EFFECT OF SELECTED VARIABLES UPON STUDENTS' PERFORMANCE IN SHORTHAND TRANSCRIPTION

BY

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A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL AHMADU BELLO UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTERS IN BUSINESS EDUCATION

DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION FACULTY OF EDUCATION AHMADU BELLO UNIVERSITY, ZARIA

FEBRUARY, 2000

DECLARATION

I hereby declare that this thesis has been written by me and that it is a record of my own research work and it has not been presented in any previous application for a higher degree. All quotations are indicated by quotation marks or indentation and sources of information are specifically acknowledged by way of references

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CERTIFICATION

This thesis entitled **EFFECT OF SELECTED VARIABLES UPON STUDENTS' PERFORMANCE IN SHORTHAND TRANSCRIPTION** by **Ugwuogo Christopher Chuks** meets the regulations governing the award of the degree of **M.Ed. in Business Education (Office Education)** of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This work is dedicated to my late father, Mr. J. D. Ugwuogo who rested in the Lord in 1989. It is also dedicated to all men and women of good will.

ACKNOWLEDGMENT

The flowers were gathered by the meadows and riversides, it is only the strings with which I tied them together that belongs to me. For this reason, I owe the success of this work to many individuals.

First and foremost, I thank the Almighty God for the infinite love, mercy and protection granted me and all those who contributed in one way or the other to the success of this thesis.

Secondly, I wish to express my great indebtedness to my major supervisor, Dr. (Alhaji) M. M. A. Aliyu who, despite his tight official schedules, gave me prompt attentions. The quality of this work was a reflection of his ingenuity and constructive criticisms. In fact, he is a rare gem.

My sincere gratitude also goes to Dr. (Mrs.) T. O. Ojo, a member of the supervisory committee for her great ideas and contributions. I am also greatly indebted to the members of oral defense committee in the persons of Dr. (Alhaji) M. M. A. Aliyu, Dr. (Mrs.) T. O. Ojo, Dr. (Mrs.) V. O. Babalola and Mr. M. O. Ibrahim for their constructive criticisms and useful suggestions.

Worthies of thanks are the following colleagues: Mr. Agbor Peter, Miss Adedijo Esther and Mr. Aluziwe H.O.D. for their encouragement and cooperation. I also acknowledge the contributions and advice from Dr. (Engr.) Matthew Edoga, Dr. Steve Njoku and Mr. Eze John.

Finally, I thank Dr. (Mrs.) V. O. Babalola, the Head of the Department and all those, too numerous to mention, that contributed in one way or the other to the success of this work.

ABSTRACT

This thesis which is quasi-experimental study focuses on the effect of selected variables upon students' performance in shorthand transcription at Federal College of Education (Technical), Bichi, Kano State. The study has six major objectives. They include ascertainment of whether or not syllabic intensity, familiarity of a passage or otherwise and length of dictation have effect upon students' performance in shorthand transcription among others. To help achieve these objectives, a total of 14 research questions were asked and 14 null hypotheses formulated for the study. Two levels of students - NCE I writing at 60 wpm and NCE II writing at 70 wpm were used. The population comprised 262 students offering shorthand in the institution and a sample of 160 comprising 98 NCE I and 62 NCE II students were used. The instruments for data collection were 10 different shorthand passages. The instruments were validated and tested for reliability through a pilot study. The sample was randomly divided into experimental and control groups. The two groups were taught for 4 weeks before administering tests which lasted for another 3 weeks. T-test statistic and Analysis of Variance (ANOVA) were used to test the hypotheses at 0.05 level of significance. Six of the hypotheses were rejected and 8 not rejected. The major findings were that syllabic intensity, familiarity of a passage or otherwise and length of dictation all affect students' performance in shorthand transcription. And based on these findings and conclusions reached, 12-point recommendations were made. They include a call for adopting syllabic intensity of 1.4 in all shorthand examinations, employment of preview as a

teaching device to help students cope with difficulty of unpreviewed, unfamiliar passage and sustained dictations during class periods among others.

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OPERATIONAL DEFINITION OF TERMS

For the purpose of better understanding, the following terms used in this study are operationally defined as follows:

Academic Performance: This refers to the result of a student in a test or examination. A mark of 40 and above is a pass mark while a student who obtains below 40 is regarded as having failed.

Syllabic Intensity: This refers to the average number of syllables of the total number of words in the passage. It is obtained by dividing the total number of syllables in a passage by the total number of words.

Unfamiliar, Non-previewed Passage: This refers to dictation material taken from copy with which the students were not familiar. No words contained in the copy were written for the students either before (preview) or after (postview) the dictation.

Deferred Transcription: This refers to a shorthand passage that was not transcribed immediately it was written. The passage is kept for some days before transcription. It is also referred to as a cold note.

Shortcut: It refers to an unconventionally contrasted outline. Such an outline is not written in full the way it should have been written.

CHAPTER 1

INTRODUCTION

1.1 Background Information

Shorthand is the art of representing spoken sounds with brief symbols. While shorthand transcription is the act of translating written shorthand outlines into longhand. Most historians according to Russon (1968) date the beginning of shorthand with Zenophine, who used an ancient Greek system to write the memoirs of Socrates. The same source has it that Marcus Tullius Tiro invented the first latin shorthand while Timothy Bright designed an English shorthand system.

From 1602 (Russon, 1968) when John Wills invented a shorthand system to date, many shorthand systems have evolved. Of importance to this study is Pitman shorthand invented by Isaac Pitman in 1837 (Pitman, 1979). Pitman shorthand, originally called "stenographic sound-hand" is the system predominantly in use in Nigeria.

Although, it is not certain when exactly business courses, which shorthand is one of, were first taught in Nigeria, Fafunwa (1974) wrote that it was the need for clerical and secretarial staff that forced the colonial authorities to introduce elements of business subjects into the curriculum. Ehiametalor (1990) and Nwaokolo (1994) in separate accounts wrote that the training in vocational business studies or what came to be known as commercial education started about 1930 with the establishment of clerical training centre at Ogbomosho in Oyo State. By 1955, several government training centres and privately owned evening and day business schools were established in various parts of the country. Even before then, it is on record (Awokoya, 1979) that St. Andrews College Oyo, founded in 1859, taught among other things, simple accounts to teacher trainees some of whom later, on their own, learnt typewriting and shorthand during holidays. In his own account, Amaefule (1986) wrote that in late fifties and early sixties business subjects including shorthand were being offered in the colleges of arts and technology,

federal training centres, institute of administration, privately owned commercial secondary schools and road side commercial institutes.

It is gratifying to know that today shorthand, as a matter of policy, is being taught at all levels of our educational system. At senior secondary, it forms part of business studies offered as a pre-vocational subject. At senior secondary, it stands out as one of the vocational subjects. In colleges of education, polytechnics and universities, shorthand is one of the core courses in disciplines like business education, secretarial studies and secretarial administration. As at October 1998, shorthand related disciplines are being offered in 37 colleges of education, 39 polytechnics and 11 universities (1998 UME and PCE brochures).

Shorthand has remained a very vital skill of a secretary, a business teacher and even for personal use. The demand for well-trained secretaries who can take dictation and transcribe rapidly and accurately is tremendous and all indications are that this demand will increase in the years-ahead (An Action Agenda for Business Education, 1985). Even in this era of new office automation, the use and future of shorthand has not diminished because according to Valentine (1983) "shorthand contributes to office productivity in the way automated equipment can't". 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 formation, enrichment of life experiences and self-survival of the shorthand learner.

In the face of these enviable prospects for shorthand writers, shorthand writers and teachers are in short supply (Aina, 1991). This study which is carried out in an NCE awarding institution is timely. Firstly because NCE is hoped to be the minimum teaching qualification in the near future. Secondly, the Nigerian economy is in shambles and if it

is to be revamped, action should be intensified on scientific, technical and vocational programmes. In view of this, the need to acquire technolo gical expertise should no longer be focused on classics alone, but on skill subjects which shorthand is one of.

1.2 Statement of Problem

Transcription is the ultimate goal of shorthand. The m ain objective of shorthand instruction at any level is to enable students who are potential employees take a dictation at a speed which enables the accurate recording and transcript on of notes into mailable letters and reports at a rate commensurate with an acceptable r nge of office standard. It is expected that shorthand candidates pass shorthand at every st age it is registered.

Unfortunately, students' performance in shorthand tran scription has been woeful over the years. From the preliminary investigation by the res earcher, an average of 58 percent of students who registered for shorthand at various lev els at the Federal College of Education (Technical), Bichi have consistently failed it at t he first sitting for the past seven years (see appendix 1).

It is against this background that one wonders what co uld be responsible for this worrisome situation. Could it be that shorthand teachers are n t putting in their best? Or that the necessary equipment, materials and infrastructures needed for the successful teaching and learning of shorthand are not available? Or that a ptitude and interest are not considered when admitting students into shorthand programm es? It is very common to hear students complain of their inability to meet up with the d ctation speed and inability to correctly transcribe written shorthand outlines.

Students' poor performance in shorthand has been a nagging issue. Many research studies have been conducted on the causes of stud nts' poor performance in shorthand.

Most of these studies focused on the effect of the following variables upon students' performance in shorthand transcription: English Language background, teaching method, deferred and non deferred transcription, knowledge of shorthand theory, context of the dictation passage and accuracy of shorthand notes. From the researcher's teaching experience, it has been observed that some of the strategies mostly employed by teachers in helping their students achieve accurate transcription include: dictating below the required speed, mitigating penalty, and the introduction of shortcuts for outlines which are difficult or lengthy to write in full.

Little or no empirical study has been done on effects of variables like syllabic intensity (S.I), length of dictation, and familiar and previewed/unfamiliar and unpreviewed passages upon students' performance in shorthand transcription. Few of the researches already done in these areas are either foreign or scanty and therefore requires further studies. This study is, therefore, to analyze the effect of these variables namely: syllabic intensity, length of dictation and familiar, previewed and unfamiliar, unpreviewed passages upon students' performance in shorthand transcription in Federal College of Education (Technical), Bichi, Kano State.

1.3 Objectives of the study

The objectives of the study are as follows:

1. To find out whether or not syllabic intensity (S.I) of a passage affects students' performance in shorthand transcription.
2. To ascertain whether or not previewing and familiarity of a passage has any effect on students' performance in shorthand transcription.

4. To find out the percentage of correctly written outlines and correctly transcribed outlines of passages with S.I of 1.4 and 1.6 respectively.
5. To ascertain the percentage of correctly written and correctly transcribed outlines of previewed and familiar and unpreviewed and unfamiliar passages.
6. To find out the percentage of correctly written and correctly transcribed outlines of 3 and 5 minutes dictations respectively.

1.4 Research Questions

This study seeks to provide answers to the following questions:

60 words per minute writers

1. What is the percentage of accuracy of passages written at 60 words per minute (WPM) for 3 minutes with S.I of 1.4 and 1.6 respectively?
2. What is the percentage of accuracy of previewed, familiar passage and unpreviewed, unfamiliar passage written at 60 wpm for 3 minutes?
3. What is the percentage of accuracy of passages written at 60 wpm for 3 and 5 minutes with S.I of 1.4?
4. What is the percentage of accuracy of previewed, familiar passage written at 60 wpm for 3 minutes with S.I of 1.4 and unpreviewed, unfamiliar passage written at 60 wpm for 5 minutes with S.I of 1.6?

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70 words per minute writers

5. What is the percentage of accuracy of passages written at 70 wpm for 3 minuntes with S.I of 1.4 and 1.6 respectively?
6. What is the percentage of accuracy of previewed, familiar passage and unpreviewed, unfamiliar passage written at the rate of 70 wpm for 3 minutes?

7. What is the percentage of accuracy of passages written at 70 wpm for 3 and 5 minutes with S.I of 1.4 respectively?
8. What is the percentage of accuracy of previewed, familiar passage written at the rate of 70 wpm for 3 minutes with S.I of 1.4 and unpreviewed, unfamiliar passage written at the rate of 70 wpm for 5 minutes with S.I of 1.6?

60 wpm writers compared with 70 wpm writers

9. What is the percentage of accuracy of passages written at 60 wpm for 3 minutes with with S.I of 1.4 and those writing at 70 wpm for 3 minutes with S.I of 1.4?
10. What is the percentage of accuracy of passages written at 60 wpm for 3 minutes with S.I of 1.6 and those written at 70 wpm for 3 minutes with S.I of 1.6?
11. What is the percentage of accuracy of previewed, familiar passage written at 60 wpm and previewed, familiar passage written at 70 wpm?
12. What is the percentage of accuracy of unpreviewed, unfamiiliar passage written at 60 wpm and unpreviewed, unfamiliar passage written at 70 wpm?
13. What is the percentage of accuracy of passages written at 60 wpm for 3 minutes and 70 wpm for 3 minutes?
14. What is the percentage of accuracy of passages written at 60 wpm for 5 minutes and 70 wpm for 5 minutes?

1.5 Hypotheses

The following null hypotheses have been formulated for the study:

60 words per minute writers

1. There is no significant difference in the shorthand test mean scores of students writing at 60 wpm for 3 minutes with S.I of 1.4 and those writing at the same speed with S.I of 1.6
2. There is no significant difference in the shorthand test mean scores of students writing previewed and familiar passage at 60 wpm and those writing unpreviewed and unfamiliar passage at the same rate.
3. There is no significant difference in the shorthand test mean scores of students writing at 60 wpm for 3 minutes and those writing at the same rate for 5 minutes.
4. There is no significant difference in the shorthand test mean scores among the three groups writing passage with S.I of 1.6, unpreviewed and unfamiliar passage and 5 minute dictation at 60 wpm.

70 words per minute writers

5. There is no significant difference in the shorthand test mean scores of students writing at 70 wpm for 3 minutes with S.I of 1.4 and those writing at the same speed with S.I of 1.6.
6 There is no significant difference in the shorthand test mean scores of students writing previewed and familiar passage at 70 wpm for 3 minutes and those writing unpreviewed and unfamiliar passage at the same speed.
7. There is no significant difference in the shorthand test mean scores of students writing 70 wpm for 3 minutes and those writing at the same speed for 5 minutes.

8. There is no significant difference in the shorthand test mean scores among the three groups writing passage with S.I of 1.6, unpreviewed, unfamiliar passage and 5 minutes dictation at 70 wpm.

60 wpm compared with 70 wpm writers

9. There is no significant difference in the shorthand test mean scores between students writing at 60 and 70 wpm for 3 minutes with S.I of 1.4.
10. There is no significant difference in the shorthand test mean scores between students writing at 60 and 70 wpm for 3 minutes with S.I of 1.6.
11. There is no significant difference in the shorthand test mean scores between students writing preview, familiar passages at 60 and 70 wpm for 3 minutes with S.I of 1.4.
12 There is no significant difference in the shorthand test mean scores between students writing unpreviewed, unfamiliar passages at 60 and 70 wpm with S.I of 1.4.
13 There is no significant difference in the shorthand test mean scores between students writing at 60 and 70 wpm for 3 minutes with S.I of 1.4.
14 There is no significant difference in the shorthand test mean scores between students writing at 60 and 70 wpm for 5 minutes with S.I of 1.4.

1.6 Significance of the study

This research work is significant in the following ways:

(a) A problem identified is half-solved. A knowledge of the effect of the 3 variables under study upon students' performance in shorthand transcription will go a long way in assisting shorthand teachers to improve their dication strategies and teaching methods for better performance.

(b) The findings will prove useful to bodies like West African Examination Council (WAEC), National Business and Technical Examination Board (NABTEB), National Commission for Colleges of Education (NCCE), National Board for Technical Education (NBTE) and National Universities Commission (NUC) in recommending syllabic intensity (S.I) levels for different speeds of shorthand examinations.

(c) It will be of immense benefit to students as they will learn from the findings various ways in which they could improve their performance in shorthand transcription.

(d) The study will help trigger off further attempts by other people to research into other 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.

(e) Equally significant is the fact that this study will fill a gab in knowledge since there has not been any comprehensive study on this topic before now in Nigeria.

1.7 Delimitation/Scope of the Study

This study examines the effect of syllabic intensity, preview/familiarity of a passage and length of dictation upon students' performance in shorthand transcription at the Federal College of Education (Technical), Bichi, Kano State. Accurate formation and transcription of shorthand outlines which are the main issues involved in the study will be considered. The study does not intend to look into such things like penmanship, hesitation time while writing, neatness and other activities expected of shorthand writers.

1.8 Assumption of the study

The researcher makes the following assumptions:

1. The students sincerely and faithfully participated in the experiment and in all activities involved.

2. The instruments measured what they supposed to measure.
3. All the students have minimum entry qualification with at least a pass in English language.
4. The control group at each level was not aware of any differential treatment given to experimental group.
5. NCE business teachers have an important role to play in the nation's development as NCE is hoped to be the minimum teaching qualification in the near future.

1.9 Limitations of the study

This study has only one major limitation. Only one institution is used for the study. This was to enable the researcher control some variables which, were not under study but could greatly affect the outcome of the research. This limitation will not affect so much the result of the experiment because the institution used is a "mini" Nigeria having drawn its students from almost all the states of the federation. Also the entry requirement and minimum standard is the same in all the NCE awarding institutions in the country. Nevertheless, care was exercised not to over generalize the outcome of the study because of this limitation.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 Introduction

The purpose of this chapter is to describe theoretical/conceptual framework and review studies that are relevant to the problem under investigation. The chapter is organized into two major headings, namely theoretical/conceptual framework and review of previous studies.

2.2 Theoretical/Conceptual Framework on Students' Academic Performance

Students' performance is the process whereby students' educational activities are measured by examination within the context of a curriculum. Any expression used to represent students' scholastic standing is usually referred to as academic performance (Lavin, 1965). Several authors have attempted to come out with factors that affect student academic performance. Some of these factors are intelligence, entry qualification, personality trait, socio-economic background, school environment, teacher, study habit and student attitude. These factors shall be reviewed as knowledge of them provides a useful framework in explaining why students' performances differ.

These factors are not mutually exclusive or independent but combine to explain the patterns of human existence, which result in differential academic performances.

2.2.1 Intelligence

Intelligence is an attribute of persons. Probably for as long as man has been on earth it has been a common observation that persons differ in brightness, in speed of learning, in ability to solve problems and so on. Different scholars have viewed intelligence as a concept from different perspectives. Frieze (1980) said that intelligence is an attribute of persons. Jean Piajet, for instance, connected intelligence with its structures and functions (Ginsburt and Opper, 1969). While Wesman (1976) saw it as the summation of the learning experiences of the individual, re-echoing that it is an "attribute" but not an entity. Arthur (1973) defined intelligence as what intelligent test measures. Psychologists like Frieze (1980:39) and Arthur (1973) agree that Intelligence Quotient (I.Q) is an accepted measure of intelligence and that I.Q correlates with many external criteria. Historically and quantitatively, the role of intelligence in school learning comes first. Arthur (1973) asserted that in terms of assessment of scholastic performance, I.Q accounts for more of the individual difference variance than any other single measurable attributes of the child. He estimated that I.Q accounts for about 50 percent of the variance in scholastic achievement at any single grade level and over 70 percent of the variance in overall scholastic performance. To corroborate this claim, Crow and Crow in Weinland (1930) were of the view that biological inheritance exercises a significant influence upon an individual's ability to engage in activities that are predominantly mental in nature. This again coincides with the view

expressed by Green (1964) to the effect that virtually all measures of school performance – whether they are grades, scores on teachers' test or scores on standardized tests – show

stable relationships to I.Q. He concluded by saying that there is a high correlation between intelligent test scores and the achievement scores. In fact, the view is generally held that intelligence has a significant relationship with academic performance (Wechsler, 1958; Arthur, 1966; Vernon, 1976; Anastasi, 1988 and Omoluabi, 1993). In general, any two groups, which differ in possessing what are perceived as 'the good things of life' according to the criteria and values of our society, will be found on the average to differ significantly in I.Q. (Frieze, 1980).

Even as intelligence has a strong influence on scholastic achievement, Arthur (1980) was quick to point out that intelligence is not an infallible predictor of the performance of any one individual.

2.2.2 **Entry Qualification**

One factor that is generally considered to be powerful predictor of student academic performance in school is pre-entry qualification. The screening and selection exercises in educational institutions are largely based on candidate's pre-entry qualification. Although further researches are still needed in this area, most of the studies carried out so far revealed that there is a positive correlation between students' entry qualifications and their academic performance. Bloom (1982) conducted an experiment with 2 classes – A and B. Class A has no pre-requisite entry behaviour while B has. The two classes were taught and examined and class B has high mean score. Following this experiment, he found that possession of cognitive entry behaviours lead to high performance. Peil

(1970) conducted a research on "A Level and Success at university of Ghana" and established a positive relationship between GCE A level and performance in the university. In a similar study conducted in England and Wales, Sear (1983) established some association between GCE 'A' level entry qualification and degree results and found that 64% of candidates who entered university with 12 points (3 Bs) or more had first class or second class upper while only 44% of those with GCE "A" level passes and only 24% of those with 4 points (2 Cs) obtained upper division certificates. In their own study, Bakare and Majason (1974) on the predictive validity of university of Ibadan entry qualifications with the use of 1,000 students admitted to the university between 1962 and 1969, found that there was a significant positive correlation between students' performances in various entry qualifying examinations and the relevant university examinations. Other researches in this area include that of Awesu (1974), Ohuche (1974), Olatunji (1976) and Akanbi (1997).

The results of the studies cited above are inconsistent with findings and conclusion on the subject of predictive validity of entry qualification on subsequent academic performance of the students. For instance, Endler and Steinber (1983) in Akanbi (1997) concluded that the idea of studying academic attainment in relation to entry qualification is a fruitless task. For according them, previous studies have yielded more or less inconsistent results. They advocated for continued research but insisted that academic performance must be examined along with other variables.

2.2.3 Personality Trait

Another factor identified in the literature to influence student academic performance is personality trait. One of the most prominent features of any investigation of school learning is the wide variation in performance found among students, even within groups exposed to the same experiences. The traits of individuals seem to play a major role in such varying performances, and an understanding of these individual differences can help one understand learning processes. Although the term personality may quite properly be taken to refer to the entire psychological structure of an individual, studies of personality traits and learning according to Green (1964) tend to focus on motivational patterns independent of or unrelated to, ability. Learning situations arouse motives in varying degrees, but people also differ in ways that determine how strongly these motives become engaged at any given time. These differences may be variously described as differences in strength of drive, or need or goal attraction. One way of describing such differences in drive level according to Green (1964) is to call students unconcerned, anxious or overanxious. Failure, for example, is an anxiety-arousing situation for many individuals. Failure and expectation of failure have been found to handicap the test performance of individuals rated high on measures of test anxiety. Skemp (1971)) expressed that a certain amount of anxiety may result in response that would impede performance in learning situation. In drawing a line between intelligence and personality trait, Green (1964) said:

> unlike intelligence whose relationship to performance is more nearly same at all times and places for all materials, anxiety have different relationships to performance

> and learning for different materials and
> different situations. High anxiety generally
> but not uniformly handicaps performance.

2.2.4 Socio-economic Background:

The matter of opportunity to learn is more important even within a single community than we sometimes like to acknowledge. In our society some groups are severely limited in their opportunities to learn many of the concepts and skills that are pre-requisites for success in school; certain other groups have unique chances for such learning. These variations according Green (1964) come first from conditions in home and neighbourhood, the greatest contrast being between the suburban and slum or our large metropolitan districts. A student's socio-economic background determines to a large extent the type of home he lives, and types of school he attends. The higher the socio-economic status of the student's family, the higher his academic achievement. This relationship has been documented in many studies and seems to hold no matter what measures of status is used (Thorndike, 1963; Coleman et al, 1966; Husen, 1967; Bloom, 1982 and Durotolu, 1997).

The effect of socio-economic background on a student's academic performance is summed up this way:

> There are studies that show significantly low I.Qs
> for children in backward rural communities. The
> studies of racial differences in intelligence are
> are plagued with the problems of environmental
> impoverishment in certain racial groups. The many
> companions that show a correlation between socio-
> economic factors and I.Q have made clear the fact of
> the relationship....(Nancy, 1965).

A subsequent study by Curry (1980), however, introduced another dimension to the nature of this problem. In the conclusion of his study, he asserted that when children are of high intellectual ability and have gone high in their academic grade level, the influence of socio-economic background is minimized, if not completely removed. He further argued that the higher the intellectual ability of the child, the less the influence of socio-economic background on achievement.

As mentioned earlier, the type of home a student comes from is a function of socio-economic status of his parents. The home, especially in the age period of about two to ten, develops language, the ability to learn from adults, and some of the qualities of need achievement, work habits, and attention to tasks which are basic to the work of the schools. While homes vary greatly in their development of these characteristics, there are some homes, which do a superb job of developing these related characteristics. The evidence on the effect of these characteristics – largely developed in the home – has been demonstrated in some of the large-scale national and international studies of school learning such as Coleman et al (1966), Douglas (1958) and Thorndike (1973). All these studies revealed that a large portion of the variation in school achievement, especially in the verbal ability, is accounted for by the differences in the home environment of children. In his research study, Majoribanks (1974) emphasized that the practice at home, including relationship between the home and the school, the use made of books and library facilities and the arrangements and practices associated with school work at home were found to have an effect on achievement. To stress further the effect of socio-economic status on academic performance, Douglas (1968) found that the middle class

parents take more interest in their children progress at school than the manual working class parents do. He emphasized the importance of material environment on performance by saying that malnutrition and poor living condition are bound to have an influence on the health of the child and so directly on his ability to learn. He further stressed that poor housing and overcrowding cannot only seriously impede the child's homework, but even his opportunity for reading or constructive planning.

2.2.5 School Environment

School environment is another factor that influences the student academic performance. Many educationists, sociologists, and psychologists hold the opinion that the quality of the school a child attends will have effect on his academic performance. According to them, the school acts as a check and balance on the home background. Durotolu (1997) in particular said that a student's academic performance depends more on school quality than on home background. The school or classroom variables that influence academic performance include: physical nature of the school building, equipment and facilities available, the qualification and experience of its staff, the average size of class groups, the social and intellectual mix of the students as a body, expenditure per student and school organization and administration (Bloom, 1982; Urwick and Bature, 1993; Durotolu, 1977; and Frieze, 1980). Underscoring the strong effect of school environment on academic performance, Thorndike (1973) wrote that favourable school conditions could enable most students to learn well and to get satisfaction from their learning.

Plowden in Coleman et al (1966) reported a low correlation between school variables and academic performance. According to the report, it is the environment for learning in the classroom rather than the physical characteristics of the class and classroom that is important for school learning. The major exceptions to the above report was, however, found where the class or school variable reflects selectivity of students with regard to general intelligence, socio-economic status, or plans for further education. What this means in essence, is that school environmental factors work in combination with other factors like intelligence, socio-eocnomic background, entry qualification etc to have a pronounced effect on the student academic performance. Despite this, school environment remains a very strong factor or determinant of academic success. Perhaps, this prompted Bloom (1982) to say that in spite of all the evidence on the existence and stability of differences in school learning, much of the variation is attributable to the environmental conditions in both the home and the school.

2.2.6 Teacher:

Another factor influencing student academic performance is the teacher. There is a popular saying to the effect that no nation can rise above the quality of its teachers and that no teacher can teach more than what he knows. Several qualities are expected of a good teacher. The good teacher should be qualified and experienced in the subject being taught, mentally alert, friendly, reliable, enthusiastic, fair and firm, adaptable and not

difficult. Blackmore in Afolabi (1996) held the view that poor teaching is one of the factors that account for high school dropout in schools. Presented in another way but meaning exactly the same thing, Nancy (1965) wrote that environmental opportunities geared to good performance include good teaching and varieties of experience. This statement presupposes that there are good and bad teachers. Ideally, a good teacher produces good result while the reverse is the case for a bad teacher. Crow and Crow (1958) expressed that when learners adopt the attitude of "the subject is too difficult" the fault lies with the teacher and not the subject. This opinion indicated that teachers should motivate their students for better performance. The teacher can help learner engage in good study procedures, and he can so present his material that it will be more easily understood. Making the point even clearer, Coleman et al (1966) wrote that such teacher characteristics as age, length and type of pre-service training, amount of experience, teacher attitudes and salaries have great influence on student academic performance.

Finally, most studies conducted about factors affecting achievement in schools indicated that the teacher is the key to school achievement (DeRose, Lockard and Paldy, 1979). To this end, Farrant (1984) wrote that a teacher cannot lift his students higher than himself. A lesson is not taught until it has been learned and it cannot be learned until it is understood. It is, therefore, the responsibility of the teacher to feed his pupils with knowledge, which they can consume. To do this, he requires a deep knowledge of what he teaches.

2.2.7 Study Habit:

Studies (Weinland, 1930; Crow and Crow, 1958 and Mcmillan, 1980) have shown that there are good and bad study habits and that good study habits, if adopted, would boost performance of most students. In particular, Crow and Crow(1958) said:

> Those students, either in high school or in college who succeed especially well usually study alone and follow a study technique that has been worked out by themselves and that incorporates desirable procedures.... He has discovered what for him is good study habits.

They went further to list 17 study habits that contribute to efficiency of learning. They include having a (1) definite place for study (2) definite purpose for study (3) plan and follow a definite time schedule for study among others.

2.2.8 Student Attitude

Writing on the effects of personal attitude of students on their academic performances, Blair, Jones and Simpson (1968) emphasized that the kinds of attitude which a child has affects school work and learning. If he has positive attitudes about teachers, and work, it is almost inevitable that he will experience some success and through reinforcement, will work more effectively and achieve almost nearly to his capacity. Conversely, negative attitude towards school and teacher usually signify that his interest and energies are aimed elsewhere and that he will fight attempts to make him learn. Although there are no research findings to support this claim, but experience shows that lackadaisical attitude towards schoolwork leads to truancy and absenteeism.

Furthermore, Ikejiofor (1979) gave lack of adequate preparation and dependence on cheating by buying exam question papers as some of the causes of poor performances in the WAEC examinations. According to him, the cause of poor performance lies mostly with the students. In most cases, they do not start on time to work hard. Consequently, at the last stages they do a lot of rush work as they make last minute preparations. This type of attitude would not help the students to achieve their goals.

2.3 Previous Studies

Valentine (1983) wrote that the secretary with both shorthand and word processing skills can fill the gab between word processor capabilities and the requirements of the modern office. Valentine went further to say that business understands that shorthand contributes to office productivity in ways automated equipment can't. Shorthand has an inestimable value and those who possess the skill are in high demand either as secretaries or business teachers. This claim was supported by the report of An Action Agenda for Business Education (1985) which stated that job prospects are excellent for secretaries with shorthand skills. Apart from vocational value, shorthand has personal uses, which include taking of notes and minutes. Despite these bright prospects for shorthand writers, the number of qualified shorthand writers turned out in our training institutions has not been encouraging because of the general poor performance of trainees in shorthand examinations. Some important research findings and expressed opinions of experts on causes of students' abysmal performance in shorthand transcription are reviewed

here. Such research studies and opinions show that students' poor performance in shorthand transcription is a function of many variables. They include:

2.3.1 Selection Procedure

Aptitude test is a test designed to measure capacities that is, to predict what one can accomplish with training. Many writers have blamed students' poor performance in shorthand transcription to lack of aptitude tests before selection of candidates. Writing in this regard, Plato in Robert (1967) wrote that:

> No two persons are born exactly alike, but each differs from each in natural endowment, one being suited for one occupation and another for another... all things will be produced in superior quality and quantity and with greater ease, when each man works at a single occupation in accordance with his natural gifts.

Faced with the problem of low turnover rate of secretarial studies students in Ondo State Polytechnic, Abiola (1992) discovered that some students used the department as "transit camp" to transfer to other department or institutions. To curb this high attrition rate and to reduce to the barest minimum the rate of failure especially in shorthand, Abiola (1992) conducted a research with a sample of 308 students from the Department of Secretarial Studies, Ondo State Polytechnic. The sample comprised of 150 students admitted on the basis of their School Certificate/General Certificate of Education result and 158 students admitted on the basis of their performances in the entrance examinations and interview. After administering a test, a rank-difference correlation and product-moment

co-efficient of correlation were used to establish a high position correlation between entrance examination performance and school shorthand performance. Abiola (1992) in his submission concluded that as a result of the high positive correlation between entrance examination performance and school shorthand performance, performance in shorthand can be improved through proper selection of qualified students with interest and aptitude in shorthand. He concluded by saying that aptitude test should be introduced before admitting students into the secretarial studies department of the polytechnic.

In their own report, Tonne and Nanassy (1970) wrote that many students who take shorthand never complete the subject and this they blame on unsatisfactory selection of trainees. What this means is that without proper selection of candidates with interest and shorthand aptitude, the effect will be high dropout and failure rate. The question now is what determines aptitude and interest in shorthand? Abiola (1992) reported that some National Secretarial Examinations and West African School Certificate Examinations Examiners' Report from 1978 to 1988 show that some of the reasons for students' failure in shorthand include spelling and punctuation errors. Also Hilgard (1962) argued that one of the abilities of entering into success in typing is good spelling. Since typing ability is sine qua non for typewritten transcription, spelling and punctuation should enter into shorthand aptitude test. Apart from spelling and punctuation skills, Anyaduba, Davis and Oladunjoye (1988) listed visual, manual and aural skills, good understanding of the use of English as requirements for shorthand transcription. Therefore, the

aforementioned skills should be reflected in shorthand aptitude test to be taken by any person aspiring to offer shorthand.

The main requisite of skill learning is interest. Charlesworth (1969) maintained that from onset it was necessary to make clear to the students the usefulness of the skill, adding that if we put ourselves in the students' place we would realize how difficult it was to maintain interest in learning something which seems to bear no relation to our own life. She added that it was well known that we learn only when our interest is caught and retained.

Much have been written on the question of interest. Harms, Sterhr, and Harris (1970) were of the view that the needs, interests, attitudes and capabilities of pupils are of fundamental importance and should not be ignored. Kanu (1991) conducted a research on the causes of difficulties and problems in learning shorthand in two tertiary institutions in Imo State with a sample of 100 students and 9 teachers. As much as 30 percent of the students used for the study indicated lack of interest in shorthand as one of the causes of their difficulties. Although the sample of this study is small considering the population, which stood at 391, the result is revealing. Also, Ugoji (1991) in a similar study conducted with a sample of 200 students in higher institutions in Rivers and Imo States identified lack of interest on the part of the students as one of the factors responsible for students' poor performance in shorthand.

2.3.2 Teacher/Teaching Method

Tonne, Popham and Freeman (1965) defined method of teaching as the procedure by which the teacher meets the learner at his level 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. A shorthand teacher, like any other teacher, faces a great deal of challenge in teaching his subject. But a shorthand teacher faces a greater challenge in the face of high failure rate in shorthand examinations. This informed Nwaokolo (1991) to pontificate that the problem that confronts a shorthand teacher everyday is the presentation of the principles as already sequenced and programmed in the textbook on a chapter by chapter basis. Even assuming that the student has the potential for success in learning shorthand, the extent to which he reaches that potential may be facilitated or hindered by the effectiveness of the teacher (Irol, 1975).

Supporting the above view, William (1968) wrote that normally if no students fail a subject, the question might rightfully arise concerning the credibility of the subject. However, if the number of dropout and failures is excessive, as in the case of shorthand, obviously something is amiss – either on the part of the teacher, in the materials used or in the methodology employed. Teachers' contribution in the high failure rate in shorthand has been expressed in various ways ranging from inappropriate teaching technique to non-teaching of important aspects of shorthand such as transcription and penmanship. Writing on instruction technique, Uduma (1986) quoted Mills as saying that good instruction makes difficult subject easy to learn but bad instruction makes even easy subject difficult to learn. In his part, Frink (1962) wrote 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.

Several researches have been conducted on teaching methods and such researches have not come out with any best method. Little wonder then that Reid and Thompson (1971) said that every shorthand teacher must be free to select the method, or combination of methods, which in his experience have resulted in effective learning. The vulnerability of shorthand to poor teaching has been authenticated in the works of Nwaokolo (1991), Nwaokolo and Otubolu (1991) and Olorunmaiye (1992). In particular, Olorunmaiye (1992) wrote that no teaching situation is static and no two classes are identical. The skillful teacher is knowledgeable about methods and materials but selects according to the needs of the particular class he is teaching. Some methods are used successfully by some teachers and not by others, some students react favourably to one type of material and others unfavourably to the same type of material. But unfortunately, some teachers treat different classes as if they are the same. This leads them to using the same method to different set of students whether the method is yielding result or not.

Apart from teaching techniques, which are often faulty, Harms et al (1972) observed that teachers do often not teach transcription, which is the most important phase of shorthand. They went further to report that literature of business education indicates that teachers are competing with one another to teach basic shorthand in less time. To

them, this is a worthy objective, but cautioned that neither the teacher nor the student should be encouraged to cut short the time for transcription. Transcription is a skill and deliberate effort should be made to teach it. Moreover, previous studies (Pullis, 1973; Abubakar, 1988) have shown that inability to transcribe correctly written shorthand outlines constitutes one of the students' problems in shorthand examinations. Also, an empirical study by Harms et al (1972) showed that 91 percent correct transcription could be made from 75 percent correctly written outlines. For this reason, the teaching of transcription should be introduced early enough for according to Reid et al (1971); "the early introduction of transcription not only improves skill at the end of the course, but also helps students to retain interest by providing additional motivation".

Worried by the inability of teachers to teach transcription, Merril (1958) wrote that it is imperative that the teacher teaches transcription. He contended that transcription is a skill that crowns and unifies the other basic skills of shorthand and typing and is too complicated to be left to a hit-or-miss process of learning. 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.

2.3.3 English Language Background

Poor knowledge of English has been identified as another major cause of students' poor performance in shorthand transcription.

> Our knowledge of shorthand is at the mercy of our knowledge of words. Shorthand and linguistic command here go hand in hand, and our power over the one will increase our power over the other. You cannot teach

> shorthand effectively to students whose command of English is abysmally low. (Canning, 1979).

English words are the stock-in-trade of shorthand writers. So the link between shorthand and English is very close. This is true, as Gartside (1970) had indicated that examining bodies in shorthand not infrequently report that many candidates fail through poor English rather than through poor shorthand. Crank, Anderson and Peterson (1982) agreed no less to this when they wrote that English grades are sometimes used to forecast shorthand performance and research reveals a relationship between English ability and shorthand success. English grades usually reflect reading ability, vocabulary development, English usage, and ability to punctuate and spell – all factors associated with transcription performance, the ultimate goal of all shorthand instruction. Igwe (1991) conducted a research on the relationship between proficiency in English and shorthand courses in institutions of higher learning in Imo State. He used a sample of 90 students from a population of 174. Students' first year English and final shorthand raw scores for 3 years were tested for any relationship. The study established a positive correlation between students' scores in English language and their scores in shorthand writing in all the three institutions used for the study. Many other research studies (Ugoji, 1991; Udemezue, 1991 and Kanu, 1991) have equally established a positive correlation between performance in English language and performance in shorthand. Explaining this relationship further, Nwaokolo and Otubolu (1991) wrote that if a student's level of English were low, his shorthand would be poor. Walter (1975) acknowledged this point by saying 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. Despite the general acceptance that language skills are major factors in shorthand writing, Jester (1970) regretted 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 essential 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.

Apart from students, shorthand teachers should as well be grounded in the use of English language. This is why Volpe (1984) wrote that shorthand teachers must be good students of English if they are to achieve the objectives of emphasizing correlation of English and transcription. In the same vein, Igwe (1991) maintained that excellent knowledge of English including phonetics is necessary for both the teacher and the student of shorthand as it will minimize pronunciation and spelling mistakes and in short faulty transcription. Canning (1970) summed it up this way:

> Shorthand and language are integrated, and trying to teach the subject divorced from language must be disastrous. The teacher of shorthand must not only be a master of the art, and capable of demonstrating that mastery, but must equally be a master of language

and as absorbed in English in all its aspect as the teacher of English.

2.3.4 Dictation Material/Manner of Dictation

Another factor that affects students' performance in shorthand transcription is the difficulty level of the dictation material and the manner of dictation. If a passage is difficult, it will affect student's performance. Canning (1970), Aransiola (1988) and Ulinfun (1992) listed the followings as factors that affect the difficulty level of shorthand test materials: theme/context material, vocabulary spread, syntax and sentence structure, word frequency, syllabic intensity and length of dictation.

The theme of the dictation is significant in measuring its difficulty. Ulinfun (1992) quoted Wellman and Lamb as saying that material of technical nature or material containing spelling demons creates problem for students. Also Canning (1970) after conducting an experiment on the effect of theme/context of a passage on performance concluded that what you know about is always better recorded than what you do not know.

As has been amply illustrated in the literature, the difficulty level of a passage cannot be based on theme/context alone. The vocabulary spread is another important factor. Ulinfun (1992) wrote that previous studies showed that the time required writing the common words (the high-frequency words) is much less than the time it takes to write the uncommon words. Obviously, this gave credence to what Canning (1970) wrote to the effect that any collocation of words of special difficulty in comprehension,

pronunciation, or shorthand writing is sure to have a disproportionate effect upon the total result. He concluded by saying that it is clear that word frequency and vocabulary range are highly important in making dictation easy or difficult.

Syntax and sentence structure is another factor that determines the difficulty level of a passage. According to Perry (1968), students make more mistakes in sentences with awkward wordings, long and difficult to comprehend. Thurling (1986) also maintained that where the median sentence length is greater than 19, the sentence structure may indeed cause problems.

Another way of assessing difficulty of a passage is the average number of syllable per word. But Canning (1970) quickly cautioned that such a test is not fully scientific and therefore requires further empirical studies. Shyllon (1993) expressed that the higher the syllabic intensity the more difficult is the content of the passage. To make the passage easy for students, he suggested that examiners should try as much as possible to ensure that the same level of syllabic intensity (S.I) is maintained throughout the passage. That is each quarter minute is marked and calculated to meet the required syllabic intensity. Osemota (1978) in Ulinfun (1991) recounted that the idea of syllabic intensity came about with the need to verify the claims of shorthand writers claiming speeds of 400 and 500 words per minute in the shorthand contest that was held around 1887 in U.S.A. John Gregg studied the contest materials to determine the difficulty. After analyzing the materials used in the shorthand championship test over a ten-year period, he found a median syllabic intensity of 1.40. Most examination bodies recommend syllabic

intensity of between 1.3 and 1.4 but Osemota (1981) called for a shift from syllabic intensity of 1.4 to 1.6 for shorthand examinations.

Research studies on the effect of duration of dictation on students' performance have produced conflicting and inconclusive results. Pullis (1982) conducted experiment with 71 students and found out that a significant coefficient of correlation exists between achievement on three-minute dictation tests and achievement on five-minute dictation tests. This study shows that length of dictation has a serious influence on students' achievement in shorthand writing and transcription. A study by Anderson (1971) showed that there was a difference of almost twenty words a minute between the three and five minute tests. Dallman (1962) to determine whether there was a significant difference of achievement among some students conducted one of such studies on three- and five-minute tests. He found no significant difference. The contradictory research findings on this issue lend it to further studies. Also, all these studies, as mentioned earlier, are foreign and therefore require home study.

As efforts are being intensified by shorthand teachers to find out more on the effect of varying the duration of shorthand dictation upon students' performance, it may be useful to reflect on the submission made by Pullis (1973). He wrote that it is apparent that as an indicator of achievement, the speed of dictation at which a shorthand student is able to write may be 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.

Equally important in determining the difficulty level of a passage is the manner of dictation. According to Canning (1970), the timbre, pitch and clarity of the dictator's voice mean much. He went further to state that mannerisms and exaggerations of all kinds very rapidly become intrusive and create a barrier between the reader and the writer. Some teachers may quite unknowingly have a distinct "dictation voice" which is unlike their normal utterance. Naturalness is the essence of good dictation. The manner of dictation is not concerned exclusively with the way the words are uttered. Dictation accuracy is inclusive. Osemota (1978) in Ulinfun (1992) pointed out that accuracy in dictation refers to: reading the test passages to time; pronouncing every word audibly; and making notes of errors and the time occupied by the reading. It is generally known that faulty reading of shorthand test passages adversely affect the speed and the standard of the test. A speed above what the students are being tested for will definitely have a negative effect on students' performance.

2.3.5 Facilities/Materials

Poor and inadequate facilities and materials have partly accounted for students' poor performance in shorthand. According to Amaefule (1986) "the typewriting, shorthand, reprographic, filing, accounting and other skills cannot be properly acquired by the trainee secretary unless the right quality equipment and supplies for achieving these skills are available and in sufficient quantities. These include poor and inadequate textbooks, shorthand dictionary, pre-recorded shorthand cassettes, typewriters, projectors, shorthand laboratories, chairs and tables. In some schools, some of these facilities and materials are

not available at all. Nwaokolo and Otubolu (1991) found out in their research study conducted in three tertiary educational institutions in the country that lack of facilities constituted 10 percent of students' problems in shorthand examinations. To this extent, they remarked that lack of the necessary facilities for enhancing learning usually places the learner at a disadvantage and practically incapacitates him thereby compelling him to achieve below the level of his potentiality. Although Nwaokolo and Otubolu's study used a very small sample, their study is a true reflection of the condition of our tertiary institutions in terms of facilities and materials as shown by other similar studies (Azuka, 1991; Kanu, 1991; Oyedeji, 1991; and Ugoji, 1991). This brings to mind the issue of textbooks. Foreign authors with foreign backgrounds write "New Course "and" Instructor the shorthand textbooks mostly in use in Nigeria. It has been established that the theme and context affects the difficulty level of a passage. Therefore, it will be easier for a Nigerian student to write Okene than to write Georgia. Makeri (1990) explained this point further by saying that when the teacher should be dictating words like "Katsina-Ala" or the "Obi of Onitsha"; he is still dictating words like "Stroke-Upon-Trent" or "the Duke of Kent". To make matter worse, the originals of these foreign books are hard to get in the market. Instead, photocopied versions, which are not clear, are found. This throws a challenge to Nigerian authors to write shorthand textbooks. Kanu (1991) summed up the importance of equipment and facilities this way: "Their availability (equipment and materials) help to make the work of the teacher easier and also help the students to be independent of their teachers. They make for better learning and understanding and its attendant creation of improved awareness".

The laboratories should equally be spacious to make for easy supervision of students' work. To this end, McNicol in Kanu (1991) advised that supervision of individual work is essential in all classes and therefore seating should be so arranged that there are sufficient gangways to enable the teacher to move around without disturbing students unduly.

2.3.6 Other Factors

Other factors have been identified as having effect on students' performance in shorthand transcription. They include anxiety, knowledge of theory, time allowed for transcription and nature of shorthand.

In a study conducted by Nwaokolo and Otubolu (1991) cited earlier on, a very high percentage of the respondents (78%) indicated state of anxiety that obviously would not favour effective achievement and performance in shorthand. In a similar study, Kanu (1991) discovered that students always experience tension during shorthand tests or examination and feels useless at times in the middle of dictation. Test or examination anxiety in shorthand is attributable to insufficient drill by teacher due to lack of time, unfriendly atmosphere created while teaching, poor method of teaching, a record of consistent poor performance, students inability to develop speed and cope with outline, lack of facilities for learning shorthand and difficult nature of shorthand (Nwaokolo and Otubolu, 1991).

Poor knowledge of shorthand theory is another cause of students' abysmal performance in shorthand. Knowledge of shorthand theory refers to the correct

application of rules or principles for writing rather than rote memorization of such rules. Knowledge of theory leads to formation of correct shorthand outlines. Although, many teachers have insisted that accuracy of shorthand notes is unimportant, research studies have proved otherwise. Anderson (1971) indicated that accurate shorthand outlines might enable students to develop their shorthand writing skill more rapidly and to transcribe more accurately and with fewer hesitations. Haack (1982) at the end of his study on "Selected Personal Characteristics Related to Shorthand Dictation" came to a conclusion that theory knowledge affects shorthand achievement and that correct theory outlines should be a major component in the development of high dictation rates.

The need for shorthand writers to cultivate the habit of writing correct outlines in their notes, in order to have correct transcription, can therefore not be over emphasized. Pullis (1973) carried out a research seeking to establish whether or not there is any relationship between competency in shorthand accuracy and achievement in shorthand dictation. At the end of the study, the followings were specifically reported:

1. There was a significant positive relationship between the student's ability to write accurate shorthand outlines and his achievement in shorthand dictation.

2. There was significant positive relationship between the ability of student to write accurate shorthand outlines and his ability to transcribe the outline.

3. A significant relationship exists between accuracy in application of principles and accuracy in transcription.

4. Correctly written outlines have a direct bearing on the readability of the shorthand notes.

In what seems to be a confirmation of Pullis' findings, Condon (1962), stated that the more complete the understanding of theory, the greater facility the student will bring to dictation, to improving shorthand outlines, and transcribing shorthand notes. Liles (1936) in Pullis (173) seemed to agree with Condon when he said that if the theory of any shorthand system is scientifically determined, it certainly should be a more effective system from the standpoint of readability, speed, and ease of mastery than would be one concocted on the spur of the moment by the student. Lesser (1963) believes that weak students in shorthand are those who have not mastered the theory of shorthand system. He lamented thus:

> Generally, the "weak students" in shorthand have never adequately learned the theory of the shorthand system so that they can automatize their responses. It is unfortunate that too many of the students' shorthand notes reveal that their knowledge of the theory of shorthand is far short of what it should be.

While no shorthand authority advocates rote memorization or verbalization of rules, many teachers and researchers recommend that greater emphasis be given the development of accuracy written shorthand outlines.

Time allowed for transcription could constitute another problem to shorthand students. If the time is too short they may not finish transcribing even correctly written shorthand outlines. Neither should too much time be given since speed and accuracy are inseparable. There is need for complete standardization in the time allowed for transcription. Studies cited by Ulinfun (1992) have shown different rates ranging from 8 to 25 words per minute depending on the dictation rate. One of such studies by Crank (1962) suggested that standard for handwritten transcription need not vary appreciably from standards for typewritten transcripts.

Davis and Oladunjoye (1990) wrote that shorthand has a perceived notoriety of being a difficult subject. The nature of shorthand contributes to high failure rate witnessed in shorthand examinations. In fact the high attrition rate in secretarial courses is attributed partly to difficult nature of shorthand. There is this uncomplimentary remark by students to the effect that Pitman should have died with shorthand. This is not in any way an attempt to scare anybody, but the truth has to be told. Or else, how would the failure rate be explained? In a study conducted by Nwaokolo and Otubolu (1991), 300 NCE students from three tertiary educational institutions in the country were used as samples to find out the factors contributory to students' anxiety spurt. The data collecting instruments consist of 20 item questionnaires adopted from the Mathematics Anxiety Scale. This study reveals that 67 percent of the causes of anxiety in shorthand examinations are related to the difficult nature of the subject. Russon (1968) agreed to this by saying that shorthand students should be above average in intelligence. It stands to reason that anybody who is not above average in intelligence will find shorthand extremely

difficult. Even as Motley and Kleen (1973) advised teachers to convince students that shorthand is easy to learn, they quickly cautioned that teachers should guard against making shorthand sound too simple, or the students may fail to put in as much time and concentrated effort as is necessary.

2.4 Summary

The literatures reviewed above revealed that several factors influence students' academic performance in shorthand and that no one single factor can be entirely associated with students' academic performance in school. It can therefore be established that scanty or no studies have been done on the effect of length of dictation, syllabic intensity (S.I) and previewed and familiar passage upon students' performance in shorthand transcription. The few studies done on length of dictation yielded conflicting and inconclusive results and therefore yearn for further research. No study (to the knowledge of the researcher) has been carried out in Nigeria on the effect of syllabic intensity upon students' performance in shorthand transcription. The only study on previewed and familiar passage was conducted with polytechnic students.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The purpose of this chapter is to describe or define the procedure that was used in the conduct of this research. This chapter describes the following aspects of the methodology of inquiry: experimental design, instrument used, pilot study, validity and reliability of instrument, administration of the instrument and procedure for data analysis.

3.2 Experimental Design

This research study is quasi experimental, therefore, two groups, known as Experimental and Control Groups, were used. Consequently, dictation passages and not questionnaires were used. Two levels of students – NCE I and II were used for the study. All the NCE I students passed through a one year Pre-NCE programme and had written a speed of 50 wpm in second semester Pre-NCE while all those in NCE II had written a speed of 60 wpm in the second semester of NCE I. In the present research study, NCE I wrote at a speed of 60 wpm while NCE II wrote at a speed of 70 wpm.

Each of the two levels of NCE I and NCE II were randomly split into an Experimental Group known as Group A and Control Group known as Group B. A table of One Thousand Random Digits by Busha and Harter (1980:395)(see appendix II) was used in splitting each level of the students into two equal groups. The students were not informed the reason for the grouping other than for the convenience of handling the classes. There was equal proportion of students in the two groups at each level. The two groups of each level were taught 4 hours a week for 4 weeks before the first test was administered. The two groups of each level were taught by the same lecturer to ensure that every other factor is held constant except the variable being tested.

Necessary precautions were taken to see that the Control Groups at each level were not aware of any differential treatment given to the Experimental Group in the course of the study. This is 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 ultimately render the outcome of the study unrealistic and unattainable. One of the passages the Experimental Group took in the test was used during class exercises. Apart from this, there was no other differential treatment given to the two groups as the effect of the other variables (syllabic intensity and length of dictation) tested in the study could be determined without this differential treatment.

3.3 Population

The population of this study consists of all the 261 students offering shorthand at the Federal College of Education (Technical), Bichi, Kano State. The population is made up as follows: Pre-NCE: 94, NCE I: 98, NCE II: 62 and NCE III (Secretarial option): 7.

3.4 Sample of the study

A sample of 160 students comprising 61 percent of the population was used for the study. This number is considered adequate based on the recommendation of Krejcie and Morgan (1970:608) as shown in appendix III. The sample is made up of all the NCE I and NCE II students. The researcher decided to drop Pre-NCE class because transcription is not emphasized at this level. Also NCE III (secretarial) was dropped because of their very few number.

3.5 Instrument Used

A total of 10 different passages (appendices iv –xiii) were used in this study. Each group of each level took 3 passages. The NCE I students (60 wpm writers) wrote a total of 6 passages made up as follows:

(a) One passage of 60 wpm for 3 minutes. The passage was familiar to Experimental Group and unfamiliar to Control Group.

(b) Two similar passages of 60 wpm for 3 and 5 minutes respectively. The Experimental Group wrote for 3 minutes while Control Group wrote for 5 minutes.

© Two passages of 60 wpm for 3 minutes with syllabic intensity of 1.4 and 1.6

respectively. The Experimental Group wrote one with S.I of 1.4 while Control Group wrote the one for 1.6.

While NCE II students (70 wpm writers) wrote 6 passages made up as follows:

(a) One passage of 70 wpm for 3 minutes. The passage was previewed and familiar to Experimental Group and unpreviewed and unfamiliar to Control Group.

(b) Two similar passages of 70 wpm for 3 and 5 minutes respectively. The Experimental Group wrote the one for 3 minutes while the Control Group wrote the one for 5 minutes.

(c) Two passages of 70 wpm for 3 minutes with S.I of 1.4 and 1.6 respectively. The Experimental Group wrote the one with S.I of 1.4 while the Control Group took the one for 1.6.

3.6 Validity of the Instrument

The passages that were used for this study were given to two English Language and shorthand experts each of senior lecturer cadre and above, from Kano State Polytechnic and Federal College of Education (Technical), Bichi for face validation. Validation was based on sentence structure, context material, syllabic intensity and length of dictation. Final copies of the passages were produced with strict adherence to the observations made by the experts. This is to ensure that the passages are equally matched in all aspects except for the variable being tested.

3.7 Pilot Study

A pilot study was conducted with 40 business education students of the Federal College of Education, Kano, Kano State. This number is made up of 20 NCE I and 20 NCE II students who wrote at the 60 wpm and 70 wpm respectively. The pilot study was conducted with the assistance of a lecturer in that college. A total of 10 different passages that covered the three variables under study were recorded in audio cassette which were later played back to the students. Transcription was done with the typewriter at the rate of 10 wpm.

At the end of the exercise, the passages were graded using a penalty chart based on 4% error tolerance. Students' performed abysmally low in passage 1 (B). It was discovered that the syllabic intensity (S.I) of this passage was 1.7 instead of 1.6. Subsequently, the passage was modified to bring down the S.I to 1.6.

3.8 Reliability of the Instrument

The instruments used in this research were tested for reliability using the results obtained from a pilot study. A Pearson Product Moment Correlation Coefficient (PPMC) and Spearman-Brown formulae were used to arrive at r-values of 0.96 for 60 wpm passages and 0.92 for 70 wpm passages.

The PPMC formula used is:

$$r = \frac{\sum XY - \frac{\sum X \sum Y}{N}}{\sqrt{[\sum X2 - \frac{(\sum X)2)}{N}][\sum Y2 - \frac{(\sum Y)2}{N}]}}$$

Where N refers to number of pairs.

While the Spearman-Brown formula used is:

$$\frac{2\ r}{1\ +\ r}$$

3.9 Administration of the Instrument

The two groups of each level of the classes used for this study were taught for 4 weeks before the first test was administered to each group of each level. Each group took a total of 3 tests. This lasted for 3 weeks. The shorthand passages including the warm-up were dictated into a tape recorder by the researcher with the aid of a stopwatch, and played back for the tests. This was to ensure uniformity in the speeds for each group in the same level. After the dictation, transcription was done with manual typewriter. The transcription time was at the rate of 10 words per minute. This means that those writing at 60 wpm for 3 minutes transcribed for 18 minutes. This transcription time falls in line with a minimum transcription time of 10 wpm recommended by Crank (1962:164). This was to ensure that the students' problem would not be lack of time for transcription.

3.10 Procedure for Data Analysis

Only the accuracy of written outlines and accuracy of transcribed words of the two levels of shorthand writers (NCE I and NCE II) involved in the study were examined. Only shorthand transcription errors and non-shorthand transcription errors such as wrong spelling, omissions, additions, and punctuation marks that distort the sense of the passage

were penalized. Typewritten errors such as bad erasure, wrong margin, irregular spacing and other similar errors were ignored.

The following steps were taken in analyzing the data that were collected from the study:

(a) Errors in each student's shorthand note and transcription were marked and noted in a register.

(b) Penalty chart based on 4% error tolerance was used in grading the tests.

(c) Percentages and means of the standard of accuracy were computed.

(d) Differences noted between the performance of each group of each level (60 and 70 wpm) were tested for significance. For this purpose, the t-test statistic was used for hypotheses 1 – 3, 5 – 7 and 9 – 14 while Analysis of Variance (ANOVA) was used in testing hypotheses 4 and 8 that involved the comparison of 3 means.

(d) All the hypotheses were tested at alpha ($\propto$) level of 0.05 or less ($P \leq 0.05$). This is in line with the generally held belief in educational and psychological circles that 0.05 probability level of significance or less is reasonable standard.

The t-test formula used is:

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_1^2}{n_1 + n_2 - 2}}\left(\frac{1}{n_1} = \frac{1}{n_2}\right)}$$

Where:

$\overline{X}$ = *Mean*

n = Number of pairs

S^2 = Variance = SD^2

While the following steps were used in calculating the F-ratio.

1. To determine the group sums = $\sum X$
2. To determine the sum of the group sums = $\sum^{k}_{1}\sum^{n}_{1}X$
3. To determine the sums of square = $\sum^{k}_{1}\sum^{n}_{1}X^2$
4. To determine the Correction Factor (CF) = $\frac{(\sum^{k}_{1}\sum^{n}_{1}X)^2}{KN}$
5. To calculate the total sums of squares = $\sum^{k}_{1}\sum^{n}_{1}X^2 - \frac{(\sum^{k}_{1}\sum^{n}_{1}X)^2}{KN}$
6. To calculate the between group sums of squares = $\frac{\sum^{k}_{1}(\sum^{n}_{1}X)^2}{N} - \frac{(\sum^{k}_{1}\sum^{n}_{1}X)^2}{KN}$
7. To calculate the within group sums of squares = $\sum\sum X^2 - \frac{\sum(\sum X)^2}{N}$

CHAPTER 4

ANALYSIS AND PRESENTATION OF DATA

4.1 Introduction

This chapter answers the research questions and tests the hypotheses which were stated in chapter one.

4.2 Research Questions

After shorthand dictations were administered at both 60 and 70 wpm, the shorthand notes and transcription of 98 students for 60 wpm and 62 students for 70 wpm were collected and graded. The following answers to the research questions were obtained from data gathered from the grading exercise.

60 words per minute writers

4.2.1 Of the 3 minutes dictation with S.I of 1.4, the percentage of accuracy was 41.14% while the percentage of accuracy for the passage with S.I of 1.6 was 38.82% (see table 1).

4.2.2 For the previewed, familiar passage, the percentage of accuracy was 48.92% while the percentage of accuracy for the unpreviewed, unfamiliar passage was 38.04% (see table 2).

4.2.3 In the 3 minutes dictation with S.I of 1.4, the percentage of accuracy was 43.18% while in the 5 minutes dictation with S.I of 1.4, the percentage of accuracy was 35.97% (see table 3).

4.2.4 In the passage with S.I of 1.6, the percentage of accuracy was 37.15% while in the unpreviewed, unfamiliar passage, the percentage was 41.58% and in the 5 minute dictation, the percentage of accuracy was 39.09% (see table 4).

70 words per minute writers

4.2.5 Of the 3 minutes dictation with S.I of 1.4, the percentage of accuracy was 46.1% while of the 3 minutes dictation with S.I of 1.6, the percentage of accuracy was 42.94% (see table 5).

4.2.6 In the previewed, familiar passage, the percentage of accuracy was 48.87% while in the unpreviewed, unfamiliar passage, the percentage of accuracy was 41.10% (see table 6).

4.2.7 Of the 3 minutes dictation with S.I of 1.4, the percentage of accuracy was 42.65% while in the 5 minutes dictation with S.I of 1.4, the percentage of accuracy was 35% (see table 7).

4.2.8 In the passage with S.I of 1.6, the percentage of accuracy was 39.90% and in the unpreviewed, unfamiliar passage, the percentage of accuracy was 43.81% while the percentage of accuracy in the 5 minutes dictation was 40.05% (see table 8).

60 and 70 words per minute writer compared

4.2.9 Of the syllabic intensity of 1.4, the percentage of accuracy of 60 wpm writers was 41.14% while that of 70 wpm writers was 46.1% (see table 9).

4.2.10 On the S.I of 1.6, the percentage of accuracy of 60 wpm writers was 38.82% while that of 70 wpm writers stood at 42.94% (see table 10).

4.2.11 Of the familiar, previewed dictations, the percentage of accuracy of 60 wpm writers was 48.92% while that of 70 wpm writers was 48.87% (see table 11).

4.2.12 Of the unfamiliar, unpreviewed dictations, the percentage of accuracy of 60 wpm writers was 38.04% while that of 70 wpm writers was 41.10% (see table 12).

4.2.13 Of the 3 minute dictation with S.I of 1.4, the percentage of accuracy of 60 wpm writers was 43.18% while that of 70 wpm writers was 42.65% (see table 13).

4.2.14 In the 5 minute dictation with S.I of 1.4, the percentage of accuracy of 60 wpm writers was 35.97% while that of 70 wpm writers was 35% (see table 14).

The following observations were made based on the students' performance at both 60 and 70 wpm.

1. Students performed generally better in written outlines than in transcription.
2. Students' did better in writing and transcribing passages with S.I of 1.4 than in passages with S. of 1.6.
3. Students' did better in writing and transcribing previewed, familiar outlines than in unpreviewed, unfamiliar outlines.
4. Students' also did better in 3 minutes dictation than in 5 minutes dictation. There was a drastic drop especially in the 4^{th} and 5^{th} minutes of the dictation. This drop manifested in both 60 and 70 wpm writers.
5. All the 3 variables namely: S.I, preview/unpreview, familiar/unfamiliar and length of dictation have similar effects on students' performance across speeds and levels.

4.3 Hypotheses

The following formulated null hypotheses were tested using the t-test statistic to find out the level of significance of difference, if any, in each case. Analysis of variance (ANOVA) statistic was also used to check the level of significance of the differences in the students' performances in the 3 variables under study. The computed t-test and ANOVA were tested at alpha ($\propto$) level of 0.05 to justify rejection of the null hypotheses.

60 words per minute writers

4.3.1 Hypothesis 1:

There is no significant difference in the shorthand test mean scores of students writing at 60 wpm for 3 minutes with S.I of 1.4, and those writing at the same speed with S.I of 1.6.

Table 1: **T-TEST COMPARISON OF STUDENTS' MEAN SCORES ON PASSAGES WRITTEN AT 60 WPM FOR 3 MINUTES WITH S.I OF 1.4 AND 1.6.**

Groups/S.I levels	N	$\overline{X}$	SD	DF	T-Calculated	T-Critical
Experimental (S.I = 1.4)	49	41.14	3.40	96	3.09	1.98
Control (S.I = 1.6)	49	38.82	4.07			

Significant at 0.05 level.

Hypothesis 1 is rejected at $P \leq 0.05$ because the t-calculated (3.09) is greater than the t-critical of 1.98. Rejecting the null hypothesis means that significant difference exists between shorthand test mean scores of students writing at 60 wpm for 3 minutes with S.I of 1.4 and those writing at 60 wpm for 3 minutes with S.I of 1.6.

4.3.2 Hypothesis 2:

There is no significant difference in the shorthand test mean scores of students writing previewed, familiar passage at 60 wpm for 3 minutes and those writing unfamiliar passage at the same rate.

Table 2: **T-TEST COMPARISON OF STUDENTS' MEAN SCORES ON PREVIEWED, FAMILIAR AND UNPREVIEWED, UNFAMILIAR PASSAGES AT 60 WPM FOR 3 MINUTES.**

Group/Nature of passage	N	$\overline{X}$	SD	DF	T-Cal.	T-Critical
Experimental (Previewed/familiar)	49	48.92	4.50	96	15.77	1.98
Control (unpreviewed/ Unfamiliar)	49	38.04	1.78			

Significant at 0.05 level.

Hypothesis 2 is rejected at $P \leq 0.05$ because the t-calculated 0f 15.77 is greater than the t-critical of 1.98. This therefore means that there is a significant difference in the test mean scores between students writing previewed, familiar passage at 60 wpm with S.I of 1.4 and those writing unpreviewed, unfamiliar passage at the same speed with S.I of 1.4. 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 table 2 above.

4.3.3 Hypothesis 3:

There is no significant difference in the shorthand test mean scores of students' writing at 60 wpm for 3 minutes and those writing at the same speed for 5 minutes.

Table 3: **T-TEST COMPARISON OF STUDENTS' MEAN SCORES ON 3 AND 5 MINUTES DICTATIONS AT 60 WPM WITH S.I OF 1.4**

Group/Duration	N	$\overline{X}$	SD	DF	T-Cal	T-Critical
Experimental (3 Minutes)	49	43.18	5.18	96	6.80	1.98
Control (5 Minutes)	49	35.97	4.89			

Significant at 0.05 level.

The above table shows the rejection of hypothesis 3 at alpha level of 0.05. This is so because the t-calculated of 6.80 is greater than the t-critical of 1.98. Thus, there is a significant difference in the test mean scores between students' writing at 60 wpm for 3 minutes with S.I of 1.4 and those writing at the same speed for 5 minutes with S.I of 1.4.

4.3.4 Hypothesis 4:

There is no significant difference in the shorthand test mean scores among the three groups writing passage with S.I of 1.6, unpreviewed, unfamiliar passage and 5 minutes dictation at 60 wpm.

Table 4. **ANALYSIS OF VARIANCE COMPARISON OF MEAN SCORES OF 3 GROUPS ON PASSAGES WRITTEN AT 60 WPM (N = 98)**

Sources of variance	Sums of square	DF	Mean sums of square	F-ratio	F-Critical
Between Group	324.54	2	162.27	0.66	3.07
Within Group	23442.02	95	246.76		

Not significant at 0.05 level.

The F-calculated of 0.66 is less than F-critical of 3.07, therefore, the null hypothesis is not rejected at $P \leq 0.05$. This means that there is no significant difference in the mean scores of the 3 groups that wrote at 60 wpm passage with S.I of 1.6, unpreviewed, unfamiliar and 5 minutes dictations. Even though the difference in the means is not significant, a critical look at the means shows that those that wrote unfamiliar, unpreviewed passage performed better than the other two groups, followed by those that wrote for 5 minutes.

70 words per minute writers

4.3.5 Hypothesis 5:

There is no significant difference in the shorthand test mean scores of students writing at 70 wpm for 3 minutes with S.I of 1.4 and those writing at the same with S.I of 1.6.

Table 5: **T-TEST COMPARISON OF STUDENTS' MEAN SCORES ON PASSAGES WRITTEN AT 70 WPM FOR 3 MINUTES WITH S.I OF 1.4 AND 1.6.**

Group/S.I Level	N	$\overline{X}$	SD	DF	T-Cal	T-Critical
Experimental (S.I of 1.4)	31	46.1	4.95	60	3.33	2.00
Control (S.I of 1.6)	31	42.94	2.37			

Significant at 0.05 level.

This null hypothesis is rejected at 0.05 level of significance because the t-calculated of 3.33 is greater than t-critical of 2.00. In other words, there is a significant difference in the test mean scores of students who wrote at 70 wpm for 3 minutes with S.I of 1.4 and those who wrote at the same speed with S.I of 1.6.

4.3.6 Hypothesis 6:

There is no significant difference in the shorthand test mean scores of students writing previewed, familiar passage at 70 wpm for 3 minutes and those writing unpreviewed, unfamiliar passage at the same speed.

Table 6: **T-TEST COMPARISON OF STUDENTS' MEAN SCORES ON PREVIEWED, FAMILIAR AND UNPREVIEWED, UNFAMILIAR PASSAGES WRITTEN AT 70 WPM FOR 3 MINUTES**

Group/Nature of passage	N	$\overline{X}$	SD	DF	T-Cal	T-Critical
Experimental (Previewed/familiar)	31	48.87	1.78	60	17.66	2.00
Control (Unpreviewed/unfamiliar)	31	41.10	1.79			

Significant at 0.05 level.

Table 6 shows that the null hypothesis is rejected because the t-calculated of 17.66 is greater than the t-critical of 2.00. Therefore, there is a significant difference in the test mean scores between students' writing familiar, previewed passage at 70 wpm for 3 minutes and those writing unfamiliar, unpreviewed passage at 70 wpm for 3 minutes.

4.3.7 Hypothesis 7:

There is no significant difference in shorthand test mean scores of students' writing at 70 wpm for 3 minutes and those writing at the same speed for 5 minutes.

Table 7: **T-TEST COMPARISON OF STUDENTS' MEAN SCORES ON 3 AND 5 MINUTES DICTATION AT 70 WPM WITH S.I OF 1.4**

Group/duration	N	$\overline{X}$	SD	DF	T-cal	T-Critical
Experimental (3 minutes)	31	42.65	5.26	60	7.43	2.00
Control (5 minutes)	31	35	2.76			

Significant at 0.05 level.

Hypothesis 7 is rejected at $P \leq 0.05$ because the t-calculated which is 7.43 is greater than t-critical of 2.00. Rejecting this null hypothesis means that significant difference exists between shorthand test mean scores of students writing at 70 wpm for 3 minutes and those writing at 70 wpm for 5 minutes.

4.3.8 Hypothesis 8:

There is no significant difference in the shorthand test mean scores among the 3 groups writing passage with S.I of 1.6, unpreviewed, unfamiliar passage and 5 minutes dictation at 70 wpm.

Table 8: **ANALYSIS OF VARIANCE COMPARSN OF MEAN SCORES OF 3 GROUPS ON PASSAGES WRITTEN AT 70 WPM**

Sources of variance	Sums of square	DF	Mean sums of square	F-ratio	F-Critical
Between Group	204.34	2	102.17	0.54	3.15
Within Group	11256	59	190.78		

Not significant at 0.05 level.

The null hypothesis is not rejected because the f-calculated is less than the f-critical. Therefore, there is no significant difference in the mean scores of those writing a passage with S.I of 1.6, those writing unpreviewed, unfamiliar passage and those writing for 5 minutes all at the rate of 70 wpm. Even though the difference was not significant, those that wrote unpreviewed and unfamiliar passage performed better.

60 and 70 wpm writers compared

4.3.9 Hypothesis 9:

There is no significant difference in the shorthand test mean scores between students' writing at 60 and 70 wpm for 3 minutes with S.I of 1.4.

Table 9: **T-TEST COMPARISON OF MEAN SCORES OF 60 AND 70 WPM WRITERS WITH S.I OF 1.4**

Speed	N	$\overline{X}$	SD	DF	T-Cal.	T-Critical
60 wpm writers	49	41.14	3.40	78	-5.45	2.00
70 wpm writers	31	46.1	4.95			

Not significant at 0.05

The hypothesis is not rejected at $P \leq 0.05$ because the t-calculated is less than the t-critical as can be seen in table 9. This means that there is no significant difference in the shorthand test mean scores between 60 and 70 wpm writers with S.I of 1.4.

4.3.10 Hypothesis 10:

There is no significant difference in the shorthand test mean scores between students writing at 60 and 70 wpm for 3 minutes with S.I of 1.6.

Table 10: **T-TEST COMPARISON OF MEAN SCORES OF 60 AND 70 WPM WRITERS WITH S.I OF 1.6**

Speed	N	$\overline{X}$	SD	DF	T-Cal.	T-Critical
60 wpm writers	49	3.09	4.07	78	-5.22	2.00
70 wpm writers	31	42.29	2.37			

Not significant at 0.05.

The table above shows that the t-calculated is less than the t-critical, therefore, the null hypothesis stands not rejected at $P \leq 0.05$, meaning that there is no significant difference in the test mean scores between students writing passages with S.I of 1.6 at 60 and 70 wpm for 3 minutes.

4.3.11 Hypothesis 11:

There is no significant difference in the shorthand test mean scores between students writing previewed, familiar passages at 60 and 70 wpm for 3 minutes with S.I of 1.4.

Table 11: **T-TEST COMPARISON OF MEAN SCORES FROM PREVIEWED, FAMILIAR PASSAGES WRITTEN AT 60 AND 70 WPM FOR 3 MINUTES**

Speed	N	$\overline{X}$	SD	DF	T-Cal.	T-Critical
60 wpm writers	49	48.92	4.50	78	0.06	2.00
7o wpm writers	31	48.87	1.78			

Not significant at 0.05 level.

The null hypothesis is not rejected at $P \leq 0.05$ because the t-calculated is less than the t-critical. Therefore, there is no significant difference in the shorthand test mean scores between students writing previewed, familiar passages at 60 and 70 wpm for 3 minutes.

4.3.12 Hypothesis 12:

There is no significant difference in the shorthand test mean scores between students writing unpreviewed, unfamiliar passages at 70 and 70 wpm for 3 minutes.

Table 12: **T-TEST COMPARISOM OF MEAN SCORES FROM UNPREVIEWED, UNFAMILIAR PASSAGES WRITTEN AT 60 AND 70 WPM FOR 3 MINUTES**

Speed	N	$\overline{X}$	SD	DF	T-Cal.	T-Critical
60 wpm writers	49	38.04	1.78	78	-7.65	2.00
70 wpm writers	31	41.10	1.79			

Not significant at 0.05 level.

The null hypothesis is upheld because the t-calculated is less than the t-critical. It then means that there is no significant difference in the shorthand test mean scores between writing unpreviewed, unfamiliar passage at 60 wpm for 3 minutes and those writing unpreviewed, unfamiliar passage at 70 wpm for 3 minutes.

4.3.13 Hypothesis 13:

There is no significant difference in the shorthand test mean scores between students writing at 60 and 70 wpm for 3 minutes with S.I of 1.4.

Table 13: **T-TEST COMPARISON OF MEAN SCORES OF 3 MINUTES DICTATIONS FOR 60 AND 70 WPM**

Speed	N	$\overline{X}$	SD	DF	T-Cal.	T-Critical
60 wpm writers	49	43.18	5.41	78	0.44	2.00
70 wpm writers	31	42.65	5.26			

Not significant at 0.05 level.

The null hypothesis is not rejected at $P \leq 0.05$ since the t-calculated of 0.44 is less than the t-critical of 2.00. Therefore, there is no significant difference in the mean scores of those writing at 60 wpm for 3 minutes with S.I of 1.4 and those writing at 70 wpm for 3 minutes with S.I of 1.4.

4.3.14 Hypothesis 14:

There is no significant difference in the shorthand test mean scores between students writing at 60 wpm for 5 minutes and those writing at 70 wpm for 5 minutes.

Table 14: **T-TEST COMPARISON OF MEAN SCORES OF 5 DICTATIONS FOR 60 AND 70 WPM**

Speed wpm writers	N	$\overline{X}$	SD	DF	T-Cal.	T-Critical
60 wpm writers	49	35.97	4.89	78	1.03	2.00
70 wpm writers	31	35	2.76			

Not significant at 0.05 level.

The table above shows the non-rejection of the null hypothesis because the t-calculated of 1.03 is less than the t-critical of 2.00. It therefore means that there is no significant difference in the shorthand test mean scores of students writing at 60 wpm for 5 minutes and those writing at 70 wpm for 5 minutes.

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of this chapter is to state the summary of the findings, draw a conclusion and make recommendations based on the findings. The chapter is divided into the following subheadings: summary of the findings, conclusion, recommendation, suggested areas for further studies and limitations.

5.2 Summary of findings

The followings are the major findings of the study:

1. The null hypothesis which states that there is no significant difference in the shorthand test mean scores of students writing at 60 wpm for 3 minutes with S.I of 1.4 and those writing at the same speed with S.I of 1.6 was rejected at 0.05 level of significance. Students performed better in passage with S.I of 1.4 than they did in passage with S.I of 1.6. This means that the higher the syllabic intensity, the more difficult a passage is. This finding corroborates that of Canning (1970), and Ulinfun (1992) who listed syllabic intensity among the factors that affect the difficult level of shorthand test material. Although in their own case they theorized because they did not conduct any empirical study to that effect.
2. The null hypothesis which states that there is no significant difference in the shorthand test mean scores of students writing previewed, familiar passage at 60 wpm

for 3 minutes and those writing unfamiliar passage at the same rate was rejected. Those that wrote previewed and familiar passage performed better. This confirms the generally held notion that unfamiliar, unpreviewed dictation is more difficult to write and transcribe than the familiar, previewed dictation. 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 confidence in them.

3. The null hypothesis which states that there is no significant difference in the shorthand test mean scores of students writing 60 wpm for 3 minutes and those writing at the same speed for 5 minutes was also rejected. Students performed better in 3 minutes dictation than in 5 minutes dictation. Majority of the errors in the 5 minutes dictation came in the 4^{th} and 5^{th} minutes of the dictation. This particular variable has continued to yield contradictory results. This finding is at variance with the finding of Dallam (1962) but agrees with the finding of Pullis (1973). What might be responsible for this contradiction could be other variables like syllabic intensity and the accuracy required in the transcription. The present study employed S.I of 1.4 and a penalty chart of 4% error tolerance while the S.I and the level of error tolerance were not stated in the studies of Dallam and Pullis.
4. The null hypothesis which states that there is no significant difference in the shorthand test mean scores among three groups writing passages with S.I of 1.6, unpreviewed/unfamiliar passage and 5 minutes dictation at 60 wpm was not rejected. Even though the difference was not significant, a close look at the means shows that

those that took unpreviewed, unfamiliar passage performed better followed by those that took at 5 minutes. This means that even as the 3 variables have effect on students' performance, one has more effect than the other does. Syllabic intensity affects performance more than length of dictation and preview/familiarity of a passage. This also confirms the claims made by Canning (1970) to the effect that S.I, theme/context material and length of dictation affect the difficult level of shorthand test materials but quickly cautioned that the effect may not be equally weighted.

5. The null hypothesis which states that there is no significant difference in the shorthand test mean scores of students writing at 70 wpm for 3 minutes with S.I of 1.4 and those writing at the same speed with S.I of 1.6 was rejected. Those that wrote a passage with S.I of 1.4 performed better. This means that no matte the rate of dictation S.I affects the difficult level of a passage. This finding already corroborated the statements of Canning (1970) and Ulinfun (1992) cited earlier. It goes further to establish that the effect of S.I on performance cut across speeds.
6. The null hypothesis which states that there is no significant difference in the shorthand test mean scores of students writing previewed, familiar passage at 70 wpm for 3 minutes and those writing unpreviewed, unfamiliar passage at the same speed was also rejected. Those that wrote previewed, familiar passage performed better. This means that previewed, familiar passage is easier to write no matter the rate of dictation.

7. The null hypothesis which states that there is no significant difference in the shorthand test mean scores of students writing 70 wpm for 3 minutes and those writing at the same speed for 5 minutes was rejected. Those that wrote for 3 minutes performed better than those that wrote for 5 minutes. This means that those who wrote for 5 minutes was affected by fatigue more than those that wrote for 3 minutes. Pullis (1973) wrote that it is apparent that as indicator of achievement, the speed of dictation at which a shorthand student is able to write may be a very unreliable measure unless other variable like the duration of dictation is known. This study has confirmed just that. It has also confirmed that length of dictation affects performance at various speed takes.
8. The null hypothesis which states that there is no significant difference in the shorthand test mean scores among the 3 groups writing passages with S.I of 1.6, unpreviewed, unfamiliar and 5 minutes dictation at 70 wpm was not rejected. Like the 60 wpm writers, those that wrote unpreviewed, unfamiliar passage performed better than those that wrote for 5 minutes. While those that wrote a passage with S.I of 1.6 performed the least.
9. The null hypothesis which states that there is no significant difference in the shorthand test mean scores between students writing a passage with S.I of 1.4 at 60 wpm and 70 wpm for 3 minutes was not rejected. This means that what is true of 60 wpm writers is also true of 70 wpm writers as far as S.I is concerned.
10. The null hypothesis which states that there is no significant difference in the shorthand test mean scores between students writing a passage with S.I of 1.6 at 60

wpm and 70 wpm for 3 minutes was also not rejected. It has the same meaning as item 9.

11. The null hypothesis which states that there is no significant difference in the shorthand test mean scores of students writing previewed, familiar passages at 60 and 70 wpm for 3 minutes was not rejected. This confirms the popular opinion that previewed, familiar passage is easier to write than unpreviewed, unfamiliar passage no matter the speed and length of dictation.
12. The null hypothesis which states that there is no significant difference in the shorthand test mean scores of students writing unpreviewed, unfamiliar passages at 60 and 70 wpm for 3 minutes was also not rejected. It means the same as in item 11.
13. The null hypothesis which states that there is no significant difference in the shorthand test mean scores between students writing at 60 wpm for 3 minutes with S.I of 1.4 and those writing at 70 wpm for 3 minutes with S.I of 1.4 was not rejected. This means that length of dictation has similar effect on performance irrespective of the level of speed. This corroborates the finding made by Pullis (1973). In his study, there was no significant difference across speed takes of between 70 – 130 wpm for 3 minutes. Rather, a significant difference was established across length of dictation of 3 and 5 minutes.
14. The null hypothesis which states that there is no significant difference in the shorthand test mean scores between students writing at 60 wpm for 5 minutes and those writing at 70 wpm for 5 minutes was also rejected. This has the same meaning as in item 13.

5.3 Conclusions

The acute shortage of shorthand writers and teachers in both public and private sectors is a common knowledge. This is compounded by the poor performances of students in shorthand examinations. This research work which is quasi-experimental is an effort towards reversing this trend. A total of 160 students comprising 98 NCE I and 62 NCE II students of the Federal College of Education (Technical), Bichi were used for the study.

Based on the findings of the study, the following conclusions are made:

Syllabic intensity affects students' performance in shorthand transcription. The higher the syllabic intensity, the more difficult the passage.

Secondly, preview/familiarity of a passage or otherwise affects students' performance in shorthand transcription. Previewed, familiar passage is easier to write and transcribe than unpreviewed, unfamiliar passage.

Lastly, length of dictation affects students' performance in shorthand transcription. The shorter the length of dictation, the better the performance.

5.4 Recommendations

Based on the findings and conclusions of the study, the following recommendations are made:

1. Syllabic intensity of 1.4 should be adopted in all internal and public examinations. Similarly the vocabularies in examination passages should be evenly spread so that no one half-minute will be excessively different in syllabic difficulty from the other.

2. Teachers should continue to employ preview as a teaching device since it helps the students see how outlines are written and how they look when completed. Before a passage is dictated in the class the teacher should preview the difficult outlines in the passage.
3. In every one hour class, about 15 minutes should be devoted to unpreviewed dictation to enable the students get used to office style dictation which is usually not previewed.
4. Sustained dictations should be included in the training programmes of shorthand writers. Half of the dictation time can be spent on 5 minutes dictation to help students cope with 3 minutes dictation.
5. Transcription is a skill and should be deliberately taught and not left to chance. The shorthand teacher should ensure that every dictation taken must be transcribed.
6. Every teacher at all levels should discourage handwritten transcription. Only typewritten transcription, which is the office style, should be accepted.
7. Shorthand teachers should explore ways of incorporating in their daily drills and dictations various aspects of English grammar like vocabulary, spellings, tenses, parts of speech, punctuation and sentence construction. In addition students should be allowed to refer to dictionary in both the class work and examinations. Above all, shorthand teachers should constantly liaise with English teacher for any possible help that the students may need in improving their knowledge and understanding of the English language.

8. Since correct formation of outlines leads to correct transcription shorthand students particularly at the lower classes should be tested not only for speed but also in the theory and methodology of shorthand.
9. Teachers need to create opportunities for students to experience success in order to check anxiety, which has been identified as one of the causes of high failure rate in shorthand.
10. Shorthand experts should develop aptitude test and prospective shorthand students should be selected based on their performances in this test so that only those who have the interest and aptitude are admitted.
11. Shorthand class should not be too large to make way for individualized instruction. A maximum of 30 students should be ideal to give the teacher the opportunity for a close monitoring of the performances of the students.
12. The learning environment should be conducive and the necessary minimum equipment and facilities should be made available for effective teaching and learning of shorthand.

5.5 Implications for classroom instructions

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

1. Teachers should be conscious of the syllabic intensity (S.I) levels of the passages dictated to the students. To do this, teachers have to take pains to count the S.I levels of any passage meant for dictation. During classroom instructions, half of the

2. passages used should be between S.I levels of 1.5 and 1.6 so that students can easily write and transcribe passages with S.I levels of 1.4 during examinations.
3. One-third of the passages used during class period should be previewed before the actual dictation. This means that before such passages are dictated, the teacher should write out the difficult words in the passages and ask students to practice and drill them. Preview should be used as a teaching device only and not to encourage laziness on the parts of the students. It should therefore enlighten the minds of the student, challenge their intellect and motivate them towards the achievement of greater heights.
4. Two-third of the passages dictated during the class periods should not be previewed to enable the students get used to office style dictation which is usually not previewed. Writing unpreviewed passage is a proof of what students can do in shorthand transcription without being helped.
5. At least a 5 minutes dictation should be given to the students every week. This is necessary if students are to write 3 minutes dictation without pressure or fatigue.
6. The study shows that many students wrote correct outlines which they could not transcribe correctly. Consequently, teachers should teach the students the art of transcription and insist that every dictation taken in the class be transcribed immediately with a typewriter because in the offices transcription is typewritten. Teachers should endeavour to let students know what are shorthand and non-shorthand transcription errors.

7. It was observed that may of the errors in the students transcription are grammatical errors. Shorthand teachers should use every opportunity of each lesson to drill their students in various aspects of English grammar like punctuation, parts of speech, tenses, spellings and vocabulary.
8. Since experience of success reduces anxiety, teachers should in every class start the dictation with a lower speed. For instance, for a class writing at 70 wpm, the teacher should start the day's dictation with 60 wpm.

5.6 Suggested areas for further study

Improvement of teaching and learning generally requires a continuous research. Improvement on performance in shorthand requires knowledgeable inquiries from time to time. Further research studies can be carried out in the following areas:

1. Effects of deferred and non-deferred transcription upon students' performance.
2. Improved way of teaching and learning of transcription.
3. A correlation study of performance in typewriting and shorthand.
4. Effects of class size on performance.
5. The use of shorthand in industries.

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APPENDIX I

Students' Performance In Shorthand Examinations From 1991/92 – 1997/98 Academic Session At F.C.E. (T), Bichi, Kano State

SESSION	LEVEL	1ST SEMESTER % FAIL	2ND SEMESTER % FAIL	AVERAGE % FAIL
1991/92	NCE I	77	94	86
	NCE II	37	88	63
1992/93	NCE I	47	96	72
	NCE II	83	63	73
1993/94	NCE I	44	56	50
	NCE II	70	54	62
1994/95	NCE I	45	60	53
	NCE II	62	46	54
1995/96	NCE I	49	42	46
	NCE II	55	44	50
1996/97	NCE I	50	54	52
	NCE II	23	50	37
1997/98	NCE I	46	58	52
	NCE II	72	55	64
AVERAGE PERCENTAGE FAILURE				58

Source: Exams Office, Federal College of Education (Technical), Bichi

APPENDIX II

A Table of One-Thousand Random Digits

8175	0734	5956	3472	1688	4641	5675	8676	2680	0280
8306	3875	4739	0547	4934	5388	2056	2729	1824	1080
9896	0156	4581	9920	3443	0305	2271	4474	3269	6710
9308	4336	9855	4064	8542	3025	1574	0166	6863	0241
6388	8008	1210	5160	9657	1506	4774	7556	1007	8081
8065	1280	6410	6256	2576	2680	7910	0931	0140	3025
0442	3840	0881	1375	3577	1824	5681	6676	5227	1506
9536	7456	7616	9062	7949	3269	2737	5689	3215	2680
9352	5919	0034	1198	1866	6863	4911	3647	3362	1824
4599	0345	1156	3520	8195	1007	1179	3006	3030	3269
1508	1902	3633	3904	1580	0140	0904	0360	1809	6863
7406	1760	1986	2412	9640	3479	0720	2960	2724	1007
8488	9760	4419	1774	9296	2160	1840	7616	4201	0140
1252	2576	5275	4707	4156	6656	3856	0034	6484	4558
6750	3577	8256	1558	2723					
5625	7949	1615	2736	1472					
6404	1866	0822	8569	6678					
0363	8195	7568	4277	5956					
3542	1580	2746	2927	4739					
5457	9640	4051	6732	4581					
7788	9296	4106	3198	9855					
6529	4156	8592	2272	1210					
6278	2723	8224	6198	9245					
4132	1472	6341	4152	4700					
5891	6678	2082	2391	2099					
7038	3023	8687	1156	0422					
5334	1385	4639	3363	7808					
4515	9182	5203	3097	9648					
8379	3091	0712	5914	0839					
2076	7163	1210	8137	5366					
3097	9367	6345	4641	7939					
5914	7406	2590	5388	0277					
9753	8488	7081	0305	6729					
1210	0461	1405	3025	2794					

Source: Busha and Harter (1980: 390)

APPENDIX III

Table For Determining Sample Size From A Given Population

N	S	N	S	N	S
10	10	220	140	1200	201
15	14	230	114	1300	207
20	10	240	149	1400	320
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Source: Krejcie and Morgan (1970:608).

APPENDIX IV

PASSAGE 1 (A)

210 words to be dictated at the rate of 70 wpm for 3 minutes.

I have decided to accept the offer of the job in Enugu. I think I am very/ fortunate to have this offer, but my present employers say they are very sorry to see me go/ and have asked me to stay with an increase in salary. I have thought about it for/ a long time and I think this offer could lead to a much greater variety of work for// me and it will allow me to travel not only in Enugu but also to other places/ in the east like Aba and Owerri.

No doubt, the range of the new work will be quite/ a challenge, but I feel I must do my best to meet it. I know several people/ in Enugu already. I shall be living in a flat, which the firm has rented for me. The // salary is liberal and the terms offered make it seem advisable that I take the job. I/ shall be best in marketing and I think I shall sometimes be called to aid staff and customers/ in speaking to each other. I shall deal with some of the forms which both sides must/ sign and also assist with tours of the factory when customers call to see how goods are produced.//

S.I. = 1.4

APPENDIX V

PASSAGE 1 (B)

210 words to be dictated at the rate of 70 wpm for 3 minutes.

At the time of going to the press we were under the impression that the new productivity/ and incomes board guidelines relating to dividend payment to 50 percent of profit after tax instead of 60 percent/ which formerly apply will be applicable to the dividend arising from 1986 profit. I am happy to/ tell you however, that the substantially PPIB have clarified the position. The new limitations will be applied to// the financial year ending 1987 and not in 1986 as we had at first thought. Happily therefore,/ we are able to provide shareholders with higher dividends per share than we had first hopped. The total/ dividend will therefore be 8.8 Kobo per share as compared with 7.7 Kobo per share last year./ The most significant event of the year was the introduction by the government of a far reaching structural// adjustment programme which gave the nation a major opportunity to reduce its tendency to import from abroad/ rather than manufacture them here and provide incentives necessary to create a viable non oil sector to compliment/ revenue received from oil. I will in future over view how certain aspect of Medium Term Structural/ Adjustment Programme have and are likely to affect the economy in general and industry and agriculture in particular.//

S.I. = 1.6

APPENDIX VI

PASSAGE 2 (A & B)

210 words to be dictated at the rate of 70 wpm for 3 minutes.

When you apply for a job, your would be employer will require you to give a brief/ account of yourself. He likes to know your training and experience. He will want to know your/ qualifications as well as your interests and the good qualities, which you have. Such record is needed/ so that the employer may know if you are fit for the new job for which you are// applying. Some employers will provide a personal record form to be completed by applicants. If you have/ to prepare one yourself, it must be typed and well displayed.

It is good to arrange your facts/orderly and emphasize them. As you know, other people who have applied for the same job will/ also present their personal records and you will not like them to be ahead of you. If you// have worked before, you should mention this. It will show that you are dependable and that you/ can assist in the decision-making process of an office.

It is usual to give the names of/ one or two referees. You should first ask their permission to use them as referees before you/ put their names. It is very important to spell their names correctly and to give their correct address.//

S.I. = 1.4

APPENDIX VII

PASSAGE 3 (A)

210 words to be dictated at the rate of 70 wpm for 3 minutes.

It seems to me that there are three principal ways in which we can learn to do things/ or to understand things – looking, reading, or hearing. We can watch things done by other people, and/ copy their movements and actions. This is the way in which we learn when we are very young./ Babies, and all young animals are very quick to copy the acts of their mothers, and in// this way they learn a very great amount in a very short time. We continue throughout our lives/ to learn in this way, for we are always seeing others do certain things in certain ways/ and then making some attempt to carry out like acts ourselves. When we grow up, we are able/ to make observations within much wider limits, and we are free to learn great numbers of things// simply by watching. Not only can we see the life going on around and about us, but we/ have also brought right into the home the moving picture and the TV set. There is no/ more interesting and successful method of learning about other countries than to watch moving pictures that have been/ taken in these places. Most of us find it much easier to remember what we have seen.//

S.I. = 1.4

APPENDIX VIII

PASSAGE 3 (B)

350 words to be dictated at the rate of 70 wpm for 5 minutes.

It seems to me that there are three principal ways in which we can learn to do/ things or to understand things – looking, reading, or hearing. We can watch things done by other people, and/ copy their movements and actions. This is the way in which we learn when we are very/ young. Babies, and all young animals are very quick to copy the acts of their mothers, and in// this way they learn a very great amount in a very short time. We continue throughout our/ lives to learn in this way, for we are always seeing others do certain things in certain way/ and then making some attempt to carry out like acts ourselves. When we grow up, we are/ able to make observations within much wider limits and we are free to learn great numbers of things// simply by watching. Not only can we see the life going on round and about us, but/ we have also brought right into the home the moving picture and the TV set. There is no/ more interesting and successful method of learning about other countries than to watch moving pictures that have/ been taken in those places. Most of us find it much easier to remember what we have seen// than to remember what we have read in a book or have been told. Even a very/ good writer cannot bring to our minds so clear a picture of those countries as can a quite/ short moving picture. That is why many schools use both TV and the moving picture in the/ course of instruction in subjects as different from one another as history and science. In such subjects mere// reading is not enough to give complete picture of the material we are studying.

We can, then,/ use our eyes when we want to learn, using our powers of seeing and of observation. We must/ also, however, use our powers of hearing. To most of us this is a very difficult way of learning/ and we have often to work quite hard to master the art of learning through hearing.//

S.I. = 1.4

APPENDIX IX

PASSAGE 1 (A)

180 words to be dictated at the rate of 60 wpm for 3 minutes.

I desire to take this opportunity to mention the good work done by my fellow/ members. I have also to tell you that Mr. Ojo, who has been with us/ for thirty years and who has held the position of manager for the last ten/ years, is leaving us within the next few weeks. I regret to say that Mr.// Ojo has been in very poor health for some time, and according to his doctor/ his heart is not strong enough to allow him to carry on his work for/ us. While we would like to keep him we must of course, accept the fact/ that it is better for him to leave. He will go with our hope that// within a few months he will find himself very much better and that he will/ enjoy many years of good health. I have a sense of personal loss, as during/ the whole time I have been here I have worked side by side with Mr./ Ojo and I know that I shall miss him greatly. We shall forever remember him.//

S.I. = 1.4

APPENDIX X

PASSAGE 1 (B)

180 words to be dictated at the rate of 60 wpm for 3 minutes.

It must have been apparent to the honourable members during the discussion of the loan/ application bill that the matter concerns municipal authorities just as much as it concerns the/ business community. Municipal expenditure is just the same as expenditure in business enterprise. The logical/ conclusion of all the argument for the bill is that the economics that are affected// on what might be called physical activities, the stronger will be our financial position for/ the prosecution of the work. When state expenditure is at the maximum, municipal expenditure must/ be at the minimum. It is regretted that in some cases it appears to have/ been overlooked that as a result of the destruction of capital trade and industry will// experience very serious crisis in the years following the termination of the work and it/ is necessary to look forward. The man who looks forward is rarely caught napping and/ the state is in the same position as the individual in regard to this matter./ I am very glad that the house has formally decided to let the matter drop.//

S.I. = 1.6

APPENDIX XI

PASSAGE 2 (A & B)

180 words to be taken at the rate of 60 wpm for 3 minutes.

Dear Adamu Bello,

We would like to rejoice with you and express our best wishes/ to you on this occasion that you are celebrating your five years in the block-/making industry.

We are very proud of the fact that you have been buying white/ sand, which is one of your main raw materials, from us. During this period we// have never failed to deliver your order on time. This in turn has helped you/ to meet your customers' requests. We are pleased to observe that the business which you/ started alone five years ago is now a private limited company with ten shareholders and/ that you have branches in four state capitals.

In order to meet the increasing demand// for our white sand and at the same time maintain our reputation of never disappointing/ our customers, we shall now be on duty every day of the week with effect/ from first September. We shall observe the same working hours on Saturday and Sunday as/ we did for the five-day working week.

Very sincerely yours

Chairman and Managing Director.//

S.I. = 1.4

APPENDIX XII

PASSAGE 3 (A)

180 words to be taken at the rate of 60 wpm for 3 minutes.

The year is drawing to a close and we are now looking forward to the/ new one. This is the time when people take stock of their activities over the/ past year and also make resolutions about what they hope to do during the next year./

You will recall that soon after I assumed duties in this Ministry, I had// the opportunity of talking to you on the role of the Ministry of Education within/ the setup of government. The idea of a new-style Public Service recommended by/ the Udoji commission has placed even greater burdens on this Ministry. The task of bringing/ about the new changes rests fully on the shoulders of the Ministry.

Looking back// the past twelve months, I think that the staff of the Ministry can rightly claim/ to have made some important contributions towards the achievement of the objectives set for the/ Ministry by the government. This, you will agree, has been possible through the joint efforts/ of all members of staff, from the office cleaners to those at the highest level.//

S.I. = 1.4

APPENDIX XIII

PASSAGE 3 (B)

300 words to dictated at the rate of 60 wpm for 5 minutes.

The year is drawing to a close and we are now looking forward to the new/ one. This is the time when people take stock of their activities over the/ past year and also make resolutions about what they hope to do during the next/ year.

You will recall that soon after I assumed duties in this Ministry, I had// the opportunity of talking to you on the role of the Ministry of Education within/ the set-up of government. The idea of a new-style Public Service recommended by/ the Udoji Commission has placed even greater burdens on this Ministry. The task of bringing/ about the new changes rests fully on the shoulders of the Ministry.

Looking back over// the past twelve months, I think that the staff of the Ministry can rightly claim/ to have made some important contributions towards the achievement of the objectives set for the/ Ministry by the government. This, you will agree, has been possible through the joint efforts/ of all members of staff, from the office cleaners to those at the highest level.// Everyone is a link in the chain. I must warn you, however, that much as/ we have all tried to do our best during the passing year, much more is/ still required of the Ministry. I have, therefore, no doubt that it will the/ firm resolve of everyone of us gathered here today to roll up our sleeves to// meet the even bigger

challenges that lie ahead in the new year. As you are/ all aware, there is always a reward for the hard working officer and, of course,/ the reverse for the lazy one. I have no doubt that everyone of you will/ strive to be in the former class.

I thank all of you for your cooperation.//

S.I. = 1.4