column is folded back, leaving the shorthand column uppermost. Again, the students transcribe from shorthand to longhand as before. This procedure is continued until all eight spaces are filled. The paper is left folded, the student writing his name on the outside, and submitted as part of the homework assignment. (9:14)



3. Early-New-Matter Dictation. The day after the first folded paper is completed the teacher dictates the first new matter practice. As the vocabulary is nearly all taken from the first two lists of brief forms, the task is exceedingly simple. However, the class is highly motivated from being able to write the sentences as the teacher dictates them. Any word that is not a brief form is previewed, and the dictation rate is slow enough so that everyone is able to get it. The new-matter practice is taken Shorthand Dictation ABC's. (9:14-15)
4. Early 3-Minute Takes. A new letter, based on previously automatized brief forms, is dictated each day. By the end of the fourth week the class is ready for their first chance to pass. On Wednesday of the fourth week the teacher explains and demonstrates the mechanics of transcription. If typewriters are available for the beginning class, this demonstration and student trial is done with typewriters. If no typewriters are available, the mechanics of transcribing in longhand are demonstrated. (9:15)
5. Formal Review. Formal review begins with the twenty-first lesson. When the class is assigned Lesson 21 as a new lesson, it is also instructed to review Lesson 1. This procedure is followed for the remainder of the first semester, with the review lesson always twenty lessons back of the new lesson. The procedure for reviewing all of the lessons is described when the first review lesson is assigned. These steps are: (1) The words at the beginning of the review lesson are written several times to develop facility. (2) The last page of the lesson is practiced three times, skipping the lines. The student copies the continued matter by writing on every third line of his notebook. After all of the review matter has been written once, the student closes his textbook and writes on the first blank line beneath the shorthand, reading aloud from the shorthand as he writes. The third writing is the same: The student writes on the third line as he reads aloud from the second. (9:15)

In addition to the five procedures differentiating the early-new-matter approach, other procedures are similar to the conventional approaches. (9:15-16)

1. Reading and Spelling. For the first two weeks the class is instructed to spell and read all homework assignments. They also spell as they read in class for the first two weeks. Beginning with the third week spelling is dropped and the class reads in the usual manner.
2. Use of the Key. The key is used by the students when reading the lessons for homework.
3. Rules. Rules are explained but not emphasized. Certain students will always want to know why an outline is written as it is. A simple explanation when the new principle is presented is usually sufficient. No stress is placed on the rules nor are the students asked to memorize them.
4. Writing. While the class is tracing their lessons for homework, the teacher begins teaching the writing of shorthand in the notebook. On the third day of instruction the teacher demonstrates writing in the shorthand notebook. Some writing practice from the lesson is provided each day thereafter, the teacher dictating slowly and the class copying from their notebooks. Not more than five minutes is allotted to this activity.
5. Reading for Speed. A device used by most of the shorthand approaches is to read periodically as rapidly as possible. This practice helps to automatize the common words in the vocabulary. In the early-new-matter approach, the class reads for speed once a week. Every sixth lesson is assigned for reading only. The students are asked to read the lesson over and over until it can be read rapidly. The next day in class the students are timed for one minute as they read in pairs, one member reading and the other member checking.

In the early-new-matter approach homework assignments in the first semester follow this pattern: (9:22)

1. No homework is assigned the first day. Whatever is

presented on the first day is repeated the second day, and homework assignments begin on the second day.

2. The first two assignments are spelled and read twice.
3. The assignments from Lesson 3 through Lesson 20 are read twice and traced once.
4. Every two lessons of brief forms are automatized with the folded paper technique.
5. Beginning with Lesson 21, each new lesson is read once and either written or traced once. With this new lesson, a beginning lesson is reviewed.
6. The review assignment proceeds as follows: With Lesson 21 the class reviews Lesson 1; with Lesson 22 the class reviews Lesson 2, and so on. Each review lesson consists of writing the words at the beginning of each lesson several times to develop fluency and to write the last full page of the lesson three times skipping the lines.

In the second semester using the early-new-matter approach, "the homework assignment is similar to the review assignment in the first semester (except that the complete lesson is practiced)." (9:22) The class practices one lesson each day as follows: (9:22-23)

1. Theory words at the beginning of each lesson are automatized by writing from the key and checking with the shorthand plate. Words written incorrectly are practiced several times.
2. Continued matter in the lesson is written three times skipping the lines.
3. The fifth lesson in each group of five lessons may be read for speed and not written. Reading for speed is practiced by repeating readings against time.
4. Students who take dictation rapidly but have difficulty with transcription may be given an

alternate homework assignment. Instead of writing the continued matter three times, they might write the letters once in shorthand and then transcribe the homework lesson. Students electing the transcription homework assignment are asked to divide the time taken in transcribing into the total words transcribed and to attempt to improve their transcription rate each week.

As was observed in the material that was presented in the preceding section of the study, there is evidence that there are some very basic differences in the methods used in the study; however, in certain aspects they were also quite similar.

These two methods of teaching shorthand, the writing approach and the early-new-matter approach, were the methods used in the instruction of the shorthand students which were involved in this study.

#### Procedures

The population of this study was the two shorthand classes in the Business Education Department at Sidney Senior High School for the 1969-1970 school term. There was no selection of students for these classes as they were registered for the class that best fit their own particular schedules. After they had been in one of the classes for a period of time, they were not allowed to change to the other class even at semester time. However, there were several students that dropped from both classes because of various reason which will be mentioned later.

The classes, which were both taught by the investigator, were made up of junior and senior girls. Class I, which was taught by the writing approach, consisted of 16 students at the beginning of the year and was made up of 9 juniors and 7 seniors. Class II, which was taught by the early-new-matter approach, consisted of 17 students at the beginning of the year and was made up of 11 juniors and 6 seniors. Three students (2 juniors and 1 senior) dropped from Class I during the course of the year leaving a total of 13 students in this class. These three students dropped for various reasons: one because of a class conflict at semester time, one because she felt she was carrying an overload in her class work, and one dropped out of school. In Class II four students (2 juniors and 2 seniors) dropped from the class during the course of the year leaving a total of 13 students. The reasons given by these students for dropping the class were: one moved to another town, one needed an additional credit for graduation and this caused a class conflict, one dropped because she felt another class was of more benefit to her and one dropped because of poor grades. This left a total population of 13 students in each class.

There was no particular method used in determining which approach was to be used for which class. It was simply derived from the fact that the investigator chose to use the writing approach for Class I and the early-new-matter approach for Class II.



The classes used the same textbooks for both the first and second semesters. The textbook used was Gregg Shorthand, Diamond Jubilee Series, Text Edition by Gregg, Leslie, and Zoubek (1963) for all of the first semester and a few weeks of the second semester. For the remainder of the year Gregg Dictation, Diamond Jubilee Series by Leslie, Zoubek, and Strongy (1963) was the textbook used.

Most of the tests given to these two classes were different, but a brief form test and certain theory tests were given to both classes for comparison purposes at various times during the year.

An attempt was made to follow as closely as possible the specific characteristics of each approach as they were explained in detail in the previous section of the study. However, because of circumstances beyond the investigator's control, this was not always possible and variations had to be used at certain times.

### Writing Approach

Introduction of Each Lesson. In each of the theory lessons presented in the textbook (Lessons 1 - 48) the major emphasis was placed on the rules for constructing the outlines. Special emphasis was also placed on proportion of strokes, shorthand slant and placement on the line of writing because penmanship is an important factor in the writing approach. The steps that were followed in the presentation

of the lessons were as follows: (a) the rule was read (b) words were then written on the board applying the rules (c) at the end of the first week the students wrote the words in their notebooks, writing each word two or three times, as they were presented on the board (d) after each group of words was presented illustrating a rule, they were reviewed orally by spelling and reading the words on the board (e) after all the rules of any one lesson were presented, a composite review using oral spelling and reading of all words was made (f) when the rules and words were completed, the Reading and Writing Practice section of each lesson was covered in the same way, using the oral spelling and reading methods on the sentences in the first several lessons and progressing into longer and more difficult paragraphs and eventually an entire letter. After the third week the spelling was eliminated from this step.

The steps outlined in the preceding paragraph were also applied to the introduction of brief forms, phrases and special characters, such as time, weight and distance, etc.

The methods of presentation used for the remainder of the lessons in the first semester textbook and those completed in the second semester textbook were basically the same as those used for the first forty-eight lessons, except there were no new rules to be presented. The emphasis at that point was on reviewing the theory that had been studied.



Other procedures were also used in presenting the lessons which included such things as oral review of words from students' notebooks, one student reviewing entire groups of words and allowing students to read the rules.

An attempt was made to cover approximately one lesson each day, however, adjustments had to be made because of the existing circumstances. Sometimes we were faced with shortened class periods, reemphasizing certain parts of lessons or entire lessons and because of a large number of absences at any one time.

The review lessons, which was every sixth lesson, were presented in a similar way using the above mentioned steps.

Word Lists. At numerous times throughout most of the year this was a method used to practice penmanship and application of rules to various words. These were given quite regularly and used a small portion of the class period in which they were used. These lists were usually dittoed copies which were handed out to the students but at times they were given orally.

Writing. Writing was introduced very early in the year (end of the first week) and became a daily part of every lesson. At the beginning of the year it was used quite sparingly but became a major part of each lesson early in the course.

The writing that was done consisted of writing words.

from the board presentations, copying shorthand plates from the text both in class and as homework, recording practiced material from dictation with and without the use of the textbooks, recording new-matter dictation and writing in the workbooks used as supplementary materials.

Tests. Tests were given quite regularly and a variety of tests were used.

1. Standardized tests -- These tests were taken from the Gregg test booklet, Graded Transcribing Tests, Diamond Jubilee Series by Leslie and Zoubek (1964). These tests tested the students in both transcribing words and sentences as well as writing words and sentences in shorthand.
2. Brief Form tests -- These tests were used to test the student's ability to write the brief forms in shorthand. They usually consisted of all the brief forms that had been learned up to that point.
3. Teacher Prepared Theory and Vocabulary tests -- These tests primarily tested the student's ability to write words, sentences, and short paragraphs or letters in shorthand; also, some transcribing into longhand was involved in these tests.
4. Dictation tests -- These were used primarily in the second semester to determine the student's abilities to transcribe from their own shorthand notes. These tests involved both word lists as well as letter materials.

Formal Review. There were formal reviews used on the previous lessons at regular intervals throughout the entire year.

Reading. Reading was done quite extensively both in and out of class. The in class reading was from board presentations and materials in the textbooks. The out of class reading was from the textbooks as homework assignments.

Dictation and Transcription. Approximately four weeks into the course, dictation was introduced in a very limited way. It consisted of dictating at a slow rate sentences or paragraphs from the textbook as the students wrote from dictation using their shorthand plates when necessary. Gradually, the dictation was taken without the use of the textbooks and from easy new-matter material.

Early in the second semester, dictation for speed was started. The letters averaged from two to five minutes in length and were entirely on new but previewed material taken from the following two dictation books: (1) Dictation for Transcription, Diamond Jubilee Series by Leslie and Zoubek (1963) and (2) Speed Dictation with Previews in Gregg Shorthand, Diamond Jubilee Series by Zoubek (1963). The dictation for speed was a major part of every class period except those days in which tests were administered.

The dictation for speed was started at a speed of 40 words a minute and progressed upward at 10 word intervals. Dictation at in-between speeds was not given except for practice. The students were required to transcribe two letters at any one speed with 95 percent accuracy before they were given credit for that particular speed. They were, however, prompted to take the dictation at the other speeds for practice if nothing else. They were also told that if they did well enough on a take at a higher speed they should attempt

to transcribe it and if they transcribed it within the allowable error limit they were given credit for that speed.

Punctuation and paragraphs were usually dictated as a part of the letter.

Most of the transcription was done in longhand because of overcrowded, limited facilities. The transcription that was done on the typewriters had to be done outside of class time and either longhand or typewritten transcripts were accepted. They were required to turn in their transcripts by the end of the class period if it was at all possible and definitely no later than 4:30 on the day that the dictation was given. Even though they were done in longhand they were required to follow the correct transcription procedures and to follow a set style of letter. They were allowed to choose between the block and modified block style of letter. The transcripts were corrected by the instructor. All errors--punctuation, spelling, paragraphs, incorrect words and letter placement--were checked on the transcripts which were handed in.

Homework. The homework in the writing approach consisted of daily written lessons, reading and studying the next day's lesson and the workbook lesson corresponding to the lesson completed for that day. The workbook used was the one that corresponds with the textbook; and there was a workbook used during both semesters.

Supplementary Information. All supplementary information presented in the textbook was studied in class and the students were occasionally quizzed on these items. This information included such things as vocabulary words, spelling, punctuation, similar words drills, grammar, word roots, sentence structure, etc.

#### Early-New-Matter Approach

The use of the early-new-matter approach in teaching shorthand is much facilitated by using Shorthand Dictation ABC's by Dr. Allien R. Russon. The material in this book is presented in such a way that it is very easy to follow and use.

Introduction of Each Lesson. The basic procedures used in presenting the lessons of this approach were quite similar to those used in the writing approach except for these differences: (a) rules were explained but not emphasized or stressed (b) no formal penmanship practice was given (c) much more emphasis was placed on brief forms and (d) dictation from new-matter was introduced at a much earlier point in the course, as it was introduced during the second week.

In the early-new-matter approach an attempt was made to cover one lesson per day; however, this was not always feasible for various reasons explained in the writing approach.

Tracing. Tracing was demonstrated and started on the third day of class. It involved the procedure discussed in

explaining the characteristics of the early-new-matter approach. Tracing was used as an in class procedure and also as a daily homework assignment to be turned in. Tracing was used for approximately six weeks.

Writing. On the third day of class the procedure for writing shorthand in their notebooks was explained. After this explanation, the students wrote in their notebooks from dictation given by the teacher as a part of every days lesson from then on.

Reading for Speed. This is used to automatize common words in the vocabulary. It was used on every sixth lesson in the textbook and used once every week.

"The students are asked to read the lesson over and over until it can be read rapidly. The next day in class the students are timed for one minute as they read in pairs, one member reading and the other member checking." (9:16)

Automatization of Brief Forms with Folded Paper. This procedure, explained in the characteristics of the early-new-matter approach earlier, was used at the beginning of the second week, after completion of Lesson 5 and the second group of brief forms. This device was used after each two groups of brief forms and continued until all brief forms were studied. As these were completed they were handed in as a part of the homework assignment.

Early-New-Matter Dictation and 3-Minute Takes. On the first day after the folded paper exercise the first new



matter dictation practice taken from Shorthand Dictation ABC's by Dr. Allien R. Russon was given. The material is primarily made up of the brief forms used in the folded paper exercise and any words that were not brief forms were previewed. The dictation was slow enough so that most everyone was able to get it quite easily. The early dictation was given at a speed of 20 words a minute while the 3-minute takes started at 30 words a minute.

When the early-new-matter dictation was started at the beginning of the second week, it consisted of a new letter dictated each day which was based on previously automatized brief forms. These letters are not transcribed but were read back in class by one or more of the students. Towards the end of the fourth week the students were given their first chance to pass. These consisted of the 3- and 5-minute takes that were transcribed at the end of each week and were referred to as chances to pass rather than tests. The speeds of these takes were announced as they were given. These transcripts were corrected and the goal was 95 percent accuracy. At the end of the grading period, the three best takes are averaged for their final rate.

The students were pushed to increase their speed by permitting only three passing takes at each speed. The material in Russon's book Shorthand Dictation ABC's is presented in such a way to make this a very convenient book in teaching shorthand by the early-new-matter approach.

Formal Review. At the time Lesson 21 was assigned, the students were also told to review Lesson 1. This procedure was followed for the rest of the first semester, with the lesson to be reviewed always twenty lessons behind the current lesson. The procedure used in reviewing the review lesson was explained in the section listing the characteristics of the early-new-matter approach.

Tests. As was mentioned earlier, tests were given in dictation and transcription but were referred to as chances to pass. However, early in the course some teacher prepared theory and vocabulary tests were administered, primarily for the purpose of comparison with results obtained on the same tests given to the class being instructed by the writing approach. Also, after all the brief forms had been automated, a comprehensive test on brief forms was given for comparison purposes.

Transcription. The transcription primarily used were the weekly chances to pass. Towards the end of the second semester the transcription of longer takes (5-minute) were used and also the transcription of mailable letters against time were given; however, not enough of them were given to establish a justified transcription rate.

Because of the number of low ability level students in this class and their absenteeism rate, both of which will be shown later, this class did not progress as rapidly in the

transcription process as was suggested by Dr. Russon in using the early-new-matter approach of teaching shorthand. It was because of this reason that we did not become involved with Transcription Speed Tests and Production Tests except only as an introduction to them and very limited practice in these particular areas.

Homework. The homework procedures for the early-new-matter approach was explained earlier in the study. In addition to that, other homework assignments consisted of tracing, automatized brief forms, and various other writing assignments from the lesson being studied. Also, the assignment to read and study the next day's lesson was made. As the students read for homework and to some degree in class, they were allowed to use the key.

Supplementary Information. All supplementary information presented in the textbook was studied in class and the students were occasionally quizzed on these items. This information included such things as vocabulary words, spelling, punctuation, similar words drills, grammar, word roots, sentence structure, etc.

Because the procedures and methods used in the early-new-matter approach of teaching shorthand are relatively new and are introduced quite rapidly at the beginning of the course it seems appropriate to outline the activities of the first four weeks.

TABLE I

AN OUTLINE OF THE FIRST FOUR WEEKS  
SHOWING THE APPLICATION OF THE EARLY-NEW-MATTER APPROACH

| Week   | Day | Lesson | Presentation of<br>New Material                                              | Homework*                                                                               |
|--------|-----|--------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| First  | 1   | 1      | Introduce Lesson 1                                                           | No Homework<br>assigned<br>Read and spell<br>Lesson 1 twice<br><br>Trace lesson<br>once |
|        | 2   | 1      | Repeat Lesson 1                                                              |                                                                                         |
|        | 3   | 2      | Present Lesson 2                                                             |                                                                                         |
|        | 4   | 3      | Explain tracing                                                              |                                                                                         |
|        | 5   | 4      | Introduce writing                                                            |                                                                                         |
| Second | 1   | 5      | Explain speed reading<br>Folded paper (brief<br>forms)                       | Folded paper for<br>brief forms<br>Reading for<br>speed                                 |
|        | 2   | 6      | Reading for speed<br>New matter dictation                                    |                                                                                         |
|        | 3   | 7      |                                                                              |                                                                                         |
|        | 4   | 8      |                                                                              |                                                                                         |
|        | 5   | 9      |                                                                              |                                                                                         |
| Third  | 1   | 10     | Reading for speed                                                            | Omit spelling<br>from reading                                                           |
|        | 2   | 11     |                                                                              |                                                                                         |
|        | 3   | 12     |                                                                              |                                                                                         |
|        | 4   | 13     |                                                                              |                                                                                         |
|        | 5   | 14     |                                                                              |                                                                                         |
| Fourth | 1   | 15     | Introduce transcription<br>Reading for speed<br>Transcribe 3-minute<br>takes |                                                                                         |
|        | 2   | 16     |                                                                              |                                                                                         |
|        | 3   | 17     |                                                                              |                                                                                         |
|        | 4   | 18     |                                                                              |                                                                                         |
|        | 5   | 19     |                                                                              |                                                                                         |
| Fifth  | 1   | 20     | Introduce formal review                                                      | Review Lesson 1<br>Review Lesson 2                                                      |
|        | 2   | 21     |                                                                              |                                                                                         |

\*Each new homework assignment is in addition to other  
homework. (9:17)

### Delimitations

This study was limited to those students registered in the shorthand classes at Sidney Senior High School for the 1969-1970 school term. The students being instructed in the early-new-matter approach did not exactly follow through on the area of transcription as was suggested by the author of this approach because of the reasons which were explained earlier.

The research completed for the related literature in this study was limited to the materials and publications found in the library located on the Montana State University campus.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

In reviewing the current literature at the library on the Montana State University campus in an attempt to find studies that have been done which were related to the development of vocational competency in shorthand, it was discovered that in reality few studies or other reviews have been undertaken that inclusively used either the writing approach or the early-new-matter approach. One such study that was reviewed was done by Kenneth B. Settle at the University of Cincinnati Teachers College in 1961 in which the Writing Approach was compared to the Reading Approach. The summarization of this study is given later in this chapter.

As was stated before, there is generally a lack of related research which has been done in the area of shorthand. In an article by Mildred Hillestad she points this out.

Relatively little research has been done in the area of shorthand learning, but interest seems to be on the upswing. In the last few years, several studies have investigated learning and teaching problems and procedures, the shorthand systems themselves, and the relationship between knowledge of shorthand principles and achievement in shorthand. (3:23)

This lack of literature regarding either of these two approaches further emphasized and pointed out the need for a study of this type, and it was on this premise that the investigator was further prompted to do this research.



During the course of reading the related literature in an attempt to review past research done in this area, even though little directly related research was encountered, several studies have been made which involved various characteristics of one or both approaches which were indirectly related to them. Therefore, the investigator felt that these indirectly related studies would show how some of the individual parts or characteristics of these approaches have been researched and some of the conclusions that have been formulated by the studies. It may also serve as additional reference to the conclusions that will be made from this study.

The following are brief summarizations of these aforementioned studies. An attempt is made to show the particular characteristic of either approach involved in the study, the conditions under which they have been researched, and the conclusions which have been formed. Also, any recommendations which were made and are of importance to this investigator's study will be shown. Although some of the research studies have been made at the college level, the investigator felt that they were important enough to his study to include them in the summarizations.

#### The Relative Effectiveness of Two Methods of Teaching Gregg Shorthand

The only literature encountered that involved one of the two teaching approaches researched in this study was the

study done by Kenneth B. Settle at the University of Cincinnati Teachers College in 1961. In this study he compared the results of two first-year shorthand classes with one class being instructed by the writing approach and the other class by the reading approach. The major purpose of his study was an attempt to find an answer to this question:

Does the teaching of shorthand by means of reading exercises during the first twenty class meetings result in an achievement significantly different from the teaching of shorthand by means of writing exercises introduced after only two class meetings devoted to reading exercises? (11:4296)

The study was conducted three times during the years of 1957-58, 1958-59, and 1959-60 in which control classes, those taught by the writing approach, and experimental classes, those taught by the reading approach, were compared in terms of achievement in shorthand dictation, knowledge of principles and rules of writing Gregg shorthand and the relationship between these two items.

The time at which the writing of shorthand symbols was introduced was the only variable involved in the teaching methods of this study. In the control classes, writing of shorthand was started during the third class meeting. In the experimental classes the major classroom activity during the first twenty lessons was the reading of shorthand. After the writing was introduced in both groups the teaching procedures were identical. One hundred hours of classroom

instruction was given both groups.

On the basis of his findings Settle (11:4297) made the following conclusions:

1. Final shorthand dictation achievement of students taught by the reading approach method was slightly higher than students taught by the writing approach method. The small, differential achievement became statistically significant only when the three replications were combined.
2. Differences in achievement in knowledge of the rules and principles of writing Gregg shorthand were not statistically significant for either teaching method.
3. Both teaching methods used in this study contain strengths and weaknesses which tend to negate the practical importance of the small differential achievement in favor of the reading approach method.
4. Findings of this study do not provide a basis for strong endorsement of either teaching approach.

In summary, the study done by Kenneth B. Settle did not show a significant achievement difference in the results obtained from shorthand classes instructed by the writing approach when compared to the results of teaching shorthand by the reading approach.

#### A Classroom Investigation of When to Begin New-Matter Dictation in Gregg Shorthand

In 1966 Bobbye Sorrels Persing made a study in the beginning shorthand classes at Central State College, Edmond, Oklahoma, during three consecutive semesters to determine if new-matter dictation should be started early or after the completion of the theory of shorthand.

Groups were randomly established and were determined, through chi-square and Fisher exact probability testing, to be equal (at the .05 level), measured by ages, collegiate grade point averages, and ACT Composite and English national percentile rankings. (7:56)

All groups were taught and tested in the same way except one group was exposed to the early and continued training in new-matter dictation.

The findings of this study which has implications for the research being done by the investigator are:

Comparative chi-square and Fisher exact probability tested results for the classroom investigation for the semester considered singly and in combination showed that there was no significant difference (.05 level) in achievement in theory, familiar-matter dictation, and new-matter dictation. Therefore, because there was found no definite conclusion, the recommendation is that each shorthand teacher should be aware of the merits of the arguments and employ in optimum fashion those procedures which prove pragmatically best for him. (7:56-57)

According to this study, although no definite conclusions were found, the indication was that there was no real definite reason to begin new-matter dictation early or wait until the shorthand theory had been taught. The recommendation made was for each teacher to use the method that best suited their own situations.

An Experiment to Determine the Effect of the Early  
Introduction of New-Matter Dictation in the Teaching  
of Beginning Shorthand to College Students

A study was made at Michigan State University by  
Margaret A. McKenna in 1966 and one of the purposes of her

study was "to determine the effect of the early introduction of new-matter dictation on the performances of a group of beginning shorthand students." (5:21)

The sample used for the study were 33 Michigan State University students enrolled in two sections of Beginning Shorthand I and Beginning Shorthand II. None of the students had any previous experience in shorthand.

The procedures used by McKenna (5:21) in conducting this study were as follows:

Section I was taught by a language-arts approach with no writing until the students had completed three chapters of the textbook, automatization of responses without knowledge that there are rules governing the construction of shorthand outlines, and no new-matter dictation until the completion of all shorthand theory.

Section II was taught by a science-type approach with students writing, after the completion of the first chapter in the textbook, rules for outline construction, presented after the students were familiar with the alphabet and joinings, and new-matter dictation beginning in the eighth class period.

Scores from two theory tests and a series of dictated letters at speeds of 60, 80, and 100 words a minute were used to compare the two sections.

The findings of this study can be summarized as follows:

1. There was no statistically significant difference found between the two groups in achievement on either the dictation tests or on the two theory tests.
2. The shorthand or transcription errors made on the test by the two groups showed no statistically significant difference.
3. Transcription achievement as measured by the dictation tests correlated with knowledge of theory



as measured by word tests in each section and in the two sections combined.

The following conclusions were drawn from an analysis of the findings of the study by McKenna (5:22-23):

1. That the early introduction of new-matter dictation does not result in an increase nor does it retard students in the ability to take and transcribe new-matter dictation as measured by the existing departmental standards at Michigan State University.
2. That this study provides no evidence to suggest either postponed benefits or postponed handicaps due to the early introduction of new-matter dictation.
3. That the students taught by the functional method do not differ in knowledge of theory as measured by word tests from students taught by a science-type approach.
4. That there is a relationship between transcription achievement as measured by the ability to take dictation and transcribe accurately and knowledge of theory as measured by word tests.

As has been shown by the last two studies summarized up to this point, it is concluded that there is no evidence either for or against starting new-matter dictation early or delaying the new-matter dictation until the completion of shorthand theory.

A Study to Compare the Achievements Attained  
in Two Methods of Teaching Gregg Shorthand--  
the Theory Approach Versus the Nontheory Approach

The purpose of a study done by Carolyn O. Schloemer in 1962-1963 at Watertown High School, Watertown, Wisconsin, was to determine if either the theory or nontheory teaching approach in beginning shorthand will produce better results.



The pairing in the two beginning shorthand classes was based on grade point average. The nontheory class consisting of 24 students taught by the functional method with "all reading and writing done in context, no drills on isolated outlines were used, and no word list tests were given." (10:52) The comparisons between the two classes at the end of the first semester were made in achievement on three minutes of practiced material and the results of 100-word theory tests. At the end of the second semester the comparisons were made on the basis of achievement on three minutes of new-matter dictation and the results of 100-word theory tests.

The findings of this study as determined by Schloemer (10:52) were:

1. The two classes were able to take practiced dictation at almost identical speeds of 60 words a minute or more at the end of the first semester.
2. High dictation speeds of 100 words a minute on new-matter dictation were attained by students in both classes.
3. Adequate dictation speeds on new-matter dictation were attained by the majority of students in each class.
4. Students in the theory class were able to write more accurate outlines on 100-word theory tests given at the end of the first and second semesters.
5. The study seemed to indicate that, when two classes are taught by the same teacher, neither approach to teaching beginning shorthand is superior to the other.

The results of this study are especially noteworthy because of the very close relationship to the study of the

investigator. It will be of particular interest to compare the results of this study to those obtained by the investigator in his study.

The Relationship Between Competency in Shorthand  
Accuracy and Achievement in Shorthand Dictation

A study was made by Joe Milton Pullis at North Texas State University in 1966 to determine the relationship between "(a) competency in shorthand accuracy and achievement in shorthand dictation and (b) competency in shorthand accuracy and measured intelligence." (8:1206-A)

The procedures used in this study involved administering to the 135 students enrolled in four levels of shorthand instruction a word list test of 200 words at the end of each three weeks' interval beginning with the ninth week of the semester; and unfamiliar, three-minute nonpre-viewed dictation tests, ranging from 50 to 140 words a minute at the end of each week beginning with the twelfth week.

The findings of the study strongly indicated that there was a significant relationship between one's ability to construct accurate shorthand outlines and success in shorthand as measured by achievement in shorthand dictation.

As a result of this study Pullis (8:1206-A) concluded that:

1. Shorthand dictation achievement is significantly related to the student's ability to construct accurate shorthand outlines.

2. Shorthand transcription ability is significantly related to the student's ability to construct accurate shorthand outlines.
3. Shorthand dictation achievement is significantly related to shorthand transcription ability.
4. Though shorthand transcription ability is significantly related to achievement in shorthand dictation, it is the student's ability to construct accurate shorthand outlines which enable him to transcribe the outlines which he has written.
5. At the college level, neither the student's shorthand accuracy, shorthand transcription, nor shorthand dictation achievement is significantly related to his intelligence quotient.

From this study it can be decided what relationships exist between shorthand dictation achievement, shorthand transcription ability, student's ability to construct accurate shorthand outlines and measured intelligence quotient. It may formulate some ideas as to what aspects in shorthand should be emphasized in order to obtain definite results in another area of shorthand.

#### Factors Affecting Achievement in Shorthand

In 1965 Berle Haggblade made a study of 232 seniors from 13 California high schools who were in their fourth semester of shorthand to examine the relationship of achievement in shorthand to certain selected factors.

There were 11 factors that Haggblade (2:222-223) used as a basis to study the relationship to shorthand achievement.

These factors were the following:

1. Ability to write theoretically correct shorthand outlines for high frequency words.

2. Ability to write theoretically correct shorthand outlines for brief forms.
3. Phrasing ability.
4. Quality of shorthand penmanship.
5. Dictation taking speed.
6. Ability to write theoretically correct shorthand outlines for words falling outside the high frequency list.
7. Typewriting speed.
8. Typewriting accuracy.
9. Transcription speed.
10. Transcription accuracy.
11. Shorthand reading ability.

A series of specially constructed tests was administered to provide the basis of studying the relationship of these factors to shorthand achievement. After the analysis of the data had been made, Haggblade (2:223) made the following conclusions and recommendations:

1. Students using theoretically correct outlines in high frequency words are the best achievers.
2. Phrasing ability and quality of penmanship have low relationships to shorthand achievement.
3. Students who take dictation at higher speeds also transcribe faster and more accurately.
4. Transcription speed is highly related to achievement in shorthand.
5. There is a high degree of interrelationship between transcription speed and the ability to read shorthand.
6. It is recommended that theoretically correct shorthand outlines should be stressed in class.

7. Some class time should be devoted to developing the ability to take dictation at high speeds.
8. There should be a great deal of emphasis placed on the development of transcription skill in shorthand classrooms.

This study gives us a good basis on which to form some ideas and points out some areas of shorthand instruction which should be emphasized to obtain achievement in shorthand which is our ultimate goal. In the conclusions and recommendations of his study, Haggblade offers some areas which, in order to attain high achievement and eventually vocational competence in shorthand, should be stressed and emphasized in shorthand instruction.

A number of other studies and articles in the area of shorthand instruction were reviewed, but only the ones that the investigator felt were pertinent to his study were summarized in this chapter.

Even of those studies which were summarized, only one was directly related to either the writing or early-new-matter approach. The other summarizations indirectly involved various facets which were used in the two approaches researched by the investigator. They served to show how they affect shorthand achievement when studied in relationship to some other factors and under different conditions. The results of these studies may indicate to some degree the effect these particular characteristics will have on this study when incorporated in either the writing or early-new-matter approach.

### CHAPTER III

#### PRESENTATION OF DATA

Before presenting any data, the investigator feels that there are two items which must be shown to represent a true picture of the results obtained in his study. It was felt that these two items, namely ability level of the students and absenteeism rate of the students, played a definite role in the final outcomes of this study.

#### Ability Level

The ability level of the students presented in Table II are the percentile bands of each student taken from the School and College Ability Test (SCAT) which was administered to them during their junior year in high school. This means that the juniors involved in the study had taken this test earlier in the current year; and the seniors had taken this test in the previous year.

The scores from this test were selected for two reasons: (1) the guidance counselor at Sidney Senior High School indicated to the investigator that it was a fairly reliable and valid source of testing student ability, and (2) the majority of the students in this study had taken this test at one time and was shown on their permanent records. The percentile band shown for each student in Table II is computed on the total scored on the test rather than on any one part of the test.



TABLE II  
THE PERCENTILE BANDS OF STUDENT ABILITY ACCORDING  
TO THE SCHOOL AND COLLEGE ABILITY TEST

| STUDENT | PERCENTILE BAND<br>CLASS I | PERCENTILE BAND<br>CLASS II |
|---------|----------------------------|-----------------------------|
| A       | 53 - 65                    | 30 - 42                     |
| B       | 42 - 53                    | 93 - 96                     |
| C       | 79 - 87                    | 79 - 87                     |
| D       | 65 - 75                    | 25 - 36                     |
| E       | 36 - 47                    | 59 - 70                     |
| F       | 53 - 65                    | 30 - 42                     |
| G       | *                          | 30 - 42                     |
| H       | 70 - 79                    | 70 - 79                     |
| I       | 97 - 99                    | 79 - 87                     |
| J       | 59 - 70                    | 65 - 75                     |
| K       | 53 - 65                    | 59 - 70                     |
| L       | 93 - 96                    | 84 - 90                     |
| M       | 87 - 93                    | 59 - 70                     |

\*This student had no record of this test in her files.

The average percentile band was approximately 7 percent higher in Class I than in Class II. The percentile band for Class I was 65.58 - 74.88; while for Class II it was 58.92 - 68.23. The difference in the ability of the two classes was not too great; however, when this ability level is compounded with the absenteeism rate (shown in Table III)

of the two classes the investigator felt that it played a significant role in the results found in the comparison of the two teaching approaches.

#### Absenteeism Rate

The absenteeism rate in Class II was much higher than that of Class I (shown in Table III).

TABLE III

THE ABSENTEEISM AND TARDINESS RATE OF EACH STUDENT IN CLASS I AND CLASS II

| STUDENT | CLASS I                |          | CLASS II               |          |
|---------|------------------------|----------|------------------------|----------|
|         | No. of Times<br>ABSENT | TARDY    | No. of Times<br>ABSENT | TARDY    |
| A       | 14                     | 1        | 26                     | 0        |
| B       | 6                      | 0        | 23                     | 0        |
| C       | 10                     | 0        | 13                     | 0        |
| D       | 3                      | 4        | 6                      | 0        |
| E       | 6                      | 1        | 9                      | 2        |
| F       | 7                      | 0        | 45                     | 1        |
| G       | 2                      | 1        | 1                      | 1        |
| H       | 10                     | 1        | 1                      | 0        |
| I       | 8                      | 0        | 4                      | 0        |
| J       | 0                      | 0        | 7                      | 1        |
| K       | 1                      | 1        | 1                      | 0        |
| L       | 7                      | 1        | 6                      | 0        |
| M       | <u>4</u>               | <u>0</u> | <u>25</u>              | <u>0</u> |
| TOTALS  | 78                     | 10       | 167                    | 5        |

As is shown in Table III, the absenteeism rate of Class II was more than twice that of Class I. In Class I there was only a composite total of 78 days missed by the 13 students, which amounted to an average of 6 days missed per student, which is within reason. In Class II there was a composite of 167 days missed by the 13 students, which amounted to an average of 12.8 days missed per student, which is somewhat high. However, this average was raised considerably by students A, B, C, F, and M which missed 26, 23, 13, 45, and 25 days respectively. The differences in the tardinesses was negligible.

Combining the differences between the two classes in relation to ability level and absenteeism rate, it is quite possible that they did have an effect on the results obtained. Regardless of how much effect they did have on this study, they cannot be neglected.

#### Comparative Test Results

Throughout most of the year, the tests that were given to the classes were different; however, as was indicated earlier, some tests were given to both classes for the purpose of comparison. The tests that were given to both classes consisted of the following: complete brief form test, complete theory test, one teacher prepared test which was given after the theory of shorthand was completed (included both transcription and writing in shorthand) and two theory tests of selected words.

The results of these tests are shown in the following tables, and in all cases they are shown in terms of percentage scores. Most of the tests were administered during the first semester.

#### Brief Form Test

The brief form test which was administered was standardized in form with all brief forms given and the students completing the test by writing them in shorthand. There were a total of 148 brief forms and brief form derivatives included in the test

TABLE IV  
COMPARATIVE RESULTS OF BRIEF FORMS TEST

| STUDENT | CLASS I | CLASS II |
|---------|---------|----------|
| A       | 99      | 47       |
| B       | 93      | 100      |
| C       | 98      | 99       |
| D       | 91      | 95       |
| E       | 82      | 91       |
| F       | 90      | 91       |
| G       | 99      | 97       |
| H       | 93      | 97       |
| I       | 99      | 99       |
| J       | 95      | 97       |

TABLE IV (CON'T)

| STUDENT | CLASS I | CLASS II |
|---------|---------|----------|
| K       | 95      | 97       |
| L       | 96      | 98       |
| M       | 98      | 95       |

The comparative results on the complete brief forms test were very similar as is shown by the preceding table. The average score in Class I was 94.6% while in Class II it was 92.9%. The percentage of all scores was quite high, with two exceptions: Student E with 82% in Class I and Student A with 47% in Class II. The scores in Class I ranged from a high of 99% to a low of 82% compared to a high of 100% to a low of 47% in Class II.

#### Complete Theory Test

The complete theory test which was administered was standardized in form with all theory words given and the students completing the test by writing them in shorthand. The theory test consisted of at least one example of every rule studied in the theory section of the course. The test consisted of 108 theory words.

TABLE V  
COMPARATIVE RESULTS OF COMPLETE THEORY TEST

| STUDENT | CLASS I | CLASS II |
|---------|---------|----------|
| A       | 81      | 20       |
| B       | 70      | 82       |
| C       | 78      | 93       |
| D       | 56      | 58       |
| E       | 69      | 42       |
| F       | 54      | 45       |
| G       | 91      | 61       |
| H       | 68      | 62       |
| I       | 92      | 62       |
| J       | 68      | 71       |
| K       | 80      | 56       |
| L       | 76      | 73       |
| M       | 84      | 41       |

The comparative results in the complete theory test showed a much larger difference in scores with Class I scoring much higher on the average. The average score in Class I was 74.5% as compared to 59.5% in Class II. On the theory test the high in Class I was 92% and the low was 54%. In Class II the range was from a high of 93% to a low of 20%.

Teacher Prepared Theory Test

This test was prepared by the investigator and was



administered upon completion of the theory lessons. It included a variety of words testing various rules of theory and tested both the ability to transcribe from shorthand to longhand and writing shorthand outlines for words presented in longhand. The theory words included were all from the theory lessons presented in the textbook. The test was composed of 100 such words with transcription and writing in shorthand presented approximately in equal proportions.

TABLE VI  
COMPARATIVE RESULTS OF THE TEACHER PREPARED THEORY TEST

| STUDENT | CLASS I | CLASS II |
|---------|---------|----------|
| A       | 95      | 26       |
| B       | 78      | 89       |
| C       | 79      | 93       |
| D       | 63      | 73       |
| E       | 65      | 72       |
| F       | 69      | 54       |
| G       | 97      | 72       |
| H       | 78      | 71       |
| I       | 92      | 78       |
| J       | 67      | 79       |
| K       | 78      | 74       |
| L       | 76      | 86       |
| M       | 94      | 45       |

The comparative results obtained from the teacher prepared theory tests were somewhat closer than the standardized theory tests; however, Class I still did comparatively better with an average of 79.3% compared to 70.8% in Class II. In Class I the high was 97% with a low of 63%. The high in Class II was 93% and the low was 26%.

#### Theory Tests of Selected Words

These two tests were standardized tests taken from the Gregg Tests and Awards Booklet for 1969-1970. They were the tests listed for Sept/Oct and Nov/Dec and consisted of 100 selected words and phrases each. The words were dittoed off and the students completed the tests by writing the words in shorthand.

TABLE VII

COMPARATIVE RESULTS OF THE TWO THEORY TESTS OF SELECTED WORDS

| STUDENT | T E S T I |          | T E S T I I |          |
|---------|-----------|----------|-------------|----------|
|         | CLASS I   | CLASS II | CLASS I     | CLASS II |
| A       | 73        | 35       | 80          | 23       |
| B       | 72        | 84       | 81          | 87       |
| C       | 85        | 90       | 82          | 93       |
| D       | 61        | 74       | 73          | 72       |
| E       | 72        | 40       | 71          | 29       |
| F       | 56        | 66       | 55          | 60       |
| G       | 92        | 69       | 93          | 64       |

TABLE VII (CON'T)

| STUDENT | T E S T I |          | T E S T I I |          |
|---------|-----------|----------|-------------|----------|
|         | CLASS I   | CLASS II | CLASS I     | CLASS II |
| H       | 76        | 72       | 77          | 82       |
| I       | 88        | 64       | 88          | 68       |
| J       | 64        | 73       | 70          | 72       |
| K       | 81        | 64       | 81          | 81       |
| L       | 81        | 81       | 84          | 82       |
| M       | 86        | 57       | 77          | 57       |

The comparative results obtained from the theory tests of selected words again very conclusively showed that in both tests Class I did considerably better. The averages for Class I were 76.1% on Test I and 78.8% on Test II. This was substantially better than the 67.1% on Test I and 67.8% on Test II for Class II. In Test I the range for Class I was from a high of 92% to a low of 56%. In Test I the range for Class II was from a high of 90% to a low of 35%. Test II showed a high of 93% and a low of 55% for Class I; compared to a high of 93% and a low of 23% for Class II.

In general it can be said that the comparative scores for all tests showed a marked difference in favor of Class I, with one exception and that was the complete brief forms test in which the scores were quite similar. Still the difference, slight as it was, is in favor of Class I. In conclusion it

can be stated that students being instructed by the writing approach did consistently better on the theory tests in which the results of the two classes were compared.

#### Comparative Dictation Rates

The dictation rates attained by the students were to be compared at the end of both the first and second semesters. However, this became an impossibility because Class I did not begin taking dictation for speed until shortly after the first semester and even though Class II had been taking dictation for some time, their rates were not too high. Therefore, for identification purposes the rates attained by Class II at the end of the first semester will be shown in Table VIII.

TABLE VIII

DICTATION RATES ATTAINED BY CLASS II  
AT THE END OF THE FIRST SEMESTER

| STUDENT | DICTATION RATE<br>IN WORDS A MINUTE |
|---------|-------------------------------------|
| A       | No Rate                             |
| B       | 40                                  |
| C       | 50                                  |
| D       | 30                                  |
| E       | 50                                  |
| F       | 40                                  |
| G       | 40                                  |
| H       | 40                                  |

TABLE VIII (CON'T)

| STUDENT | DICTATION RATE<br>IN WORDS A MINUTE |
|---------|-------------------------------------|
| I       | 40                                  |
| J       | 40                                  |
| K       | 40                                  |
| L       | 50                                  |
| M       | 40                                  |

Even though the dictation rates at the end of the first semester for both classes are not indicative of any real comparison, it was felt that some mention should be made of them to show what improvement was made by the students in both classes during the second semester.

Table IX shows the dictation rates attained by the students of both classes at the end of the second semester and the improvement made during the final semester. The procedures used in both classes to determine each student's final dictation rate must be kept in mind. These methods were explained in the procedures section of Chapter I. The dictation rate in Class I was started at 40 words a minute while in Class II it was started at 30 words a minute.

TABLE IX

DICTATION RATES ATTAINED BY BOTH CLASSES  
AT THE END OF THE SECOND SEMESTER  
AND THE IMPROVEMENT MADE DURING THE SEMESTER\*

| STUDENT | C L A S S I       |                     | C L A S S I I     |                     |
|---------|-------------------|---------------------|-------------------|---------------------|
|         | SPEED<br>ATTAINED | IMPROVEMENT<br>MADE | SPEED<br>ATTAINED | IMPROVEMENT<br>MADE |
| A       | 50                | 20                  | 40                | 20                  |
| B       | 50                | 20                  | 60                | 20                  |
| C       | 50                | 20                  | 80                | 30                  |
| D       | 60                | 30                  | 40                | 10                  |
| E       | 70                | 40                  | 70                | 20                  |
| F       | 50                | 20                  | 60                | 20                  |
| G       | 60                | 30                  | 70                | 30                  |
| H       | 70                | 40                  | 50                | 10                  |
| I       | 70                | 40                  | 60                | 20                  |
| J       | 60                | 30                  | 60                | 20                  |
| K       | 50                | 20                  | 70                | 30                  |
| L       | 60                | 30                  | 80                | 30                  |
| M       | 70                | 40                  | 50                | 10                  |

\*Rates shown in words a minute

The average dictation rate attained by Class I at the end of the second semester was 60 words a minute, with an average improvement per student during the second semester of 30 words a minute. In Class II the average dictation rate attained was also 60 words a minute, with an average improvement per student of 20 words a minute during the second semester.



The average dictation rate attained by both classes was 60 words a minute; however, Class I made an average improvement of 30 words a minute while Class II made an average improvement of 20 words a minute during the second semester.

Table X shows a breakdown by the number of students in each class attaining a particular dictation speed.

TABLE X  
NUMBER OF STUDENTS IN EACH CLASS  
ATTAINING A GIVEN DICTATION SPEED

| CLASS | 40 WPM | 50 WPM | 60 WPM | 70 WPM | 80 WPM |
|-------|--------|--------|--------|--------|--------|
| I     | 0      | 5      | 4      | 4      | 0      |
| II    | 2      | 2      | 4      | 3      | 2      |

From the above table it can be seen that even though the average dictation rate for both classes was 60 words a minute, two students in Class II attained a speed of 80 words a minute. It also shows that in the same class two students didn't progress above 40 words a minute. In Class I there were no students higher than 70 words a minute nor were there any students lower than 50 words a minute.

This table tends to indicate that a few students taught by the early-new-matter approach attain a higher rate of speed by the end of one year of shorthand instruction. However, those students taught by the writing approach

improved their speed in a shorter period of time as indicated by Table IX, when you consider the average improvement that was made by both classes during the second semester.

#### Comparative Transcription

Because of existing conditions and facilities, the investigator was not able to compare the transcription rates of the two classes in terms of the words a minute rate. However, in observing the transcribing abilities which were done in longhand, both classes did so with comparable results in terms of the time taken for transcription. In both classes there were one or two students who did exceptionally well in transcription and one or two students in each class who did quite poorly and consumed an extra large amount of time in transcribing their shorthand notes.

Another factor hindering the investigator in his effort to determine comparable results in transcription was the time element involved. An unequal amount of time was used in transcription both as far as the individual students and the entire classes were concerned, due to the uncontrollable facilities situation.

Class I did slightly better on the accuracy of their transcripts than did the students in Class II. Although no formal record was kept of transcription errors, Class I generally had fewer errors; particularly errors which were involved with verbatim transcription. Other errors were also

counted in determining acceptable transcripts even though punctuation and paragraphs were read into the dictation. It was the errors in spelling, capitalization, and punctuation that caused both classes considerable trouble in transcribing. The lack of time in class to spend on these items was largely the cause of the deficiency in the area of transcription.

All data which has been reported in this chapter was obtained by keeping accurate records of the students' achievement on all tests which were given, dictation speeds attained, and observing the transcription activities of the students in both classes.

It is the data which has been presented in this chapter that was the source used by the investigator to formulate the summary, conclusions, and recommendations which are presented in Chapter IV.

## CHAPTER IV

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

In summarizing this research study, it can be stated that both classes did equally well in shorthand dictation, with both classes attaining an average dictation rate of 60 words a minute. However, two students in Class II being instructed by the early-new-matter approach attained an 80 words a minute rate while no students in Class I using the writing approach attained this rate by the end of the school year. In the same realm, two students in Class II could not progress above the 40 words a minute rate while no students in Class I were lower than 50 words a minute.

Class I made more improvement during the last eighteen weeks (second semester) with an average improvement of 30 words a minute as compared to an average improvement of 20 words a minute for the students in Class II.

Although no formal comparisons were made in regard to transcription, through observations made by the investigator both classes performed with approximately equal ability in transcribing their shorthand notes. Because of the existing condition in which none of the students could use the typewriters for transcription during class time, comparing the two classes in terms of transcription speed became a very

difficult task. Even though Production Tests and Transcription Speed Tests were given, it was in such a limited form that no comparisons could be made from these tests.

In comparing the results of both classes on the written theory and vocabulary tests, Class I (those instructed by the writing approach) did considerably better on all tests in which the results were compared than the students in Class II (those instructed by the early-new-matter approach). The one exception to this was the complete brief forms test in which the final results were very close, with the students in Class I performing just slightly better than the students in Class II.

In general, the only outstanding difference in comparing the two classes was in the area of written tests. In the true test of ability comparisons, dictation speed and transcription ability, there was very little difference between the two classes. However, only a limited number of students in either class attained vocational competency as it was described by several authors early in the introduction chapter.

### Conclusions

On the basis of the data which was presented in Chapter III the following conclusions have been formulated by the investigator.

1. That only a limited number of students in either Class I or Class II attained the minimum dictation rate

acceptable for vocational competency. This minimum dictation rate is generally agreed to as being approximately 80 words a minute as was indicated by the several authors that were cited in regard to this.

2. That there is basically no difference in the average dictation rates attained by Class I and Class II. Both classes averaged approximately 60 words a minute on the dictation that was given in both classes.

3. The improvement made in dictation rates was greater for Class I during the second semester. The average improvement per student was 30 words a minute in Class I, while in Class II the average improvement per student was 20 words a minute.

4. In the ability to transcribe their shorthand notes, the students of both classes performed equally well, considering the conditions under which they transcribed. Both classes had some difficulty in the English mechanics of transcription, such as spelling, capitalization, and punctuation; which are important factors in transcribing ability.

5. The students in Class I did considerably better on the written theory and vocabulary tests. Class I had better averages than Class II on all written tests in which the results were compared.

6. That the students performed equally well on the brief forms test. The results of Table IV show that both



classes scored quite high in this test, with nearly equal results.

7. That there is no basic achievement difference in the results obtained from shorthand classes instructed by the writing approach when compared to the results obtained from the classes instructed by the early-new-matter approach.

The data that was presented in Chapter III attests to the concluding statement presented here.

8. That the early introduction of new-matter dictation had no effect on the achievement of Class II when compared to the dictation results obtained in Class I. Both of the shorthand classes at Sidney Senior High School that were involved in this research study attained an average dictation rate of 60 words a minute.

9. The findings of this study do not indicate a strong endorsement for either the writing approach or the early-new-matter approach of shorthand instruction.

#### Recommendations

Upon analyzing the results of this study, the following implications became evident. It is recommended that:

1. More emphasis be placed upon attaining dictation rates that are acceptable for vocational competency. As was indicated by the findings of this study, very few students involved in this study attained a dictation rate that would be acceptable for vocational competency.

2. More class time be utilized in developing transcription ability. The importance of this phase of shorthand instruction makes it necessary that this skill be developed to its fullest potential with more class time emphasis.

3. More class time be spent in teaching the English mechanics necessary for fast, accurate transcription. Too many times we, as shorthand teachers, tend to underemphasize this important aspect of shorthand transcription.

4. The transcription activities be more closely related to the in-class activities. This many times becomes a very difficult thing to do because of existing facilities and conditions but it must be given more emphasis to establish a more realistic situation.

5. Typewriters be used for all transcribing done in shorthand instruction. This is necessary to make the existing conditions in shorthand as realistic as possible.

6. Because of the limitations, in terms of existing conditions and samples used, further research be conducted in this area of shorthand using larger groups and under different conditions.

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