EVALUATION OF SELECTED FACTORS AFFECTING PERFORMANCE IN SHORTHAND DICTATION

BY

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EVALUATION OF SELECTED FACTORS AFFECTING PERFORMANCE IN SHORTHAND DICTATION

.Ed. (BUSINESS EDUCATION)

THESIS

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CERTIFICATION

This Thesis entitled, "EVALUATION OF SELECTED FACTORS AFFECTING PERFORMANCE IN SHORTHAND DICTATION" BY JOHN AYODELE ARANSIOLA, meets the regulations governing the award of the degree of M.Ed. Business Education (Office Education) of Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

Dedicated to my Son

VINCENT OLADLUWA ARANSIOLA

On his 10th Birthday

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ABSTRACT

The study evaluated the effects of preview, shortcuts, *and* fatigue in shorthand writing- This was achieved by looking far the correctly written outlines and correctly transcribed outlines.

Two groups of shorthand writers were selected: the SO words a minute group and the 100 wards a minute group. There were 104 National Diploma (ND) II Secretarial Students in the first group and SS Higher National Diploma CHND) I Secretarial Students in the second group. These students were from Federal Polytechnic, Bida; Kwara State Polytechnic, Ilorin and The Polytechnic, Ibadan-

Tne instruments used for collecting the data consisted of two identical shorthand passages of six minutes duration, *one* for each speed. After the dictation, typewritten transcription lasted for one hour.

Data were analysed by the use ofthestatistic and ANGVA (Analysis of Variance) statistics. The hypotheses were rejected at 0.05 level of significance or less (P< 0.05).

The findings were:

(i) The unfamiliar unpreviewed dictation is more difficult to write and transcribe than the familiar previewed dictation.

(ii) Learned shortcuts help correct transcription, particularly at the lower level, but *st* the higher level, there is no significant diHersnce between those who used the *learned* shortcuts and those who did not.

(iii) Students performed better in correctly written outlines *than* in correctly transcribed outlines.

(iv) Sustained dictation in shorthand writing evidently results *in* -fatigue for the writers.

(v) The SO words a minute writers were more affected by fatigue than the 100 words a minute writers in speed writing.

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DEFINITION OF TERMS

Previewed Dictation	-	Dictation material that has been made known to the students before the actual dictation is given.
Unpreviewed Dictation	-	Dictation material taken from copy with which the students were not familiar.
Sustained Dictation	-	Lengthy dictation of 5 minutes and above.
Transcription	-	The act of converting short-hand notes into handwritten or typewritten copy.
Shortcuts	-	Abbreviated forms of short-hand outlines
Institutional Examinations	-	Internal examinations conducted by schools and colleges on their students.
Public Examinations	-	Examinations conducted by recognised examining bodies other than schools and colleges e.g. West African School Certificate (WASC) and General Certificate of Education (GCE) Examinations.
Behavioural Oscillation	-	Change in behaviour pattern of a person according to the condition of his environment and his inner feelings.
Trivia	-	Unimportant details.
Clutter up	-	Make untidy or confuse.

Chapter 1

INTRODUCTION

1.1 Secretarial Education in Nigeria

Although, Fafunwa (1974) wrote that technical and vocational education in one form or another was in vogue before the introduction of western education in Nigeria, it is not certain when exactly secretarial education found its way to the country. However, considering the first time secretarial subjects were included in the curriculum of schools in the country, Gana (1987) reported that the Phelps-Stoke Commission of 1920 recommended for the first time ever that shorthand and other commercial subjects should be taught in Nigerian schools. Since then, the growth and fortune of secretarial training in the country have been a fluctuating one.

All along, there has never been a time in Nigeria when the demand for trained secretaries is in doubt. Even in the early fifties and late sixties, Gana (1987) said that "there arose a sharp demand for qualified secretarial and administrative staff for the expanding civil services of the Federal and the Regional governments and also to replace the large number of non-Nigerians who had hitherto dominated the scene." But as Fafunwa (1974) pointed out, "one of the major defects in the Nigerian educational system is the low priority accorded to technical and vocational education". Nigerians were therefore never interested in allowing their

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sons and daughters to follow secretarial careers partly because of its "subordinate" nature and partly because of the general belief that it is good only for "second rate" brains. This negative attitude on the part of the Nigeria public led Fafunwa (1974) to comment that "for almost a hundred years in Nigeria, the educated men were those who read classics - Latin, Greek, Milton and Shakespare". In the past, secondary school curriculum laid emphasis on the acquisition of facts. Very little attention was paid to the vocational subjects (Gana 1987).

Amaefule (1986) made the picture clearer in the following narration:

> The effective preparation of the secretary in Nigeria has not had a bright beginning. Very few well organised institutions for the training of secretaries existed in the country during the late fifties and in the sixties. They existed within the ambit of what then used to be known as the College of Arts, Science and Technology. Along with this type of institutions were staff training centres such as the Federal Training Centre, the Institute of Administration which included secretarial training in their courses of study. Apart from these, there were a few privately-owned commercial secondary schools, and many roadside commercial institutes which offered business courses to secretarial aspirants for first entry jobs.

The situation as described by Amaefule (1986) prevailed until late sixties when some state governments started to inject commercial courses into the government secondary schools. It is gratifying, however, that the new National Policy on Education has adequately taken care of secretarial subjects like shorthand and typewriting in virtually all the

stages of the educational set-up in the country. With this development, and with improved understanding of the importance of secretarial training among the Nigerian populace, it is hoped that the future of secretarial profession in the country will be an encouraging one.

1.2 The Nature of Shorthand

In line with the opinion expressed by Russon (1968) that "shorthand has a reputation of being a difficult subject", there is a strong feeling among the generality of students, parents and even teachers in Nigeria that shorthand is not an easy subject to master. This preconceived opinion about shorthand is also greatly affecting the performance of secretarial students in the subject all over the country as shown by poor results in shorthand examinations in our polytechnics, secondary schools and other secretarial institutions. For instance, Olorunmaiye (1982) in his research on "Prediction of Performances on the West African School Certificate Commercial Examination in Kaduna State" observed that candidates who enrolled for the shorthand examination had zero (0) percent in the examination. Uduma (1986) who researched into the "Strategies for Improving the Teaching of Shorthand in Secondary Schools in Imo State" also pointed out that the high failure rate in shorthand normally recorded at the West African School Certificate examinations is a problem and a matter of great concern to business educators in particular and other educators in general.

This unpleasant situation is not peculiar to Nigeria. In the United States of America where commercial (business) education has gained very high prominence, the poor results in shorthand examinations are also prevailent. In this regard, Pullis (1973) wrote:

> Research reports indicate that after completing one year of shorthand instruction in high school, less than 20 per cent of the students are capable of taking dictation at 60 words a minute. Even more appalling, the same reports show that after completing two years of shorthand instruction, less than 50 per cent of the students are capable of taking dictation at 80 words a minute. Such statistics have caused many instructors to wonder whether serious questions should not be posed concerning currently promoted methods and materials for teaching shorthand.

1.3 Shortage of Qualified Secretaries

In contrast to the very gloomy results in secretarial institutions in Nigeria, newspapers and magazines carry advertisements of vacancies for secretaries in all parts of the country everyday. In a mini research carried out by the researcher, it was discovered that in the first half of 1987 alone, one Lagos-based newspaper, "Daily Times of Nigeria" published two hundred and sixty-four advertisements for secretarial positions. During this period also, it was also discovered that a total of 31 HND (Secretarial Studies) holders and 156 ND (Secretarial Studies) holders were produced by three of the Nigerian polytechnics (Federal Polytechnic, Bida; Kwara State Polytechnic, Ilorin and the Polytechnic, Ibadan). When the number of the advertised vacancies in one half of the year, in one national newspaper

alone, is compared with the total number of HND and ND (Secretarial Studies) holders from three of the Nigerian reputable polytechnics in one year, the gravity of the situation all over the country can best be imagined. A large number of people fail to qualify in the secretarial profession because of their inability to secure a pass in shorthand. This leaves more than enough employment vacancies for the few successful ones. Such situation, however, does not help the rapid development of the nation because organisations that require the services of secretaries, but fail to have them, will be grossly handicapped in their secretarial services.

From the fore-going, it is clear that shorthand is widely recognised as a difficult subject and that this accounts for the low level of success in the subject in our training institutions. The attendant acute shortage of qualified secretaries in the employment market in this country is a matter of great concern. It is therefore important that efforts should be directed towards improvement of methods of teaching the subject in order that more favourable results could be achieved.

1.4 Statement of the Problem

Tonne et al. (1965) pointed out that "the primary aim of shorthand instruction is to develop the ability to take the dictation that is encountered in a business situation with sufficient speed to ensure getting it down and with sufficient accuracy to produce a mailable transcript".

This stand is supported by Popham et al.(1975) when they stated that "the ultimate goal of shorthand is for a student to perform in a business situation by taking dictation at a speed which enables the accurate recording and transcription of notes into mailable letters and reports at a rate commensurate with an acceptable range of office standards".

From the researcher's teaching experience, it has been observed that some of the strategies mostly employed by teachers in helping their students achieve perfect transcription through the taking down of accurate dictation are:

(a) The preview of difficult words in the passage before the passage is dictated.

(b) The introduction of shortcuts for outlines which are difficult or lengthy to write in full. This is supposed to assist the students gain speed when taking down the dictation and also to help them recognise such outlines quickly when transcribing.

(c) The cutting down of the length of the passage to a manageable extent to avoid fatigue or unnecessary boredom which may make the students commit many errors.

However, very few previous studies of shorthand have examined empirically the contribution of preview, shortcuts and fatigue to speed building. The purpose of this study, therefore, is to examine empirically the effects of preview,

shortcuts and fatigue on the performance of shorthand students in order that the findings thereof may be used to improve the shorthand teaching and learning processes.

1.5 Research Questions

The study will attempt to answer the following research questions:

80 and 100 Words a Minute Writers

(a) What is the percentage of correctly written outlines and correctly transcribed outlines of unpreviewed, unfamiliar dictation written at 80 and 100 words a minute?

(b) What is the percentage of correctly written outlines and correctly transcribed outlines of previewed, familiar dictation written at 80 and 100 words a minute?

(c) What is the percentage of accuracy in writing and transcribing learned shortcuts at 80 and 100 words a minute?

(d) What is the percentage of accuracy in writing and transcribing words for which no shortcuts are learned at 80 and 100 words a minute?

(e) What is the percentage of correctly written and correctly transcribed outlines in each minute of a six minute dictation written at 80 words a minute?

1.6 Hypotheses

The following formulated null hypotheses will be tested using appropriate statistical procedures highlighted in Chapter 3.

80 Words a Minute Writers

(a) There is no significant difference in the standard of accuracy of students writing 80 words a minute unfamiliar and unpreviewed dictation and 80 words a minute familiar and previewed dictation.

(b) There is no significant difference in the standard of accuracy of students writing 80 words a minute dictation without learned shortcuts and those writing the same dictation with learned shortcuts.

100 Words a Minute Writers

(a) There is no significant difference in the standard of accuracy of students writing 100 words a minute unfamiliar and unpreviewed dictation and 100 words a minute familiar and previewed dictation.

(b) There is no significant difference in the standard of accuracy of students writing 100 words a minute dictation without learned shortcuts and those writing the same dictation with learned shortcuts.

80 and 100 Words a Minute Writers

(a) There is no significant difference in the standard of accuracy of students writing 80 words a minute unfamiliar and unpreviewed dictation and those writing the same dictation at 100 words a minute.

(b) There is no significant difference in the standard of accuracy of students writing 80 words a minute familiar and previewed dictation and those writing the same dictation at 100 words a minute.

(c) There is no significant difference in the standard of accuracy of students writing 80 words a minute dictation with learned shortcuts and those writing the same dictation at 100 words a minute.

(d) There is no significant difference in the standard of accuracy of students writing 80 words a minute dictation without learned shortcuts and those writing the same dictation at 100 words a minute.

(e) There is no significant difference in the standard of accuracy of students affected by the fatigue of sustained dictation at 80 words a minute for six minutes and those affected by the fatigue of sustained dictation at 100 words a minute for six minutes.

1.7 Significance of the Study

In line with the declaration by Shilt (1978) that "the authors Lomax and Wilson feel that too much research has been on descriptive type and far too little on experimental type", the researcher believes that actual classroom experimentation is the best to discover shorthand problems for the benefit of the students and their teachers and for the improvement of the generally high rate of dropouts in shorthand courses in our institutions.

Preview of difficult words in a shorthand passage before the actual dictation begins is a speed building approach which has received criticisms in some quarters. Critics of this approach point out that in real office situation, preview before dictation is absent and that the mode of training of shorthand students should reflect what they are likely to meet in their work places after training. The first significance of this study is that it will help the shorthand teachers and students to see the effect, if any, that preview has on the overall performance of shorthand writers.

Secondly, there has been expression of opinion in some quarters that the less students are burdened with shorthand shortcuts, the more rapidly will they be able to write. In a study by Palmer (1966), it was reported that some people claimed that "students can write up to 140 words a minute

without learning any special abbreviated forms, although few classroom teachers have so far been able readily to attain this goal". This study will give an insight into the usefulness or otherwise of shortcuts in the writing of shorthand.

Thirdly, few studies of shorthand have examined the ways and extent to which fatigue affects shorthand writing. Most shorthand passages used for examination purposes in our institutions are restricted to two, three and at most four minutes duration, presumably to avoid fatigue on the part of the students. However, in actual office situation, shorthand writers may be expected to take longer dictations particularly at meetings and conferences. This study will therefore help to prove or disprove the effect fatigue has on shorthand writers.

Shorthand teachers will benefit tremendously from the findings of the study in that such findings will help to improve the dictation strategies and methods of teaching in the classrooms. The shorthand students themselves will learn from the findings the various steps and precautions they should take while taking dictation in their daily struggle to increase their speeds.

Lastly, the study will help trigger off furher attempts by other people to research into those intricate aspects of shorthand speed building that will eventually be of immense

benefit to the generality of shorthand teachers and students in all our educational institutions.

1.8 Research Assumption

The two levels of shorthand writers used in the research were chosen from the students of ND II and HND I (Secretarial Studies) in Nigerian polytechnics. The ND II students constituted the 80 words a minute level while the HND I formed the 100 words a minute level. It was assumed that because of the uniform standard of entry qualifications and syllabi for both the ND and HND (Secretarial Studies) in all the polytechnics of Nigeria, students in each of the two levels, no matter in which polytechnic they were, would adequately be comparable with one another and would be capable of the shorthand speed intended for each of the levels. For example, the ND II students should be capable of writing 80 words a minute shorthand by the end of their ND I while those in HND I should be capable of 100 words a minute shorhand at the end of their ND II.

1.9 Limitations and Delimitations

1.9.1 Limitations

This study was restricted to Nigerian polytechnics because they are the only secretarial institutions having uniform entry qualifications and syllabi for the training of secretaries in the country.

Three polytechnics were involved in the study: Federal Polytechnic, Bida; Kwara State Polytechnic, Ilorin and The Polytechnic, Ibadan. The three institutions were chosen because they are among reputable polytechnics in the country and findings from them could be relied upon to be the true situation in similar institutions. Secondly, the skill of shorthand writing is generally not influenced by culture, tribe or geographical location. It is therefore safe to generalise findings from this type of study in one part of the country to the other parts.

All the students used for the study might have been exposed to previews from other sources like textbooks and class work. These previews might include shortcuts and words regarded as unfamiliar in the shorthand dictations made up for the study.

1.9.2 Delimitations

The research is solely concerned with the number of correctly written and correctly transcribed outlines of unpreviewed words, previewed words and shortcuts. Therefore, while the transcription was typewritten, the study did not examine such things like penmanship, hesitation time while writing, neatness and other activities expected of shorthand writers. Accurate formation and transcrption of shorthand outlines, which are the main issues involved in the study, were mainly considered.

1.10 Summary

It has not been possible to meet the incessant demands for secretaries in the employment market in Nigeria because of the poor performance of students in shorthand in our schools and colleges.

In an attempt to alleviate the problem, this study examined empirically the effects of preview, shortcuts and fatigue on the performance of shorthand students for the improvement of shorthand teaching and learning processes.

Two levels of shorthand writers, 80 and 100 words a minute, comprising of National Diploma (ND) II Secretarial Students and Higher National Diploma (HND) I Secretarial Students respectively were the focus of the study. The students were from the Federal Polytechnic, Bida; Kwara State Polytechnic, Ilorin and The Polytechnic, Ibadan.

It is hoped that the findings from the research questions and hypotheses will help both the shorthand teachers and students, and trigger off further research in the subject.

Chapter 2

REVIEW OF LITERATURE

2.1 *Introduction*

Swanson (1986) wrote that "if you need to be convinced that shorthand students are special, just pick up the classified section of any major city newspaper and scan the want ads for secretaries. You will discover what a special skill employers consider shorthand to be since many of them demand it for employment."

In supporting the above claim, Davis and Oladunjoye (1987) submitted that:

> The demand for secretarial staff with the knowledge of shorthand is greater than ever. The increasing technological innovations in today's modern business offices have not and never will replace people with good stenographic skills. The future is bright and the prospects are many for those who are willing to add this "SPICE" to their life.

Inspite of the incessant demands for secretaries in all areas of our economy, the number of qualified secretaries turned out from our training intitutions has not been encouraging because of the general poor performance of trainees in shorthand examinations. This unfortunate situation has continually been a source of concern not only to students and parents but also to teachers. One of the major reasons suggested for the poor performance of students in shorthand examinations is faulty method of teaching.

Tonne et al. (1965) defined method of teaching as "the procedure by which the teacher meets the learner at his level, starting with his interests and his problems, and then establishes conditions that enable him to proceed to reach set goal in as effective a manner as possible." Realising what a good method of teaching is, Shilt (1978) observed that "the efficiency of our product is our basis for measuring the efficiency of the school and teacher. If teachers were thorough in their instructions, it would be reflected in their graduates." Uduma (1986) also quoted Mills as saying that "good instructions makes difficult subject easy to learn but bad instruction makes even 'easy' subject difficult to learn."

This must be why Selden (1964) commented that:

> Instructors of shorthand are today indicating an increasing concern for empirical evidence to support the use of teaching procedures utilizing new methods and techniques of instruction. No doubt this concern is due in large part to the fact that a higher percentage of students fail shorthand than any other subjects in our public secondary schools.

On his own part, Frink (1962) said that:

> If it is assumed that the majority of the students enrolled in the shorthand course are capable of learning the skill, such shockingly low achievement levels must certainly be an indictment against the teaching procedures by which these students are instructed, for the proficiency attained by the students is directly related to the teaching methods utilized in the classroom.

It is therefore essential that from time to time, shorthand teachers should find ways and means of examining their methods of instruction through research so as to discover possible areas of improvement. Research designed to evaluate many aspects of shorthand instruction has raised several pedagogical questions, the answers to which should be sought by all shorthand teachers who are truly concerned with making their teaching more effective and with encouraging their students to attain higher standard in shorthand and transcription (Pullis, 1971).

This particular study directed at knowing the effects of preview, shortcuts and fatigue in shorthand writing is an attempt to help shorthand teachers understand the specific contributions these three elements of shorthand writing make to shorthand speed development and transcription for the overall improvement of shorthand teaching and learning.

2.2 Shorthand as a School Subject

Until some years ago when a new policy on education was introduced in this country, shorthand as a school subject was at a great disadvantage. The subject was not accorded the same regard or recognition given to conventional subjects like mathematics, physics and geography. This disregard was particularly by most of the officials directing the educational policies and also by a great number of principals of schools. The discrimination could be seen from the bias and one-sided manner in which the educational administrators

handled issues concerning commercial subjects and how the choice of shorthand by students were looked down upon as the second best or intellectually inferior to choices of subjects like chemistry and history. The common argument that shorthand is merely a utility subject has often been the cause for the condemnation of it as a subject of study in our schools. Critics usually advanced that it is strictly a vocational subject with little or no educational value. However, in trying to justify that shorthand is an educational tool, Holland (1972) wrote that:

> What has not been realised is that shorthand works through the medium of language and for many students is often a key to its understanding. Moreover, shorthand like many vocational subjects has other educative values in its effects on temperament, standards of work and attitude of mind.

Commenting on the same point, Canning (1970) said that:

> Shorthand is not a collection of rules and gimmicks. It is not to be equated with recreative skills like playing snooker or ballroom dancing. It is a craft, an art, and a visual manifestation of language in the same way as are printed French or algebraic symbols.

Some aspects of language which shorthand as a subject can considerably influence are reading ability, grammar and sentence construction, word usage and meaning, aural comprehension, structure, literary appreciation and written expression. It could thus be seen that shorthand and language are integrated and anyone learning shorthand must

not only be perfect in the art but must equally be able to demonstrate the mastery of language because to divorce one from the other would be disastrous. Shorthand also offers varied opportunities for throwing a new and different light on the nature of language (as distinct from English or French or German) in areas such as semantics and phonetics. Shorthand therefore makes powerful contribution towards the vital goal of increasing students' awareness of language and command in its use.

On the educational value of shorthand in the area of temperamental development, shorthand writing enforces discipline and seriousness in all its ramifications. Canning (1970) oberved that "learning to read and write shorthand and to use it can never be a quiet, tranquil, lackadaisical process." In every shorthand dictation, the writer has many hurdles to cross. He is always in direct battle with the stop-watch, the dictator, the pen, the note-book and the environment. He no doubt needs a great measure of drive, impetus and struggle to survive the "ordeal". This explains why good attitude of mind, emotional stability, complete attention and perseverance are required from all shorthand writers.

Moreover, the cultivation of good habits plays no small part in learning a subject like shorthand. Everyday, while taking down dictation, students are expected to maintain

specific writing posture and handle the pen and the notebook in a particular manner. In addition, shorthand reading and writing should be carried out daily both during the class work and through the homework assignments in the course of training. In these ways, good work habits are formed in students. These work habits can then be transferred to the formation of good habits in other areas of life.

One other important educational value offered by shorthand is that it encourages good work standard. Perhaps in no other school subject is speed and accuracy so emphasised as in shorthand. Time is the controlling factor in the execution of virtually all shorthand dictations in the classroom while transcriptions from such dictations are supposed to be without error. McNicol (1968) highlighted that shorthand is one hundred percent subject and that "one error in a document may make it useless." This expectation which is the corner-stone or goal of all shorthand instructions has the educational implication of making shorthand learners aim at the very best in whatever work they produce.

Shorthand writing also enriches the life experience of the writer. From the varieties of topics in shorthand dictations on people, places, occupations and events, shorthand writers are brought into the realities of life situations daily. These varied experiences usually make the shorthand writers more enlightened and more matured.

In the matter of the relevance of shorthand to self-survival, which is one of the aims of education, Holland (1972) remarked that:

> Just as reading and writing and knowledge of numbers are necessary for the child to pass from the primary stage to the stage of self help in education, so is the knowledge and practice of shorthand a key to progress in office work besides being useful as a personal asset.

Many people holding top positions in government and private establishments today are there through the acquisition of the knowledge and mastery of shorthand. Shorthand with its twin subject, typewriting, have paved the way for employment and livelihood for numerous people who could have been jobless and who could have been disillusioned and dejected in a world full of uncertainties and challenges. In realisation of this fact, Canning (1970) pointed out that shorthand presents us, as does the full acquisition of any other worthwhile skill, with another powerful weapon to cope with life and make our maximum contribution to it. Infact, it is on this point, over any other point, that the educational value of shorthand can best be judged and appreciated as a school subject.

2.3 Shorthand as a Skill

In an attempt to find out the real nature of shorthand, Tonne et al. (1965) asked:

> Is it a knowledge or it is a skill? Does it involve what Morrison calls "science-type" learning in which the student's objective is to understand the principles on which the system is built? Or is it primarily what Morrison considers a "language art" in which the learner automatizes his responses so that he can take dictation without thinking about the rule that determines the correct way of writing a word?

Olinzock (1983) however, pointed out that shorthand is a fundamental skill of the office worker and that the learning process requires consideration of four essential elements:

i. the learner

ii. the teacher

iii. the instructional materials

iv. the learning environment

Olinzock (1983) further declared that the stages of skill development in shorthand include the ability to:

(a) read shorthand

(b) write shorthand

(c) record shorthand

(d) transcribe shorthand

(e) produce useable transcript

(f) use appropriate English skills

(g) apply appropriate office procedures

(h) apply shorthand skill on the job for personal use

In her own contribution, McNicol (1968) classified the skills required for shorthand writing into three:

Aural Skills

Ability to deal with -

1. Variation of intonation.

2. Variation of accent.

3. Variation of pitch and volume of voice.

4. Variation of pace of speech.

5. Irrelevant noises (e.g. other people speaking, traffic, door shutting, etc.).

6. Unfamiliar words.

Mental Skills

Ability to -

1. Recall shorthand outlines, or to form new ones.

2. Recognize words.

3. Retain rapidly spoken words until the hand is ready to write them (the span of retained words may vary from five to twenty-five).

4. Give some attention to, and comprehend the general meaning of what is being said.

Manual Skills

1. Skilful holding of pen or pencil.

2. Skilful handling of notebook (left hand preparing for and turning page).

3. Ability to anticipate transcript by indicating display or points for transcript (e.g. writing name and address separately from body of notes of a letter without being instructed, indicating capitals, abbreviations, etc.)

4. Dexterity in writing shorthand outlines.

In discussing the stages of shorthand skill development, Hudson (1970) revealed that there are some obvious problems to overcome. He therefore advised that "an effective program to overcome basic skill deficiencies will not happen accidentally. Several steps should be taken by the instructor to facilitate remedial instruction and provide skill building exercises in the most efficient way possible." He named these steps as:

(a) Identifying skill levels.

(b) Establishing proficiency goals.

(c) Providing remedial exercises and re-emphasising progress.

Writing on the same subject, Dickson (1971) said that "skill building is a primary concern if shorthand learners are to get best results from their time and effort in shorthand." He called for the removal of irrelevant emotional excitement and worry, removal of physical impediments and provision of necessary help to make the task of the learner easy. Some of the principles for guiding shorthand skill given by Dickson (1971) are:

(a) Constant practice

(b) Skill development aaccording to the ability of the learner

(c) Development of language art

(d) Knowledge of result and progress by the learner

(e) Understanding the learner's problems through the teacher's patience and constant encouragement.

Writing on the importance of practice in the development of shorthand skills, McNicol (1968) enumerated the following principles:

1. The aim of the practice must be precise.

2. The student must understand the aim of the practice

3. The aim must be appropriate to the needs and capabilities of the student.

4. The practice period should be sufficiently long for the students to gain benefit from it, but not longer than is necessary to achieve the aim.

5. If signs of fatigue, boredom or frustration are noticed, the practice should be stopped.

6. Period devoted to drills should always be of short duration, but should be regular and frequent.

7. The physical conditions in the room (accessibility of materials, lighting, temperature, ventilation) should be as good as possible.

8. The same goal or the same practice material (especially drills) will not always be appropriate for a whole class or group, materials and goals should be selected to help individual students.

9. During practice the teacher should oberve the techniques and work habits of the students.

10. Praise for improved techniques (however light) is more important than correction. It helps to build up the confidence of the learner - an important feature in skill acquisition. Praise is especially important with the less successful students.

11. Students learn more effectively if the material on which they practice is meaningful to them.

12. Purposeful material (material which will be used) is often more valuable than mere exercises, but it must be approriate to the stage of attainment of the student and must never be out of step with the planned course.

In recognition of the fact that shorthand skill development should be according to the ability of the learner, McNicol (1968) wrote that "no two skill performances, even by the same person are identical". She pointed out that there would be slight or even major changes in style according to the speed of dictation in relation to the writer's ability, according to his mood and conditions under which the writing

is done. In support of this stand, Dickinson (1971) reminded all shorthand teachers that skill is not a fixed or static state and that the skill of any writer varies from minute to minite as well as from day to day. Thus, he warned that "the skill fluctuates according to outside conditions and to the internal feeling of the learner" by quoting Hull as having called this "behavoural oscillation".

Furthermore, it will be naive to discuss shorthand skill in isolation without specific reference to language as its main tool. Walters (1975) acknowledged this fact by writing that "the teacher's concern is that the students develop the abilities to hear, recognize, percieve, pronounce and write the different letter sounds accurately." On the same point, apart from emphasizing the fact that "for efficient shorthand reading and writing there must be a more than average knowledge of English in addition to the knowledge of the shorthand system", McNicol (1968) reiterated that:

> English thus becomes a mental skill and the shorthand writer who has not developed it to a fair degree will be unaware of the possible dangers of mishearing, of the tendency to write the outline for the familiar in place of the unfamiliar word, of writing what one expects to hear instead of what one does hear, or of the need to "register" when a passage does not make sense.

The appreciation of the importance of language to shorthand writing made Uduma (1986) to declare that shorthand is not only a motor skill but largely a conceptual skill, as ably explained by McNicol (1968):

> By shorthand writing we mean taking down the spoken word; the writers hearing must therefore be trained so that there is no delay in recognizing what has been heard; when the sounds have been received the mind must comprehend and must recall the outlines without hesitation, so that they may be signalled to the hand; the hand then transmits them to paper, adding or omitting whatever will assist in securing a good note and a fluent transcript.

Crank et al. (1982) also highlighted that problems related to the forcing of shorthand speed are mental rather than physical hurdles. He submitted that "students who say that their hand will simply not move as fast as the dictation is given are in effect saying that they cannot think fast".

Despite the general acceptance that language skills are major factors in shorthand writing, Jester (1970) found that:

> Unfortunately, these language art skills do not come easily for today's shorthand students. For one reason or another, they do not have adequate backgrounds in the mechanics of written expression. Perhaps they have not had necessary practice and experience in the application of those mechanics, and therefore they lack both the confidence and the know how to handle the written word.

Jester (1970) therefore pointed out that proper punctuation, proper sentence structure, and the proper use of words are all essentials of good transcription and that without the knowledge of these conventions of written English, shorthand students do not find it possible to produce mailable transcription.

It is also pertinent in skill building, as in other areas of learning, that the learner should be informed of the progress he is making from time to time so that he can maintain the momentum if he is doing well or find a way of improving if the result is not a good one. Moreover, constant evaluation of the work of the students will enable the teacher to also evaluate his own work and see how best he can help the students in their various difficulties. In this connection, Boss (1971) stressed that:

> At all times the teacher must keep in tune with the progress of the class. When it is evident that most of the class is not meeting with success, this would be a good time to make a diagnosis and present again those principles wherein the students demonstrate a weakness or spend another day on what appears to be a difficult lesson.

There is no doubt that everyday there are many questions agitating the minds of shorthand teachers pertaining to those areas of knowledge and sub-skills which combine to make the total skill of shorthand writing. Some of such questions as identified by McNicol (1968) are:

> Can we say that the mental skills are more difficult to acquire than the manual? Is it easier to learn to increase one's span of "retained words", and to keep behind the speaker, than it is to adapt one's listening power to differences in accent or pace? How quickly can one acquire good penmanship as compared with the ability to recall an outline? Are all sections of the short-hand system equally easy or difficult to learn and to apply?

All these questions, according to McNicol (1968), are not only of academic interest but of practical importance in teaching because they affect the choice of material and methods of the teacher.

2.4 Shorthand Speed Building

2.4.1 Dictation Plans and Strategies

Dictation is the basis of speed building in shorthand writing. It forms the central or most vital activity in shorthand learning process. It is the yardstick for measuring the progress or standard of any shorthand writer. Its preparation, handling and execution are therefore not only the concern of the teachers who are usually the "dictators" but also those of the students who are at the receiving end. Where the dictation is not well conducted, it could spell doom for the writer. If it is judiciously handled, it could considerably enhance the performance of the writer and ensure his or her success. Dictation is no doubt the axis on which shorthand teaching and learning rotate.

Russon (1968) wrote that Charles Lee Swem, a Gregg shorthand writer who was the reporter to the late President Woodrow Wilson of the United States of America, holds the world's record in Gregg shorthand dictation on three takes at 200, 240 and 280 words a minute with better than 99 percent accuracy.

To the many thousands of Pitman shorthand writers throughout the world, the name of Marion Angus is familiar. Large audiences of students and teachers in many parts of the world have been thrilled by her demonstrations of the speed possibilities of Pitman shorthand, and by her exhilarating lectures. Whether on the blackboard, on which she was reputed to have written with ease at 140 words a minute, or in her notebook, in which she wrote at over 300 words a minute (more than five words a second!), her shorthand notes have been described by many shorthand experts as artistic, fluent, and theoretically accurate.

There are several styles of shorthand dictation. Some of these as given by Russon (1968) are:

(a) One-minute Plan: The one-minute plan is the easiest to use and the most helpful for beginning students. The method is as follows:

1. Preview one-fourth of a 5-minute dictation take.

2. Dictation for one minute at 20 words below the average of the class. If the class average is 80 words a minute, dictate the first try at 60 words a minute.

3. Second, start over and dictate for one minute at 80 words a minute.

4. Next, begin again at the beginning and dictate for one minute at 100 words a minute.

5. Then begin at the beginning once more and dictate for one minute at 120 words a minute.

6. Finally, start at the beginning and dictate for one minute at the second speed, in this case at 80 words a minute.

7. Ask one of the students to read back any one of the five takes he wishes.

There will usually be time to repeat these seven steps with the second fourth of a 5-minute take. The next day the remainder of the take is practiced in this manner. Finally, the entire take is dictated at the second speed.

(b) 3 x 4 Plan: This method (invented by Dr. Robert Grubbs) is a remarkably effective way of building high speed. Assuming that the class is working for 100 words a minute, the procedure is as follows: First preview the first three minutes of a 5-minute 100 take (this will represent about 10 percent of the total, or 30 outlines).

1. Dictate for one-half minute at 140 words a minute.

2. Dictate the next one-half minute at 140 words a minute.

3. Now dictate the first minute at 120 words a minute.

4. Next, dictate the third half minute at 140 words a minute.

5. Now dictate the fourth half minute at 140 words a minute.

6. Next, dictate the last two half minutes at 120 words a minute.

7. Finally, dictate the entire take (three minutes) at 100 words a minute. This take is read back by several of the students in rotation.

(c) Inverted-pyramid Plan: A dictation plan that builds accuracy as well as speed. First the entire letter is previewed. Then (assuming the class is working for 80 words a minute) the plan proceeds as follows:

1. The first 60 words are dictated at 60 words a minute

2. The same 60 words are dictated at 80 words a minute; then, without pausing,the second minute is dictated at 60 words a minute.

3. Next, the first minute is dictated at 100 words a minute; the second minute is dictated at 80 words a minute; and the third minute is dictated at 60 words a minute, all without pausing.

4. Again starting over, the first minute is dictated at 120, the second at 100, the third at 80, and the last minute at 60 words a minute.

Reading back may be on a volunteer basis. This plan seems to build self-confidence. The plan is rather difficult for the teacher to dictate and should be practiced until it can be done well. Thed inverted-pyramid plan is shown here in graphic form:

Repetition	1st Minute	2nd Minute	3rd Minute	4th Minute
1	60	-	-	-
2	80	-	-	-
3	100	80	60	-
4	120	100	80	60

(d) Progressive Plan: The progressive plan is designed for occassional use. It is particulary useful just before dictating speed takes for transcription. After previewing an entire 5-minute take, the teacher dictates each minute at a faster rate, without pausing. If the class is around 80 words a minute, the teacher dictates continously as the speeds change, as follows:

Minute	Speed
1	60
2	80
3	100
4	120

The dictation in the progressive plan is seldom read back since its main usefulness is for warm-up before transcription dictation.

(e) Reverse Plan: The reverse plan is the opposite of the progressive plan. This plan is used occasionally. No preview is given; and the teacher dictates continuously, starting at the highest speed. After the dictation, the difficult words are written on the chalkboard as a sort of postview. The reverse plan is shown here:

Minute	Speed
1	120
2	100
3	80
4	60

Apart from the five speed building plans cited by Russon (1968), the followings are two additional plans:

(f) The Stair-step Plan: This plan (invented by Dr. Robert Grubbs) is an ideal plan for building speed endurance and vocabulary. Assuming we have four letters of equal lengths and difficulties and that the controlled speed of the class is 90 words a minute, the following steps will be taken:

Step I
Letter 1 at 80 words a minute

Step II
Letter 2 at 80 words a minute
Letter 1 at 90 words a minute

Step III
Letter 3 at 80 words a minute
Letter 2 at 90 words a minute
Letter 1 at 100 words a minute

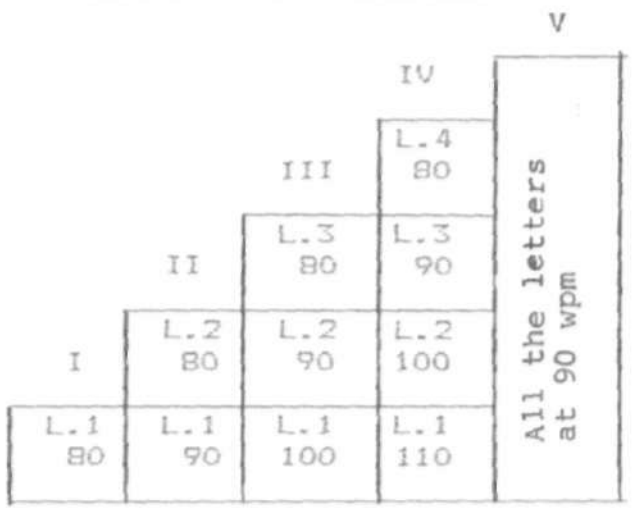
Step IV
Letter 4 at 80 words a minute
Letter 3 at 90 words a minute
Letter 2 at 100 words a minute
Letter 1 at 110 words a minute

Step V
All letters at 90 words a minute

The stair-step plan is shown here in graphic form:

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Steps and Letter Rate



(g) Micromolar Speed Building Plan: The plan is more suitable for beginners. The speed building dictation is given at the same rate throughout but copies of the plate material (printed shorthand outlines) being dictated are gradually withdrawn until the students must finally take the dictation without any reference to shorthand plates.

It is difficult to say that a particular plan is the best. This will depend upon the prevailing situation and on the needs and standards of the students involved. For example, Uthe (1971) quoted Sloan as having implied that some students found the micromolar plan of speed building extremely frustrating while others like it very much. Uthe has therefore raised the question as to whether there are some differences in personality that affect shorthand achievement and urged shorthand teachers to be fair in the selection of practice materials and dictation plans in order that the students may have more confidence and less frustration when taking shorthand dictation.

As a prelude to successful shorthand dictation, Russon (1968) identified the following three characteristics of a dictation that will help students gain shorthand skill:

> Rate of Dictation: Shorthand skill does not grow unless the students are pushed to write above their present rates. On the other hand, if all of the dictation is much faster than the student can take, he will not build skill as rapidly.
>
> Dictation Rythm: Dictation in which each word is evenly spaced is unrealistic and does not contribute to the student skill. The teacher when dictating should read at a normal rate within a thought phrase. The difference between slow and fast dictation is controlled by the length of the pause between phrases.
>
> Dictation Timing: Most of the dictation in class should be timed with a stop watch. Shorthand teachers must master the art of dictating naturally and exactly according to the marked intervals in their shorthand passages.

Aransiola (1988) also hinted that apart from pyscholo-gical and physiological problems, the following factors could affect the performance of a student on a shorthand dictation:

> Difficult Level: Though, generally, syllabic intensity is not a good indictaor of the difficulty of shorthand take, an average word in shorthand is considered to be of 1.4 syllables. Any dictation may be greater or smaller than this depending upon the levels of the learners. Dictation can also be made difficult by stroke intensity unfamiliar words, length of the passage, percentage of high frequency words, dry concepts or passages that are not easy to understand.

> Poor Presentation by the Teacher: Areas of problem in dictation which may come from the teacher are insufficient explanations about the passage before dictation begins, disorderly starting of the dictation, inaccurate timing, inaudible voice, high pitched voice and bad pronounciation.
>
> Poor Facilities: These include poor writing materials and inadequate or incorrect physical facilities like chairs, tables, etc.

The shorthand teachers should take note and avoid all those factors that could contribute to the failure of the students so as to enable the students achieve their learning objective in any given dictation.

Moreover, a shorthand class is supposed to be an exciting and most rewarding place for the learner. This is why Witherow (1969) insisted that:

> Teachers should use creativity in finding new activities and/or follow suggestions in the teachers' manuals so that there would not be such long period of one type of activity. Shorthand is one course in which there is no drudgery - one can preview, dictate, have the students constantly alert and learning. The dictation material should include more than just letters, for example, items such as information for purchase orders, telegrams, credit memoranda, or various forms.

Also commenting on strategies for effective dictation, Featheringham (1964) said that "the most important thing is for the students to take down dictations much more higher than they are able to write." This is because the students will never get their speeds up higher if they do not attempt to write at faster speeds than they are able to take easily.

Apart from the taking down of dictation itself, it will be necessary for the teachers to motivate the students, pay particular attention to them on such things as the use of proper shorthand materials, maintaining correct posture during dictation and the value of homework as an aid to speed building.

One way by which students can be motivated in shorthand writing according to Boss (1971) is that:

> When the students seem discouraged and complain that the dictation is too fast or when they are inclined to give up, the teacher must encourage them to keep trying and point out that by continuing to try they will come to a time when the work will be easier.

On the use of proper materials for shorthand writing, Pitman shorthand experts are unanimous in recommending the use of shorthand notebook and soft pencil or pen with fine nib that can decipher thick and thin outlines. However, Featheringham (1964) observed that the question whether to use a fountain pen, a pencil or a ball-point pen has always been a problem to both the teachers and the students of Gregg shorthand and suggested that:

> Notes written with a pencil are not clear; they are apt to smear or even disappear over a period of time. Notes written with a pen are always clear and precise. For high speed shorthand writing, however, nothing is so effective as a good ball point pen. A fountain pen tends to become scratchy in high-speed writing, but a ball-point pen runs along smoothly and glides over the paper evenly.

In the matter of correct posture for shorthand writing, Pullis (1969) wrote that "everyday the teacher must stress the physical routine of getting comfortable, sitting well back in the seat, resting both elbows on the desk", leaning forward slightly, and holding the pen lighthly". Also writing on this point, McNicol (1968) stated that:

> It must be stressed that good posture and handling of tools (notebooks and pen) must become habits, and both teacher and student must realize that habits are not formed in one lesson or by the student being told what to do. From the first lesson the teacher must demonstrate, supervise and guide students until the good habits are well established. If good habits are not formed, bad ones will be. Far too often in elementary and intermidiate classes one sees students writing shorthand with the left hand supporting the head instead of being on the book ready to turn the page.

As for the desirability of homework in shorthand speed building, Featheringham (1964) urged that "the student of shorthand must do shorthand homework in abundance. For the student trying to increase his shorthand speed, the more homework he writes, the better for him".

Above all, a shorthand dictation session affords the teacher the opportunity to have an overview of the progress of each of the students. He should therefore use such an opportunity to offer suggestions where desirable. In doing so, however, Blanchard (1939) recalled that most of the classroom ills of our shorthand students are of non-shorthand origin and require a non-shorthand prescription. Hence, he called on shorthand teachers to study and understand the physical, psychological, tempramental and social conditions

of their students as any of these factors or a combination of them could contribute to the overall performance or non-performance of the students.

2.4.2 Unpreviewed, Unfamiliar Dictation

Pullis (1973) referred to unpreviewed and unfamiliar dictation as dictation material taken from copy with which the students were not familiar. This means that no words contained in the copy were written for the students either before (preview) or after (postview) the dictation. It is one of the strategies adopted by teachers in shorthand dictation to test the knowledge of the students as to their understanding and usage of a particular word or group of words. It is also to check whether the students are capable of writing some set of shorthand outlines spontaneously without a fore-knowledge of their presence in a given dictation.

Unpreviewed, unfamiliar dictation will continue to be extensively used in shorthand learning process because it challenges the capability of individual student in shorthand writing. Students always have a feeling of accomplishment whenever they are able to write this type of dictation because it is a proof of what they can do in shorthand writing without being 'helped' by the teacher, thereby increasing their confidence whenever they face any shorthand

examination. Furthermore, unpreviewed, unfamiliar dictation is what obtains in actual work situation. It is a true reflection of what the students will meet when they leave their schools to take up employment and should therefore feature prominently in the training programmes of shorthand students.

2.4.3 Previewed, Familiar Dictation

Previewed, familiar dictation has been described by Pullis (1973) as "dictation material that has been made known to the students before the actual dictation is given." Previewing helps the students see how the outline is written and how it looks when completed; therefore, the teacher writes the outlines as the students watch. After each outline is written by the teacher, the students may be instructed to read the outline and write it several times.

This device, which is very common in shorthand teaching and learning situation, is to help the speed building of the students. Previewing of difficult words in a given shorthand passage reduces tension on the part of the students and gives them confidence to write the dictation in question. Previewing also affords the students the opportunity of seeing the various correct ways of writing shorthand outlines and of knowing the spellings and grammatical implications of the different words.

Shorthand experts all over the world agree with the fact that previewing helps considerably shorthand learning particularly at the early stages when students require such assistance to build in them confidence, to enable them consolidate their learning and increase their speeds of writing.

Previewing is not peculiar to shorthand learning alone. In such areas as in the study of English Grammar, it is an in-built device as illustrated by Allen (1965):

> For active use of the language, the student has to practise all the common pattern until he can use each vocabulary item in the right inflicted shape and in proper combination with other items without excessive searching and fumbling. No normal study of grammar, however thorough and complete it may be, can take the place of this practice.

It is however necessary to remind shorthand teachers not to allow preview to degenerate into "spoon-feeding" the student. Preview should be used as a teaching device only when necessary and not to encourage laziness on the part of the students. Preview will serve its true purpose only when it enlightens the minds of the students, challenges their intellect and motivates them towards the achievement of greater heights.

2.4.4 Shortcuts or Brief Forms

There is perhaps no other aspect of shorthand writing that is generating more controversy than the use and application of brief forms. Shorthand experts in various parts of the world have divergent views on the matter.

Pullis (1973) quoted Lesile that "it is not necessary for the stenographer to know every brief form or every abbreviating device. If the learner writes correctly 70 percent to 90 percent of the brief form occurrences in connected matter from dictation, that should be a satisfactory record."

Writing on her study of shortcuts, Palmer (1966) pointed out that "the Diamond Jubilee revision of Gregg shorthand has reduced greatly the number of brief forms students must memorize, on the theory that the less a mind is burdened with special shorthand forms, the more rapidly the student writes"

Also, while discussing the characteristics of various shorthand systems, Davis and Oladunjoye (1987) said that one of the weaknesses of most shorthand systems is the extra practice needed to master the short forms.

Popham (1943) had earlier raised the issue that "much of the learning of brief forms particularly in the earliest stages is memorization."

However, while agreeing that a logical understanding of any subject is superior to a collection of memorized trivia or isolated facts that cannot be applied in the workplace, Jackson and Spring (1987) wondered if business educators have not in their attempt to teach logical reasoning, neglected memorization as a basis from which to launch such understanding. They therefore declared that "memory is a

significant part of intelligence and much of our daily activity depends on facts we memorized."

In his own contribution, Patrick (1971) conducted a study. The purpose of the study was to determine the basis of error rates in writing, whether the changes that were made in the Diamond Jubilee Series of Gregg shorthand for selected brief forms and principles were justified and whether there is a need for further changes. The following conclusions were arrived at:

1. A highly significant positive relationship exists between accuracy of outlines and accuracy of transcription for both brief forms and principles.

2. A significant negative relationship exists between the frequency of occurrence of brief forms in the textbooks and the shorthand error rate on the brief forms.

3. The relationship between frequency of occurrence of principles in the textbooks and the error rate on principles is not significant.

In a similar study, Palmer (1966) reported that "where shortcuts had been learned for given words, writing time was reduced by half, both for the group as a whole and in the writing of each member of the group." The report also said that "counting as errors only those occurring in transcription on words where students attempt to use the shortcuts taught, commission of errors decreased slightly on the same words that some students had written in full."

The debate on the desirability of brief forms in shorthand writing will continue until more empirical studies are carried out to determine really whether they constitute a help or hindrance to shorthand learning. In the meantime, it will be appropriate to adhere to the following advice given by Popham (1943).

> All students do not learn alike. If these devices help the learner to visualize or hear better what he is to write, then they are useful. If they clutter up his learning, they should be discarded. Perhaps no reader would adopt all suggestions; perhaps several readers may get ideas developing their own "tricks of the trade."

2.4.5 Fatigue in Shorthand Writing

There is general agreement among shorthand teachers that one of the major factors that could affect the students performance is the length or duration of the dictation. As in all human endeavours, the more a person is involved in physical or mental exertion, the less such person is likely to perform. This phenomenon, usually referred to as fatigue, is explained by Mathews and Fox (1976):

> It has been found that the stroke volume of the heart - the amount of blood pumped by the heart at each beat or stroke is highest not during exercise but during recovery from exercise..... the higher the maximal stroke volume, the higher the capacity of the oxygen or aerobic system. This is so because the more blood that is pumped by the heart per beat, the more oxygen that can be transported to the working muscle.

The situation can also be illustrated by the economic law of diminishing returns. Samuelson (1980) described this law as "successively lower extra outputs gained from adding equal increment of a variable input to a constant amount of fixed input." In this case, the variable input is the shorthand dictation, the fixed input is the energy used by the shorthand writer in writing the dictation while the outputs are the quantity and quality of shorthand outlines written down by the writer. The more the variable input (the shorthand dictation), the less the fixed input (energy) and the lower the outputs (quantity and quality of shorthand outlines written down).

There are many causes of fatigue in shorthand writing. Some of these are the level of difficulty of the dictation passage, the manner the dictation is delivered, the timing, the materials and the facilities used, the environment and the inability of the writer to understand what is being heard. Canning (1964) somewhat described the causes in this form:

> First, there is the sheer physical difference in the acuity of hearing. Then there is the time element. What B could comprehend through the ear just as easily as A if she were given time to assimilate it becomes perplexing merely because it is uttered at natural speaking pace. Then there are the very important "built-in" speech and aural patterns to which the shorthand learner is accustomed. Indian "English" is very different from London "English" or Nigerian "English."

This inter-play of forces which mainly involves language processes and motor-skill has a great impact on the brain, nerves and, muscles. In a clarification on this, Wrightsman and Sandford (1975) wrote that:

> A uniquely human pattern of brain organisation appears when we study the role of language and speech in the human species. It can be argued that language processes represent the highest level of intergrative activity of which human nervous system is capable. Use of language involves the use of symbols as representations of object relationships and the maintenance of order among these symbols in complex and hierachical ways.

Also, Mathews and Fox (1976) reporting the study carried out by Franklin Henry and his colleagues at the University of California, U.S.A. on the functions of the brain in motor-skills revealed that:

> The entire process might be likened to the functioning of an electronic computer. According to this theory, the program (or recorded movement pattern) has been learned previously and stored on the memory drum (motor memory), ready to be selected and released when needed. Such a program consists of a set of non-conscious instructions that direct the necessary nerve impulse to the desired movement. The "read out time" or performance time, varies somewhat, depending on the length and complexity of the movement.

It is expected therefore that after a time in shorthand writing, as in virtually other areas of human endeavour, there should be a feeling of fatigue or reduction in the performance of the writer.

In the past, teachers were fond of giving shorthand tests of five-minute duration but presently most teachers use the three-minute tests. Prigge (1974) felt that "many who have made this change have done so without having a real reason for shortening the duration of the test." One of the reasons usually given for the change is that time is needed in the classroom and for marking the scripts. The other reason is that employers rarely dictate for more than three minutes without interruption.

It is, however, common knowledge that in most offices, secretaries are used outside their normal schedule of duties to cover other things as meetings, conferences and seminars. They can therefore be called upon to undertake shorthand dictations of considerable duration. Because of this, it will not be out of place to consider the possibility of including sustained dictations in the training programmes of secretaries.

Various studies have been conducted on the effect of varying the duration of shorthand dictation on students ability. One of such studies was conducted by Dallam (1962) to determine whether there was a significant difference of achievement among some students on three-minute and five-minute tests. He found no significant difference and recommended that at least part of the time, the teacher could measure avchievement as reliably on the three-minute tests as on the five-minute tests.

In a similar study conducted by Prigge (1974), he noted that "administering three minutes dictation tests would provide an indication of the student's ability on five minutes test. However, the longer test would usually result in proportionately greater number of errors".

One other researcher who has also made an interesting discovery on the effect of varying the duration of shorthand dictation is Blanchard (1939). He recalled the following experience.

> The symptom that I first overlooked stood out clearly when I noticed that the errors in the transcript were all made in the last two minutes of the 5 minute take. The students transcribed the first three minutes' dictation with 100 per cent accuracy and then made from 15 to 40 errors in the last two minutes. This symptom indicated that nothing was wrong with the students' knowledge of shorthand. They were merely unable to concentrate upon the task before them for more than three minutes. The remedy they needed was more training in sustained concentration; more determination to stick out; a compelling incentive to move.

The dilemma experienced by Blanchard (1939) has a sort of answer in the explanation given by Mathew and Fox (1976) who found out in the area of Physical and Health Education there are many "recovery" or relief intervals because the stroke volume of the heart reaches its highest level, thereby providing a good stimulus for maximising the capacity of the oxygen system many times during interval training. The physiological implication of this is that there will be less lactic acid accumulated and thus less fatigue associated with the intermittent work. On the other hand, it was also found

that if the work is done on a continuous basis, there is only one relief interval, that which occurs immediately after the workout is over, and only one time during which the stroke volume of the heart reaches its highest level or the oxygen system reaches its maximum capacity. The following examples were given:

1. Suppose you ran intermittently, running just as hard as you did continuously, but for only 10 seconds at a time with 30 seconds of rest between each run. If you repeated this six times, you would have performed the same amount of work at the same intensity intermittently as you did continuously (i.e six runs of 10 seconds each equals one minute running) but the degree of fatigue following intermittent running would be considerably less.

2. Suppose you ran an all out 5 minute continuous run to exhaustion on one day, then on another day, you ran five 1 minute intermittent runs at the same speed with 1 minute relief intervals between runs. Again, as before, even though the same amount of work at the same intensity was performed in both types of runs, the fatigue following intermittent runs would be noticeably less.

As efforts gets intensified by shorthand teachers to find out more on the effect of varying the duration of shorthand dictation on their students and on the contribution of fatigue to shorthand writing, it may be useful to reflect on the submission by Pullis (1973). He wrote:

> It is apparent that as an indicator of achievement, the speed of dictation at which a shorthand student is able to write may be a very unreliable measure unless other variables such as the duration of the dictation, the accuracy required in the transcription, the type of material used for testing, and frequency at which the level of achievement can be attained are also known.

While the duration of the dictation is no doubt an important element in shorthand writing, it should be considered along other important elements listed by Pullis (1973) which will help the teacher measure sufficiently and accurately the achievement of each student.

2.5 Mailable Correspondence through Shorthand Dictation and Transcription - Goal of Shorthand Writing

"Transcription" is the act of converting shorthand notes into handwritten or typewritten copy (Bowman, 1939). Shorthand, which is the main vehicle of the transcription process is the most involving intellectually of all the secretarial subjects. Though, it is regarded by many as a skill subject, it is largely a conceptual subject as it has intricate symbols and rules to be fully mastered and understood before they could be applied appropriately. It, therefore, forms the core of secretarial endeavours.

The principal way by which proficiency of a student or a secretary can be judged in shorthand transcription is through the production of mailable letters and documents. Popham et al. (1975) quoted Lesile as having defined a mailable letter as "one that can be signed and mailed". They added that:

> Generally, mailable correspondence contains none of the following: Omission of important parts of letter (date, title, enclosure etc.), poor centering (horizontal or vertical), poor erasures, misspelled words, incorrectly divided words, transposition of words, grammatical errors, changes in meanings of sentences, incorrect abbrevia-tions, jagged right hand margins or major punctuation marks.

The goal of all shorthand teachers and students should therefore be the production of mailable correspondence by the students. In this regard, Tonne et al. (1965) advised that "the primary aim of shorthand instruction is to develop the ability to take the dictation that is encountered in a business situation with sufficient speed to ensure getting it down and with sufficient accuracy to produce a mailable transcript."

In their own contribution, Popham et al. (1975) stated that "the ultimate goal of shorthand is for a student to perform in a business situation by taking dictation at a speed which enables the accurate recording and transcription of notes into mailable letters and reports at a rate commensurate with an acceptable range of office standards."

.The general awareness of the importance of transcription to shorthand writing has made many secretarial institutions all over the world to teach it as a separate subject distinct from the writing of shorthand itself. Fox (1938) reported that the Metropolitan School of Business in Los Angeles, United States of America was the first known institution to experiment on this. In support of the idea, Bowman (1939)

wrote that "teachers quite generally agree that transcription is a skill separate and distinct from the ability to write shorthand and to operate a typewriter, and as such must be taught with a thorough understanding of the principles involved." Shilt (1978) also emphasised that "transcription must be taught" if the expected result is to be achieved. However, Bowman (1939) stressed the fact that if transcription lesson is to be successful, we must be absolutely certain that the student has in his shorthand notes all the material that he is expected to transcribe because according to Boss (1971), "the transcript is evidence of the student's ability to record the dictation." This opinion is similar to the one expressed by Tonne et al. (1965) that "shorthand competency can be measured by one criterion only: ability to transcribe." The view is also related to the one given by McNicol (1968) that "the transcription of connected matter dictation is the measure of the writer's skill." The need for shorthand students to cultivate the habit of writing correct outlines in their notes, in order to have correct transcription, can therefore not be over emphasised. Listed below are some of the findings reported by Pullis (1973) in this regard:

1. In a study of factors affecting achievement in shorthand, Haggblade found that the ability to write accurate shorthand outlines contributed more than any other factor toward the correct transcription of shorthand notes.

2. Klaseus also found that the factor contributing the most toward the inability to transcribe shorthand outlines correctly was that of incorrectly written outlines. In comparing the accuracy of transcription between correctly written and incorrectly written shorthand outlines, Klaseus found that correctly written outlines were transcribed correctly 96 per cent of the time as compared to incorrectly written ones, which were transcribed correctly only 59 per cent of the time.

3. A study by Fermenich indicated that significant relationship exists between accuracy in application of principles and accuracy in transcription. There also appears to be a significant relationship between inaccuracy in application of principles and inaccuracy in transcription

4. After identifying and analyzing the numerous activities which make up the totality of the shorthand transcription process, Jester found that correctly written outlines have a direct bearing on the readability of the shorthand notes. A significant positive linear correlation of .79 was found to exist between the number of problems occuring during transcription as the result of outlines which were incorrectly written. Transcribers with better skill in writing correct shorthand outlines were more efficient and faster transcribers because they lost less time deciphering incorrect outlines.

2.6 Summary

Inspite of the adverse economic conditions which are forcing employers to curtail their recruitment of staff, there are limitless opportunities for qualified secretaries. The situation calls for better educated individuals with the flexibility to apply shorthand skill in variety of ways.

This can be achieved only when shorthand teachers are constantly concerned with improving their methods and techniques of instruction.

Apart from the employment utility of shorthand, it has other educational values as a school subject. These values are shown in its effect on the attitude of mind, temperament, use and command of English Language, high standard of work, good habit formations, enrichment of life experiences and self-survival of the shorthand learner.

Viewing shorthand as a skill, success in it can come only when the learner engages in constant practice, develops according to his ability and has keen interest in language art. The teacher would be helping the learner if he understands the learner's problems through constant encouragement and by informing him promptly of any progress or shortcoming in his work.

The most central or most vital activity in shorthand learning is dictation. There are many dictation plans but it is hard to say that one is the best. Some of the causes of difficulty in taking down dictation are rate of dictation, dictation rythm, dictation timing, difficult words, poor facilities and poor dictation presentation by the dictator. It is essential for the learner to maintain good sitting posture, possess appropriate writing materials and cultivate other good work habits towards an effective dictation.

Three of the strategies that a teacher can employ to enable his students have a successful dictation are previewing, learning of shortcuts or brief forms for words and avoidance of fatigue in the course of the dictation. The preview should be mainly to enlighten the students, challenge their intellect and motivate them towards greater achievement. As for the shortcuts, the teacher should know that all students do not learn alike. If the shortcuts help the learner, then they are useful. If not, they should be discarded. On avoidance of fatigue, the length of the passage should be kept within a reasonable range. Atimes, however, there ought to be sustained dictation to enable the students cope with lengthy dictations which they may encounter in their work places after training.

The ultimate goal of shorthand writing is production of mailable correspondence through shorthand dictation and transcription. Accurate shorthand transcription is possible only if the shorthand notes are accurate and readable. For a good standard of shorthand transcription to be achieved, transcription must be separately taught in our institutions. In this way, the goal, which is the production of mailable correspondence, will be quickly realised.

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Chapter 3

RESEARCH PROCEDURES

3.1 Introduction

This study examined empirically the effects of preview, shortcuts and fatigue in shorthand speed building using the 80 words a minute and 100 words a minute shorthand writers as the focus. The procedures used for the study are discussed in this chapter.

3.2 Population

All the 1988/89 ND II and HND I students of secretarial studies (with no carry over of shorthand from the lower class) in the Federal Polytechnic, Bida; Kwara State Polytechnic, Ilorin and The Polytechnic, Ibadan (including its satellite campus at Iree where the ND II secretarial studies is being run) comprised the population of this study. The ND II students represented the population for the 80 words a minute writers while the HND I students represented the population for the 100 words a minute writers. These classes were selected because the ND II students had passed their 80 words a minute shorthand at the end of their ND I while the HND I students achieved their 100 words a minute at the end of their ND II. This means that both levels of shorthand writers were capable of the speeds for which the study was conducted. Moreover, there is uniformity in the entry requirements into ND programmes in this country i.e. West

African School Certificate (WASC) or General Certificate of Education (GCE) with four credits including English Language and three relevant subjects. It was therefore believed that none of those used for the study had an advantage over the others educationally and professionally.

Moreover, the three polytechnics named in this study were chosen because they are among reputable polytechnics in the country and findings from them could be relied upon to be the true situation in similar institutions. Each of the polytechnics involved in the study presented the following students in ND II and HND I classes respectively for the study:

Table 3.1: Breakdown of Participating Students

Institution	ND II	HND I	TOTAL
Federal Polytechnic, Bida (Niger State)	12	22	34
Kwara State Polytechnic, Ilorin (Kwara State)	52	24	76
The Polytechnic, Ibadan (Oyo State)	40	42	82
TOTAL	104	88	192

3.3 Sample

The entire population of the study was taken as the sample so that the full effect of the study could be seen.

3.4 Instruments

Two articles, substantially identical in content, but with key words placed in somewhat different arrangements were composed by the researcher to test both the 80 words and 100 words a minute writers respectively for six minutes. The subject matter of the material used was on secretarial duties. The pattern and theme of the test were adopted from the past examination papers of the Royal Society of Arts (R.S.A.) Examinations Board, London, an examining body recognised internationally in the area of commercial examinations. Every effort was made to keep the general subject matter of moderate difficulty. The vocabulary for previewed, familiar words came from the Pitman 700 Common Words Series while the words categorised as unpreviewed, unfamiliar were taken from outside the 700 Common Words Series. Also included in the dictation were words for shortcuts or brief forms.

There was a "warm-up" passage of one minute at each level (80 and 100 words a minute) dictated before the actual dictation was given in order to "tune up" the writers, so that they could get used to the voice of the dictator.

3.5 Administration of the Instruments

Each of the two levels of shorthand writers, 80 and 100 words a minute, used for the study was broken into an Experimental Group and Control Group. This was carried out randomly and without informing the students why. There was

equal proportion of students in the two groups at each level in each polytechnic. This allowed for uniformity in the approach towards the study in all the three polytechnics.

Necessary precautions were taken to see that the Experimental Group and the Control Group at each level were not aware of any differential treatment that was given to each group in the course of the study. This was to avoid 'placebo effect' which is a situation whereby the Experimental and Control Groups are aware that different treatments are given to each group before the study. This could result in unnecessary competition among the groups in the course of the study which could ultimately render the outcome of such study unrealistic and untenable.

'The Experimental Group at each level was taught the shortcuts used in the study while the Control Group was not. This was to test the effect of shortcuts in shorthand writing. There was no any other differential treatment given to the two groups apart from this as the effects of the two other variables (preview and fatigue) looked for in the study were determined without this differential treatment.'

The shorthand passages including the "warm-up" were dictated into a Grundig tape recorder by the researcher, with the aid of a stop-watch, and played back for the tests. This ensured uniformity in the speeds and presentation of the dictation materials in the three institutions used for the study.

After the dictation, transcription of the shorthand notes, which was typewritten, lasted for one hour. This means that the 80 words a minute writers transcribed at the rate of 8 words a minute (480 words for 60 minutes) while the 100 words a minute writers transcribed at the rate of 10 words a minute (600 words for 60 minutes). This conformed with the practice obtainable in most secretarial institutions all over the country.

3.6 Data Analysis

Only the accuracy of written outlines and accuracy of transcribed words of the two levels of shorthand writers involved in the study were examined. The study did not interest itself in other penalties that are usually looked for in shorthand transcription tests. For example, while the transcription was typewritten, typewriting errors such as bad erasure, wrong margin, irregular spacing and other similar errors were not taken into account. What was taken into account were wrong spellings, omissions, additions and punctuation marks that distorted the sense of the passage.

The following steps were taken in analysing the data collected for the study:

(a) Errors were marked in each student's shorthand notes and transcription and were also noted in the register kept for the purpose.

(b) There were separate listings for previewed words, unpreviewed words and shortcuts. There were also separate listings for each minute of the six minutes, to ascertain the effect of fatigue on shorthand writing.

(c) Percentages and means for correctly written outlines and correctly transcribed outlines were computed for the readings obtained.

(d) Differences noted between the performance of the two levels of shorthand writers (80 and 100 words a minute) were tested for significance. For this purpose, the "t" test of significance was used.

(e) Differences between each minute of the six minutes of performance were also tested for significance using ANOVA (Analysis of Variance) statistics.

(f) As a yardstick for rejecting the null hypotheses, 0.05 level of significance or less ($P < 0.05$) was chosen in line with the generally held belief in educational and psychological circles that 0.05 probability level of significance or less is a reasonable standard.

3.7 Summary

The population of this study, which is also the sample, comprised of 104 National Diploma (ND) II Secretarial Students representing the 80 words a minute writers and 88 Higher National (HND) I Secretarial Students representing the 100 words a minute writers.

The instruments used for collecting the data consisted of two identical shorthand passages of six minutes duration, one for each speed. All the students were tested on the effects of preview and fatigue but were broken into Control and Experimental Groups to determine the effects of learned or not learned shortcuts. After the dictation, typewriten transcription lasted for one hour.

Scripts were graded mainly on the basis of correctly written outlines and correctly transcribed outlines. Data collected were analysed by the use of t-statistic and ANOVA (Analysis of Variance) statistics to test the significance of the differences between the variables. The hypotheses were rejected at 0.05 level of significance or less ($P < 0.05$).

Chapter 4

ANALYSIS AND PRESENTATION OF DATA

4.1 Research Questions

After shorthand dictations were administered at both 80 and 100 words a minute, the shorthand notes and transcription of 104 students for 80 words a minute and 88 students for 100 words a minute were collected and graded. The following answers to the research questions were obtained from the data gathered from the grading exercise:

4.1.1 80 Words a Minute Writers

(a) Of the unpreviewed, unfamiliar dictation, 66.9% were correctly written while 63.0% were correctly transcribed (see Table 4.1).

(b) Out of the previewed, familiar dictation 88% were correctly written while 82.0% were correctly transcribed (see Table 4.1).

(c) For learned shortcuts 87.8% were correctly written while 82.9% were transcribed correctly (see Table 4.2).

(d) In words for which no shortcuts were learned, 81.6% were correctly written and 75.3% correctly transcribed (see Table 4.2).

(e) The following percentages were recorded under each minute of the six minute dictation (see Table 4.9):

Minute	Correctly Written %	Correctly transcribed %
1st	92.6	89.0
2nd	86.1	81.0
3rd	86.1	78.9
4th	83.7	75.7
5th	85.8	78.6
6th	83.3	74.5

4.1.2 100 Words a Minute Writers

(a) Of the unpreviewed, unfamiliar dictation, 74.0% were correctly written while 65.5% were correctly transcribed (see Table 4.3).

(b) Out of the previewed, familiar dictation 89.4% were correctly written while 82.0% were correctly transcribed (see Table 4.3).

(c) For learned shortcuts, 84.5% were correctly written while 81.2% were correctly transcribed (see Table 4.4).

(d) In words for which no shortcuts were learned, 85.5% were correctly written and 79.1% were correctly transcribed (see Table 4.4).

(e) The following percentages were recorded for each minute of the six minute dictation (see Table 4.9):

Minute	Correctly written %	Correctly transcribed %
1st	91.8	89.4
2nd	88.6	83.7
3rd	85.9	77.3
4th	86.9	77.9
5th	85.7	74.4
6th	85.3	77.7

Based upon the students' performance at both 80 and 100 words a minute, it would be observed that:

i. Students performed generally better in written outlines than in transcription.

ii. Students did better in writing and transcribing previewed, familiar outlines compared with unpreviewed, unfamiliar outlines.

iii. Students showed signs of fatigue in their writing. This is evidenced by the high percentages of correctness recorded by the two groups in the 1st minute of writing and transcription compared with very low percentages in subsequent minutes particularly in the 3rd, 4th and 6th minutes.

iv. There were traces of fluctuations in the stability of the students during the dictation as could be seen from their inconsistent accuracy in both the written and transcribed outlines. For example, there was a drastic drop in the 4th and 6th minutes of the 80 words a minute group though

this drop manifested itself in the 5th and 6th minutes of the 100 words a minute group. This shows that while there is the presence of fatigue in shorthand writing, fatigue may not manifest itself in consistent manner in the output of the writer, particularly where the writer got relaxed and missed some words in the middle of the dictation only to renew his or her energy in subsequent minutes of the dictation.

4.2 Hypotheses

The following formulated null hypotheses were tested using the t-statistic to find out the level of significance of difference, if any, in each case. Analysis of Variance (ANOVA) statistics was also used to check the significance of the differences in the six minutes of performance. The computed t-test and ANOVA must equal or be less than 0.05 to justify rejection of the null hypotheses ($P < 0.05$).

4.2.1 80 Words a Minute Writers

(a) There is no significant difference in the standard of accuracy of students writing 80 words a minute unfamiliar, unpreviewed dictation and 80 words a minute familiar, previewed dictation.

Table 4.1: Comparison of Correctly Written Outlines and Correctly Transcribed Outlines of Unpreviewed and Previewed Dictations at 80 Words a Minute (N = 104)

	Corrrectly Written Outlines		Correctly Transcribed Outlines	
	Unpreviewed	Previewed	Unpreviewed	Previewed
Mean	66.9	88.4	63.0	82.0
Std. Dev	19.5	8.3	14.3	10.0
C.V.	20.2	9.4	22.7	12.2
T-stat	13.8		11.1	
df	206		206	
P. of sig	0.003×10^{-12}		0.0065×10^{-11}	
Decision	Very Highly Significant		Very Highly Significant	

In the above table, the computed level of significance of 0.003×10^{-12} for correctly written outlines and 0.0065×10^{-11} for correctly transcribed outlines are less than the value of the usual 0.05 level of significance. Therefore, the null hypothesis is rejected to uphold that significant difference exists in the standard of accuracy of students writing 80 words a minute unfamiliar, unpreviewed dictation and those writing 80 words a minute familiar, previewed dictation.

The outcome of the test shows that unfamiliar, unpreviewed dictation is more difficult to write and transcribe than the familiar, previewed dictation judging from the means on the table.

(b) There is no significant difference in the standard of accuracy of students writing 80 words a minute dictation without learned shortcuts and those writing the same dictation with learned shortcuts.

Table 4.2: Comparison of Correctly Written Outlines and Correctly Transcribed Outlines of Students Writing without Learned Shortcuts and those Writing with Learned Shortcuts at 80 Words a Minute (N = 52)

	Correctly Written Outlines		Correctly Transcribed Outlines	
	Control	Experimental	Control	Experimental
Mean	81.6	87.8	75.3	82.9
Std.Dev	9.9	9.4	14.1	12.2
C.V.	12.2	10.69	18.7	14.8
T-stat	3.8		2.94	
df	102		102	
P. of sig	0.0007		0.0020	
Decision	Very Highly Significant		Highly Significant	

Those students who took the dictation without the learned shortcuts were the Control Group while those who took the dictation with learned shortcuts were the Experimental Group.

In the above table the probability of significance of 0.007 for correctly written outlines and 0.0020 for correctly transcribed outlines are less than the usual level of significance of 0.05. The null hypothesis is thereby rejected, meaning that there is significant difference in the standard of accuracy of students writing 80 words a minute dictation without learned shortcuts and those writing the same dictation with learned shortcuts.

In other words, those with learned shortcuts got down more correct outlines and were able to transcribe these outlines more accurately than those without learned shortcuts who probably wrote the outlines mostly in full in their shorthand notes and could not recognise these outlines easily

4.2.2 <u>100 Words a Minute Writers</u>

(a) There is no significant difference in the standard of accuracy of students writing 100 words a minute unfamiliar, unpreviewed dictation and 100 words a minute familiar, previewed dictation.

Table 4.3: Comparison of Correctly Written Outlines and Correctly Transcribed Outlines of Unpreviewed and Previewed Dictation at 100 Words a Minute (N = 88)

	Correctly Written Outlines		Correctly Transcribed Outlines	
	Unpreviewed	Previewed	Unpreviewed	Previewed
Mean	74.0	89.4	65.5	82.0
Std. Dev	8.4	6.3	11.1	9.5
C.V.	11.4	7.0	17.0	11.5
T-stat	13.8		10	
df	174		174	
P. of sig	0.0050×10^{-12}		0.001×10^{-10}	
Decision	Very Highly Significant		Very Highly significant	

From the table, the probability of significance of 0.0050×10^{-12} for correctly written outlines and 0.001×10^{-10} for correctly transcribed outlines are much less than the value of the usual level of significance. The null hypothesis is rejected, pointing to the fact that there is significant difference in the standard of accuracy of students writing 100 words a minute unfamiliar, unpreviewed dictation and those writing 100 words a minute familiar, previewed dictation.

This is to say that the result given in the table, as indicated in the means, shows that students at this level performed much better in previewed dictation than in unpreviewed dictation in both the written and transcribed outlines.

(b) There is no significant difference in the standard of accuracy of students writing 100 words a minute dictation without learned shortcuts and those writing the same dictation with learned shortcuts.

Table 4.4: Comparison of Correctly Written Outlines and Correctly Transcribed Outlines of Students Writing without Learned Shortcuts and those Writing with Learned Shortcuts at 100 Words a Minute (N = 44)

	Correctly Written Outlines		Correctly Transcribed Outlines	
	Control	Experimental	Control	Experimental
Mean	85.5	84.5	79.1	81.2
Std. Dev	6.7	12.8	9.8	11.0
C.V.	7.9	15.2	12.4	13.6
T-stat	0.48		0.92	
df	86		86	
P. of sig	0.31		0.18	
Decision	Not Significant		Not Significant	

Those students who took the dictation without the learned shortcuts were the Control Group while those who took the dictation with learned shortcuts were the Experimental Group.

It could be seen from the table above that the probability of significance level of 0.31 for correctly written outlines and 0.18 for the correctly transcribed outlines are more than the normal level of significance of 0.05. The null hypothesis can therefore not be rejected as the test reveals that there is no significant difference in the standard of accuracy of students writing 100 words a minute dictation without learned shortcuts and those writing the same dictation with learned shortcuts.

This means that the standard of performance of both the Control and Experimental Groups in writing and transcribing shortcuts were virtually the same at this level.

4.2.3 <u>80 Words a Minute Writers Compared with 100 Words a Minute Writers</u>

(a) There is no significant difference in the standard of accuracy of students writing 80 words a minute unfamiliar, unpreviewed dictation and those writing the same dictation at 100 words a minute.

Table 4.5: Comparison of Correctly Written Outlines and Correctly Transcribed Outlines of Unfamiliar, Unpreviewed Dictation Written at 80 and 100 Words a Minute

	Correctly Written Outlines		Correctly Transcribed Outlin	
	80 w.a.m N = 104	100 w.a.m N = 88	80 w.p.m N = 104	100 w.p.m N = 88
Mean	66.9	74.0	63.0	65.5
Std. Dev.	19.5	8.4	14.3	11.1
C.V.	20.2	11.4	22.7	17.0
T-stat	4.24		1.31	
df	190		190	
P. of sig	0.002		0.096	
Decision	Highly Significant		Not Significant	

The probability of significance value of 0.002 for correctly written outlines is much less than the value of 0.05. The null hypothesis is thereby rejected as there is a significant difference in the standard of accuracy of students writing unfamiliar, unpreviewed dictation at 80 words a minute and those writing at 100 words a minute. However, the probability of significance level of 0.096 for the correctly transcribed outlines is more than 0.05

(P > 0.05), which means that the null hypothesis cannot be rejected for the correctly transcribed outlines. In other words, there is no significant difference in the standard of accuracy of students transcribing unpreviewed dictation at 80 words a minute and those transcribing such dictation at 100 words a minute.

The direct interpretation of this result is that the 100 words a minute writers did much better than the 80 words a minute writers in writing unfamiliar, unpreviewed outlines whereas both groups exhibited almost the same quality of performance in transcribing the outlines.

(b) There is no significant difference in the standard of accuracy of students writing 80 words a minute familiar and previewed dictation and those writing the same dictation at 100 words a minute.

Table 4.6: Comparison of Correctly Written and Correctly Transcribed Outlines of Previewed Dictation Written at 80 and 100 Words a Minute

	Correctly Written Outlines		Correctly Transcribed Outlines	
	80 w.a.m N = 104	100 w.a.m N = 88	80 w.p.m N = 104	100 w.p.m N = 88
Mean	88.4	89.4	82.0	82.0
Std. Dev	8.3	6.3	10.0	9.5
C.V.	94	7.0	12.2	11.5
T-stat	0.93		0.01	
Df	190		190	
P. of sig	0.18		0. 5	
Decision	Not Significant		Not Significant	

The above table shows that the probability of significance at 0.18 for correctly written outlines and 0.5 for correctly transcribed outlines are more than 0.05 level of significance. The null hypothesis can therefore not be rejected. The implication of this is that there is no significant difference in the standard of accuracy of students writing familiar, previewed dictation at 80 words a minute and those writing the same dictation at 100 words a minute.

It could be noticed from the table that the means of the two groups are fairly and uniformly high for both the written and transcribed outlines. This confirms the generally held belief in educational circle that familiarity with the content or subject matter of a lesson helps learning greatly.

(c) There is no significant difference in the standard of accuracy of students writing 80 words a minute dictation with learned shortcuts and those writing the same dictation at 100 words a minute.

Table 4.7: Comparison of Correctly Written Outlines and Correctly Transcribed Outlines of Students Writing 80 and 100 Words a Minute with Learned Shortcuts (Experimental Groups)

	Correctly Written Outlines		Correctly Transcribed Outlines	
	80 w.a.m N = 52	100 w.a.m N = 44	80 w.a.m N = 52	100 w.a.m N = 44
Means	87.8	84.5	82.9	81.2
Std. Dev.	9.4	12.8	12.2	11.0
C.V	10.69	15.2	14.8	11.6
T-stat	1.46		0.71	
df.	94		94	
P. of sig	0.07		0.24	
Decision	Not Significant		Not Significant	

The calculated level of significance, according to the table above, is 0.07 for correctly written outlines and 0.24 for correctly transcribed outlines. These values are more than the level of significance of 0.05. The hypothesis can therefore not be rejected as there is no significant difference in the standard of accuracy of those students writing 80 words a minute with learned shortcuts and those writing the same dictation at 100 words minute. According to the table, the quality of the means for both the correctly written outlines and correctly transcribed outlines at both levels are relatively identical. This suggests that those who took down the dictation with learned shortcuts (the experimental group at both levels) were able to transcribe or decipher correctly most of the shortcuts they were able to write down correctly.

(d) There is no significant difference in the standard of accuracy of students writing 80 words a minute dictation without learned shortcuts and those writing the same dictation at 100 words a minute.

Table 4.8: Comparison of Correctly Written Outlines and Correctly Transcribed Outlines of Students Writing at 80 and 100 Words a Minute without Learned Shortcuts (Control Groups)

	Correctly Written Outlines		Correctly Transcribed Outlines	
	80 w.p.m *N*=52	100 w.p.m *N*=44	80 w.p.m *N*=52	100 w.p.m *N*=44
Mean	81.6	85.5	75.3	79.1
Std. Dev.	9.9	6.7	4.1	9.8
C.V.	12.2	7.9	18.7	12.4
T-stat	2.23		1.53	
df	94		94	
P. of sig	0.01		0.07	
Decision	Highly Significant		Not Significant	

The probability of significance of 0.01 for correctly written outlines is less than 0.05, the normal level of significance. This infers that the null hypothesis is rejected in respect of the correctly written outlines. In other words, there is a significant difference in the accuracy of students writing at 80 words a minute without learned shortcuts and those writing the same dictation at 100 words a minute.

As for the correctly transcribed outlines, a significant level of 0.07 is more than the level of 0.05, the null hypothesis can therefore not be rejected. This implies that there is no significant difference in the accuracy of students transcribing 80 words a minute without learned shortcuts and those transcribing the same dictation at 100 words a minute.

It is note worthy from the above table that the means for correctly transcribed outlines for both levels of writers (80 and 100 words a minute) are low compared with those for the correctly written outlines. This might be because the students in this group (Control Group) had to write most of the outlines in full instead of using the shortcuts, resulting in their inability to recall or decipher these outlines while transcribing.

(e) There is no significant difference in the standard of accuracy of students affected by the fatigue of sustained dictation at 80 words a minute for six minutes and those affected by the fatigue of sustained dictation at 100 words a minute for six minutes.

Table 4.9: Minute by Minute Comparison of Means of Correctly Written Outlines and Correctly Transcribed Outlines of Students Writing at 80 Words a Minute and 100 Words a Minute

	Correctly Written Outlines		Correctly Transcribed Outlines	
Minute	80 w.a.m N=104	100 w.a.m N=88	80 w.a.m N=104	100 w.a.m N=88
1st	92.6	91.8	89.0	89.4
2nd	86.1	88.6	81.0	83.7
3rd	86.1	85.9	78.9	77.3
4th	83.7	86.9	75.7	77.9
5th	85.8	85.7	78.6	74.4
6th	83.3	85.3	74.5	77.7
(1) F.St (Min)	25.99		40.02	
df	5		5	
P. of sig	0.002×10^{-11}		0.00 E+00	
Decision	Very Highly Significant		V. Highly Significant	
(2) F.St (Gps)	8.74		1.26	
df	1		1	
P. of sig	0.003		0.25	
Decision	Highly Significant		Not Significant	

In working out the ANOVA or F. Statistic in the above table, only the first 88 students out of the 104 students in in 80 words a minute group were taken into consideration, for balanced comparison with the 88 students in 100 words a minute group.

From the table, the calculated levels of significance of 0.002×10^{-11} for difference in minutes and 0.003 for the difference in the two groups under the correctly written outlines are less than the usual 0.05 significant level. This means that the hypothesis under the correctly written outlines is rejected.

In the area of transcription, the 0.000E+00 probability of significance in the difference in minutes is far less than the normal 0.05 significant level, but 0.25 probability of significance in the difference between the two groups is more than 0.05 significant level. The hypothesis can therefore not be rejected under the correctly transcribed outlines.

The findings point to the fact that the 100 words a minute group is less affected by fatigue compared with the 80 words a minute group in writing the outlines. Both the two groups are, however, equally affected by fatigue in transcribing the outlines.

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The acute shortage of well trained confidential secretaries in both the public and private sectors in Nigeria is a common knowledge. This unfortunate situation is compounded by poor results in secretarial subjects, particularly shorthand, in our training institutions. One of the reasons usually given for the poor results is bad method of teaching. Efforts should therefore be directed towards improving the situation. This study which evaluated some selected factors affecting performance in shorthand dictation was undertaken to help both the students and the teachers in their roles in shorthand teaching and learning process. The researcher was mainly interested in assessing the effects of preview, shortcuts and fatigue on shorthand writers, using the 80 and 100 words a minute writers for the study and basing performance solely on the number of correctly written outlines and correctly transcribed outlines.

The study has brought out some interesting discoveries.

5.2 Principal Findings and Conclusions

The following are the key findings and conclusions arising from the study:

(a) The hypothesis which states that no significant difference exists in the standard of accuracy of students writing 80 words a minute unfamiliar unpreviewed dictation and 80 words a minute familiar, previewed dictation was rejected at 0.05 level of significance. This confirms the generally held notion that unfamiliar, unpreviewed dictation is more difficult to write and transcribe than the familiar, previewed dictation.

(b) At 0.05 significance level, the hypothesis that states that no significant difference exists in the standard of accuracy of students writing 80 words a minute dictation without learned shortcuts and those writing the same dictation with learned shortcuts was rejected. This proves that mastery and appropriate use of shortcuts at this level is a help.

(c) Also rejected at 0.05 level of significance was the hypothesis stating that no significant difference exists in the standard of accuracy of students writing 100 words a minute unfamiliar, unpreviewed dictation and 100 words a minute familiar, previewed dictation. This buttresses the finding in a (a) above and a re-affirmation that students will perform better in familiar, previewed dictation than in unfamiliar, unpreviewed dictation.

(d) At 0.05 significant level, no significant difference existed in the standard of accuracy of students writing 100 words a minute dictation without learned shortcuts and those writing the same dictation with learned shortcuts. It can therefore be concluded that at the higher level of shorthand writing, students should be given the opportunity and encouragement to construct their own outlines for words, in line with the standard shorthand principles. This is because at this level, they should understand better the rudiments of shorthand and be able to use their initiative in a more constructive manner. The test also reveals that while learned shortcuts are helpful to students, particularly at the lower level, students who could write these shortcuts in other forms and transcribe them back correctly should be encouraged to do so.

(e) The hypothesis which states that no significant difference exists in the standard of accuracy of students writing 80 words a minute unfamiliar, unpreviewed dictation and those writing the same dictation at 100 words a minute was rejected at 0.05 significant level for correctly written outlines and not rejected for correctly transcribed outlines. The result shows that length of training, practice and experience are major factors in shorthand writing. This must be why the 100 words a minute

writers wrote more correct outlines of the unfamiliar, unpreviewed dictation than the 80 words a minute writers. However, the result obtained under the correctly transcribed outlines is an indication that difficulty in transcription such as bad penmanship, poor knowledge of English and lack of indepth understanding of the rudiments of shorthand constitute general problems to most shorthand writers at all levels.

(f) There was no significant difference in the standard of accuracy of students writing 80 words a minute familiar and previewed dictation and those writing the same dictation at 100 words a minute at 0.05 level of significance. This is another confirmation that at any level of shorthand writing, preview will help students achieve better result. This position is in line with the widely held belief in educational circle that familiarity with the content or the subject matter of a lesson helps learning greatly.

(g) There was also no significant difference in the standard of accuracy of students writing 80 words a minute dictation with learned shortcuts and those writing the same dictation at 100 words a minute at 0.05 significant level. This means that at any level of shorthand writing, shortcuts written correctly are likely to boost the speed of the writer and help in correct transcription.

(h) There was significant difference at 0.05 level of significance in the standard of accuracy of students writing 80 words a minute dictation without learned shortcuts and those writing the same dictation at 100 words a minute though there was no significant difference in their correctly transcribed outlines. This substantiates that at a higher level of shorthand writing, one becomes more capable of spontaneous forming and writing new words or shortcuts as a result of more exposure to practice and experience. The outcome also confirms that problems associated with transcription are general to all levels of shorthand writers.

(i) There was significant difference in the standard of accuracy of students affected by the fatigue of sustained dictation at 80 words a minute for 6 minutes and those affected by the fatigue or sustained dictation at 100 words a minute for 6 minutes at 0.05 significant level for written outlines, but there was no significant difference in the standard of accuracy of transcribed outlines of the two groups. This indicates that the 100 words a minute group is less affected by fatigue when compared with 80 words a minute group in written outlines but both groups were equally affected by fatigue in transcribed outlines. Again, the

inexperience and lack of enough exposure to practice on the part of the 80 words a minute group might have caused their being affected more by fatigue in writing the outlines but the findings that both groups were equally affected by fatigue in transcribing the outlines is another confirmation of earlier findings that problems associated with transcription are general to all levels of shorthand writers.

(j) The study has conclusively proved that shorthand writing could be affected by fatigue. The two groups involved in the study showed evidence of fatigue judging from the means recorded for each minute of the 6 minute dictation in both the correctly written outlines and correctly transcribed outlines (see Table 4.9). For example, both groups recorded the highest mean of correctness in the first minute and invariably had reduced means as the dictation progressed. However, from the study, it was discovered that while there is the presence of fatigue in shorthand writing, the fatigue may not manifest itself in a consistent manner in the output (writing and transcription) of the writer. The writer may get relaxed and miss some words in the middle of the dictation only to renew his or her energy in subsequent minutes of the dictation.

5.3 Recommendations

In the light of the findings of this study, the following recommendations are made:

1. Shorthand teachers should preview most of the passages to be used in their lessons before giving the dictation to students. The study has revealed that it is easier to write and transcribe previewed words than unpreviewed words.
2. In all our public and institutional examinations, shorthand passages should contain only words that are familiar and within the capabilities of the candidates at a given level.
3. Shorthand teachers should allocate about 1/6 of their lessons daily to unpreviewed, unfamiliar dictation in order to acquaint the students with office style dictation which is generally not previewed.
4. Teachers should groom their students, particularly those at the lower level of 80 words a minute and below, in the mastery and application of the conventional shortforms. This will help the students develop higher speeds in shorthand.
5. Shorthand passages for both institutional and public examinations should not be more than three minutes in order to save the students from unnecessary fatigue or diminishing returns.

6. In their lessons, shorthand teachers should constantly provide the students the opportunity to improve their vocabulary, spellings, tenses and other aspects of English Grammar for better performance in transcription.
7. Shorthand students, particularly at the lower level (80 words a minute and below) should be tested not only for speed but in the theory and rudiments of shorthand. Also at the higher level (100 words a minute and above), the teacher should make efforts to review the theory from time to time. This will help the students to understand the shorthand principles and write correct outlines.
8. Hand-written shorthand transcription should be discouraged in all our schools and colleges as this has no relevance to what is the practice in offices where students will work after training.

5.4 Implications for Classroom Instructions

Based on the findings of the study and the recommendations made, the following are the implications for classroom instructions:

1. For effective use of preview in the classroom, it will be necessary for a teacher to devote about 1/3 of the class period to it. For example, in a 45 minutes lesson, about 15 minutes could be used in previewing difficult words. Another example is that

if a letter or a passage is to be dictated, at least 10 per cent of the letter or passage should be previewed before the dictation is given to the students Preview should be used as a teaching device only and not to encourage laziness on the part of the students. It should therefore enlighten the minds of the students, challenge their intellect and motivate them towards the achievement of greater heights.

2. About 1/6th of the lesson should be allocated to unpreviewed dictation to enable the students get used to office style dictation which is usually not previewed. Occasional role-playing of the office situations by the students and the teachers will also help the students grasp the technicalities involved in unpreviewed dictation. Unpreviewed dictation is meant to challenge the capability of individual students in shorthand writing. Students always have a feeling of accomplishment whenever they are able to write this type of dictation because it is a proof of what they can do in shorthand writing without being 'helped' (through preview) by the teacher, thereby increasing their confidence in the subject.

3. As the name implies, shorthand encourages brief or shortened forms of writing. The place of shortcuts in shorthand writing can therefore not be overemphasised. Particularly at the beginning of each

lesson, teachers should make efforts to dictate shortforms listed in the textbooks or work-book drills used in the class to enable the students master the shortforms properly. About 1/4 of each lesson should be devoted to learning and reviewing shortforms each day in order that students may improve their speeds. However, teachers should not forget that students do not learn alike. There are bound to be individual differences. If the short-forms help the learner to write and transcribe better and faster, then they are useful, but if a student finds it difficult to adopt specific short-forms, he or she should not be forced to do so.

4. Two or three times a week, there should be sustained or prolonged dictation of 5 to 6 minutes each. This is necessary if a shorthand writer is to write a 2 or 3 minutes dictation without pressure or fatigue. Moreover, secretaries in the offices may be called upon to take down minutes of meetings or accounts of proceedings in conferences and seminars. Students should also be encouraged to have plenty of sustained dictations at home to supplement whatever they might have had during normal class lessons. No matter the length of a dictation, teachers must ensure that the students are made to read or trans-cribe them. This will enable the students to take their work seriously at all times.

5. The study indicates that students performed much better in written outlines than in transcription. It was infact discovered that many students wrote correct outlines which they could not transcribe correctly. Shorthand teachers should use every opportunity of each lesson to drill their students in various aspects of English Grammar like vocabulary, spellings, tenses, parts of speech, punctuations and sentence constructions. In addition, students should be allowed to refer to the dictionary during transcription in both the classwork and examinations. Above all, a shorthand teacher should constantly liaise with the English teacher for any possible help that the students may need in improving their knowledge and understanding of the English Language.

6. In the study, it was found that those students who were able to write correct outlines were also able to transcribe correctly. This is a confirmation that correct formation of outlines leads to correct transcription. Shorthand students, particularly at the lower classes, should be tested not only for speed but in the theory and rudiments of shorthand. At the higher classes, while the teacher should also make efforts to revise the theory from time to time, the students should be encouraged to form or make-up their own outlines, in line with laid down shorthand principles, and not tied down to specific outlines

when taking down dictation. The study shows that students at this level use their initiative and experience more effectively in tackling their dictation speed problems.

7. It was observed from the study that some students had not been having enough shorthand transcription practice on the typewriter, though there were evidences to show that they had a lot of handwritten transcription. Secretaries are not expected to handwrite shorthand transcription in offices after training. Teachers of shorthand should discourage or where possible, totally ban handwritten shorthand transcription in their classes. This could be done by holding shorthand classes in typewriting rooms, by asking the students to transcribe all shorthand classwork on the typewriter and by introducing laboratory hours after normal classes to help students transcribe their shorthand assignments if they will have no opportunity of typing at home.

5.5 Recommendation for Further Research

Shorthand teaching and learning are still at their infancy in this country. The improvement of results in the subject, as in other subjects, requires knowledgeable inquiries from time to time. It is hoped that further research relating to the subject will be carried out in the following areas:

i. Duration for learning the subject.

ii. Minimum education necessary for proper mastery of the subject.

iii. Qualities that can rightly predict success in the subject.

iv. Definite ways or steps of learning the rudiments of the subject for easier and quicker mastery.

v. Effective and dependable ways of measuring the performance of the students in the subject.

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APPENDIX A

Both Levels

WARM-UP PASSAGE

One Minute

The duties of a secretary each working day are many and varied. The tasks of any one day may be more challenging and interesting than those on other occasions, but there is no day in the office that can be regarded as boring.

The state of mind of a secretary at the beginning of each working day will determine her approach to work in the office. A friend once offered me several useful suggestions that can help a secretary to prepare herself for the responsibilities of each day. She should be neat, modest and comfortable in her mode of dress.

(S.I = 1.5)

APPENDIX B

Dictation Passage
80 Words a Minute for 6 Minutes

Taking the Minutes of a Meeting

One of the secretary's duties may be that of taking minutes of meeting. Whether it is a large / meeting of ¼
shareholders or a small meeting of a local club, a record of the decisions is made during the meeting /. ½

After the meeting, the secretary, sometimes with the aid of the chairman, writes up the minutes. It used to be / the ¾
practice to write these by hand in a special Minute Book. Any alteration, other than minor spelling mistakes, could // 1
not be made without consulting members of the committee and initialling the amendment.

It is the practice nowadays to have / the minutes ¼
duplicated and sent out to all the committee members some time prior to the following meeting. This enables / the ½
members to read them through, refresh their memories on points discussed at the previous meeting, and to have ready / ¾
any matters arising from them that they may wish to query.

This method of working has other obvious advantages; a // member is kept up-to-date with the committee business even 2
if he is unable to attend each meeting. As / the minutes ¼
have already been issued it may save valuable time to take them as read. This avoids the boredom / of what is often no ½
more than a tedious formality for the committee.

Whether the meeting is of a large / business or simply ¾
of the village cricket club, certain rules have to be applied
to its procedure otherwise it could // easily turn into an 3
argument or free-for-all shouting match.

The most important point to bear in mind when / writing ¼
minutes is that they are not verbatim reports. Only the
resolutions and other relevant matters should be included.
Often / the name of the proposer and seconder are included, ½
but this is not essential. Some recorders are instructed to
note / the number of votes for and against a motion, but ¾
again it is by no means necessary that these are // recorded, 4
each committee having its own peculiarities and operation
style.

Among the items that have to be included in the / ¼
minutes are the date of the meeting, where it was held, the
name of the chairman, and a list of / members present. Any ½
apologies from members unable to attend should also be
included. All new rules that are made and / all resolutions ¾
passed must be accurately recorded and any relevant dates and
figures should be given where necessary.

If the // opportunity comes to you to take the minutes 5
of an important meeting, do not be anxious and nervous of the
/ task but accept it joyfully and try hard to do a good job. ¼

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It will help immensely if you are / well prepared and to this ½
end remember to have available plenty of sharpened pencils,
or a filled pen, and adequate / paper suitable for taking ¾
notes. For future reference try to learn the names of as
many committee members as possible. // 6
(S.I = 1.5)

APPENDIX C

80 Words a Minute
Unpreviewed, Unfamiliar Words
(Words Outside the 700 Common Words in the Passage)

local	avoids	motion
clubs	boredom	necessary
decisions	tedious	style
chairman	formality	apologies
minor	village	accurately
spelling	procedure	anxious
initialling	argument	nervous
amendment	shouting	accept
nowadays	match	prepared
duplicated	hear	available
committee	verbatim	plenty
prior	resolutions	sharpened
refresh	relevant	pencils
discussed	included	filled
previous	proposer	joyfully
arising	seconder	immensely
query	essential	adequate
obvious	votes	suitable
attend	against	reference

(57 words)

Previewed, Familiar Words

Words within the 700 Common Words
in the passage ... ... 397 words

Words for Which Shortcuts were Learnt

whether		members		peculiarities	
during		amendment		are	
secretary		have		was	
practice		from		should	
hand		them		all	
special		wish		any	
alteration		advantages		opportunity	
mistakes		what		important	
without		more			

(26 words)

Summary

Unpreviewed, Unfamiliar Words	- 57	Words =	11.87%
Previewed, Familiar Words	- 397	Words =	82.71%
Words for which Shortcuts were Learnt	- 26	Words =	5.42%
Total	- 480	words =	100.00%

APPENDIX D

Dictation Passage
100 Words a Minute for 6 Minutes

Taking the Minutes of a Meeting

One of the secretary's duties may be that of taking minutes of meeting. Whether it is a large meeting of shareholders or a small / meeting of a local club, a record ¼
of the decisions is made during the meeting.

After the meeting, the secretary, sometimes with the aid of / the chairman, writes up the minutes. It used to be the ½
practice to write these by hand in a special Minute Book. Any alteration, other / than minor spelling mistakes, could ¾
not be made without consulting members of the committee and initialling the amendment.

It is the practice nowadays to have // the minutes 1
duplicated and sent out to all the committee members some time prior to the following meeting. This enables the members to read them / through, refresh their memories on ¼
points discussed at the previous meeting, and to have ready any matters arising from them that they may wish to / query. ½

This method of working has other obvious advantages; a member is kept up-to-date with the committee business even if he is unable / to attend each meeting. As the minutes have ¾
already been issued it may save valuable time to take them as read. This avoids the boredom // of what is often no more 2
than a tedious formality for the committee.

Whether the meeting is of a large business or simply of the / village criket club, certain rules have to be applied to its procedure otherwise it could easily turn into an argument or free-for-all shouting / match.

The most important point to bear in mind when writing minutes is that they are not verbatim reports. Only the resolutions and other relevant / matters should be included. Often the name of the proposer and seconder are included, but this is not essential. Some recorders are instructed to note // the number of votes for and against a motion, but again it is by no means necessary that these are recorded, each committee having its / own peculiarities and operation style.

Among the items that have to be included in the minutes are the date of the meeting, where it was / held, the name of the chairman, and a list of members present. Any apologies from members unable to attend should also be included. All new / rules that are made and all resolutions passed must be accurately recorded and any relevant dates and figures should be given where necessary.

Minutes should // always be written in the past tense. The language must be direct and businesslike, and in the third person however intimate the group of members / may be. Marginal headings, or index numbers, help in referring to specific items.

After a meeting the secretary may find that she has numerous pages / of notes and then begins the task of sifting ½
the relevant points from the unnecessary. Often she will find that the same point is brought / up and emphasized at ¾
various stages of the meeting. The discussion leading to a decision need not be included. Only the final decisions are of // future importance and these should be given in the 5
clearest form possible with no likelihood of any ambiguity in meaning.

If the opportunity comes to / you to take the minutes of ¼
an important meeting, do not be anxious and nervous of the task but accept it and try hard to / do a good job. It will ½
help if you are well-prepared and to this end remember to have available plenty of sharpened pencils, or / a filled ¾
pen, and adequate paper suitable for taking notes. For future reference try to learn the names of as many committee members as possible. // 6

(S.I = 1.5)

APPENDIX E

100 Words a Minute
Unpreviewed, Unfamiliar Words
(Words Outside the 700 Common Words in the Passage)

local	village	referring
clubs	procedure	specific
decisions	argument	items
chairman	shouting	numerous
minor	match	task
spelling	bear	sifting
initialling	verbatim	emphasised
amendment	resolutions	various
nowadays	relevant	stages
duplicated	included	discussed
committee	proper	likelihood
prior	seconder	ambiguity
refresh	essential	anxious
discussed	votes	nervous
previous	against	accept
arising	motion	prepared
query	necessary	available
obvious	style	plenty
attend	apologies	sharpened
avoids	accurately	pencils
boredom	tense	filled
tedious	intimate	adequate
formality	marginal	suitable
		reference

(70 words)

Previewed, Familiar Words

Words within the 700 Common Words
in the passage ... ... 500 words

Words for Which Shortcuts were Learnt

whether		amendment		was	
during		have		should	
secretary		from		and	
practice		them		all	
hand		wish		any	
special		advantages		businesslike	
alteration		what		language	
mistakes		more		however	
without		peculiarities		opportunity	
members		are		important	

(30 words)

Summary

Unpreviewed, Unfamiliar Words	-	70 Words =	11.67%
Previewed, Familiar Words	-	500 Words =	83.33%
Words for which Shortcuts were Learnt	-	30 Words =	5.00%
Total	-	600 Words =	100.00%

APPENDIX F

Department of Vocational and
Technical Education,
Faculty of Education,
Ahmadu Bello University,
Zaria. Kaduna State.
23rd February, 1989.

The Head,
Department of Secretarial Administration,
Kwara State Polytechnic,
ILORIN. Kwara State.

Dear Sir,

Loan of Grundig Tape Recorder

Please, give me on loan for six weeks, beginning from the date of this letter, the Grundig Tape Recorder in the Model Office of your department.

I have found out that the tape recorder is most suitable for the research I am conducting on "Evaluation of Selected Factors Affecting Performance in Shorthand Dictation" in three Nigerian institutions of which the Kwara State Polytechnic is one. The research is a requirement for the award of Master's Degree in Business Education of the Ahmadu Bello University, Zaria.

I promise to keep and return the tape recorder in good condition.

Thank you for your cooperation always.

Yours sincerely,

(Sgd.)
J. A. ARANSIOLA

APPENDIX G

Department of Vocational and
Technical Education,
Faculty of Education,
Ahmadu Bello University,
Zaria. Kaduna State.
23rd February, 1989.

The Head.
Department of Secretarial Administration,
Kwara State Polytechnic,
ILORIN. Kwara State.

The Head.
Department of Secretarial Administration.
Federal Polytechnic,
BIDA. Niger State.

The Head,
Department of Secretarial Administration.
The Polytechnic,
IBADAN. Oyo State.

Dear Sir,

Master's Degree Thesis

I am a post-graduate student in the Department of Vocational and Technical Education, Ahmadu Bello University, Zaria majoring in Business Education. As part of the requirements for the award of Master's Degree, I am currently preparing a thesis titled "Evaluation of Selected Factors Affecting Performance in Shorthand Dictation" using 80 and 100 words a minute shorthand writers as the focus of study.

I therefore, intend to involve in your department ND II students (for the 80 words a minute) and HND I students (for the 100 words a minute) in the study. Your polytechnic is chosen as one of the institutions to be used for the study because of the high reputation it enjoys in secretarial education in the country. This, I hope, will enhance the reliability of the findings arising from the study.

I shall be grateful if you can grant me permission to conduct the study as requested.

Yours sincerely,

(Sgd.)
J. A. ARANSIOLA

APPENDIX H

Minute by Minute Standard Deviations and Co-efficient of Variations of Correctly Written Outlines and Correctly Transcribed Outlines at 80 and 100 Words a Minute for 6 Minutes

(a) Standard Deviations

Minutes	Correctly Written Outlines		Correctly Transcribed Outlines	
	80 w.a.m N = 104	100 w.a.m N = 88	80 w.a.m N = 104	100 w.a.m N = 88
1st	4.4	4.4	7.5	5.3
2nd	6.5	6.5	10.7	9.2
3rd	8.2	7.4	11.5	12.6
4th	7.9	7.4	13.1	10.1
5th	7.9	7.6	9.4	14.0
6th	8.6	6.1	13.3	8.9

(b) Coefficient of Variations

Minutes	Correctly Written Outlines		Correctly Transcribed Outlines	
	80 w.a.m N = 104	100 w.a.m N = 88	80 w.a.m N = 104	100 w.a.m N = 88
1st	4.8	4.8	8.4	6.0
2nd	9.9	7.3	13.2	11.0
3rd	9.5	8.6	14.6	16.3
4th	9.4	8.5	17.3	13.0
5th	9.2	8.9	12.0	18.7
6th	10.4	7.1	18.2	11.4

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