To the Graduate Council:

I am submitting herewith a dissertation written by Samuel Uwa Osemota entitled "The Basic Vocabulary of Written Business Communications in Nigeria." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Vocational Technical Education.

Edgar Ray Smith

Edgar Ray Smith, Major Professor

We have read this dissertation and recommend its acceptance:

Accepted for the Council:

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Vice Chancellor
Graduate Studies and Research

THE BASIC VOCABULARY OF WRITTEN BUSINESS COMMUNICATIONS IN NIGERIA

A Dissertation

Presented for the

Doctor of Education

Degree

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ABSTRACT

This study was designed (a) to determine and compile the basic common words used in written business communications in Nigeria, (b) to determine the average stroke and syllabic intensities of the words used in written business communications in Nigeria, and (c) to determine if there was any significant difference between the ranking of the most-used 100 words in the written business communications in Nigeria and the ranking of the same words in the business word lists of Horn-Peterson, Mellinger, and Perry.

In order to secure data for this study, letters soliciting copies of two recently written letters, memoranda, or reports were mailed to 500 business organizations. A representative return from 74 percent of the sample produced 721 pieces of business communications used in the study. The body or message of each piece of letter, memorandum, or report was keypunched on data cards, and a programmed computer listed by frequency each word in the 721 business letters, memoranda and reports.

A total of 18,388 running words with 3,053 different words appeared in the business communications used in this study. The 3,053 different words were compiled as the basic common words used in written business communications in Nigeria; and the 18,388 running words were used in determining the average stroke intensity and the average syllabic intensity per word.

The Pearson Product-Moment Correlation was employed to determine if a significant relationship existed between the ranking of the 100 most frequently used words of this study and the ranking of the same words in the word lists of Horn-Peterson, Mellinger, and Perry.

The following were the major findings and recommendations of the study:

Major Findings

1. The ten most used words in written business communications in Nigeria used in this study accounted for 30 percent of the total word usage; 50 words accounted for 47 percent; 100 words, 55 percent; 200 words, 65 percent; 500 words, 76 percent; and 1,000 words, 88 percent of the total word usage.

2. The average stroke intensity of words appearing in the written business communications in Nigeria used in this study was 5.74.

3. The average syllabic intensity of words appearing in the written business communications in Nigeria used in this study was 1.58.

4. There was a strong positive relationship between the ranking of the most-used 100 words in the word list of this study and the ranking of the same words in the word lists of Horn-Peterson, Mellinger, and Perry; the correlation coefficients being significant at .01 level.

Recommendations

1. Since the first 1,000 words constitute over 3/4 of the vocabulary of the written business communications in Nigeria used in

this study, business educators should ascertain that these words are given proper exposure so that students can thoroughly master these high frequency business words.

2. Since the average stroke intensity of words used in written business communications employed in this study is 5.6, authors and teachers of typewriting materials should adopt a new method of determining typewriting speed so as to match more closely the actual uses of typewriting skills in the business world. Therefore, 6.0 strokes should be used as the average word rather than 5.0 currently being used.

3. Since the syllabic intensity of the written business communications used in this study is 1.58, the syllabic intensity for shorthand practice and testing materials should be raised to 1.6 instead of the 1.4 currently being used so as to match the actual business communication criteria.

4. Since the high frequency words in the written business communications in Nigeria used in this study compare favorably with the high frequency words in the business word lists of Horn-Peterson, Mellinger, and Perry, textbooks printed in the United States of America for Nigerian schools should, as far as possible, incorporate the high frequency words in these word lists to avoid language difficulty for Nigerian students.

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CHAPTER I

INTRODUCTION

Business vocabulary, words used by people in business communications, is generally considered a very important factor in the teaching of business education courses, particularly stenographic subjects. The importance of business vocabulary in business education was pointed out by Silverthorn when he said:

> An adequate vocabulary is important in any line of work. Therefore, a good business vocabulary is needed by those planning to enter the field of business. Consequently, the teachers of business subjects need authoritative sources of reference concerning the vocabulary of business.[1]

Stenographic subjects, especially shorthand and typewriting, are principally connected with business communications. In order to help students achieve proficiency in these subjects, researchers have compiled basic business word lists, and have determined the stroke and syllabic intensities of these words for use in teaching the subjects. These research findings are used not only by teachers in the classrooms, but also by authors of business textbooks. For example, one of the criteria used for selecting speedforms for Century 21 Shorthand textbooks was the power-impact throughout the 6,000 most-used words of the Perry-Silverthorn merged business vocabulary word lists.[2] Various word lists influenced the preparation of Gregg Shorthand textbooks. In a communication (Appendix F) with this researcher, Barbara Hann, Editor, Gregg Shorthand, wrote:

> For our Diamond Jubilee Series materials, we concentrated on the Horn-Peterson list. In our Series 90 materials, we examined not only the Horn-Peterson but also the Mellinger and

> Silverthorn-Perry lists. We use these frequency lists to determine what theory changes we will make in the revision.

Similarly, Paul Moser,[3] the author of the Pitman Shorthand Speed Drill textbook, indicated that the word lists in his text were based on the 10,000 most common words as given in the Horn word list.

Although words in common use are highly recommended for the teaching of shorthand and typewriting subjects, it has been observed that vocabulary, like music, changes with the times and human experience;[4] therefore, words that are common to one group of people may be uncommon to another group. Holland agreed with this view when he argued:

> It may be suggested that words in common use vary according to environment, and this is true, but it is not a constructive criticism because from the shorthand point of view facility in writing words in common use is the backbone of shorthand success.[5]

Holland, however, pointed out that differences in English word lists occur only after the first 500 words. He maintained that after the first 500 words, English vocabulary word lists are most influenced by the subject matter and the writing habits of the writer than the pattern of the English language. As an illustration, he cited the omission of the word "saucer," which many people would consider a common word, from the Horn list of 10,000 most common words, and he said:

> What is the explanation of this apparently contradictory evidence? The answer is clearly that only up to a limit of frequency, apparently to be drawn somewhere below 501, does the pattern of the English language produce recurrence of words irrespective of the subject which is dealt with. . . .
>
> On the other hand, words of such a frequency that they come outside the first 500 are more influenced by the subject matter and the habits of English of the writer, or dictator, than by the pattern of the language.[6]

The implications of these arguments are that (a) a word list drawn from highly industrialized environments would vary significantly from the word list drawn from less industrialized environments, (b) the first 500 words on the two lists would basically be the same if the word lists were in English language, and (c) for stenographic teaching purposes, it would be more beneficial if the word lists used were generated from the environment in which the subjects were taught.

I. STATEMENT OF THE PROBLEM

Because there are no Nigerian business vocabulary word lists available, business educators and students in Nigeria are compelled to rely on business vocabulary word lists compiled from and for foreign environments. Nigerian business educators and students use business word lists and textbooks prepared for schools in the United States of America and Great Britain. While the United States of America and Great Britain are highly industrialized countries, Nigeria is essentially an agricultural country and less industrialized. Therefore, there is probably a difference between the words in common use in Nigeria and those in common use in the United States of America and Great Britain. One major question then is, "What words comprise the basic business vocabulary in Nigeria?"

II. THE PURPOSE OF THE STUDY

The purposes of this study were: (a) to determine and compile the basic common words used in written business communications in Nigeria, (b) to determine the average stroke-intensity of the words

used in written business communications in Nigeria, (c) to determine the average syllabic intensity of the words used in written business communications in Nigeria, and (d) to determine if there is any significant difference between the ranking of the most-used 100 words in written business communications in Nigeria and the ranking of the same words in the business word lists of Horn-Peterson,[7] Mellinger[8] and Perry.[9]

In order to accomplish this task, answers were sought to the following questions:

1. What are the relative frequencies of the basic words used in written business communication in Nigeria?

2. What is the average stroke intensity of the basic words used in written business communications in Nigeria?

3. What is the average syllabic intensity of the basic words used in written business communications in Nigeria?

4. What words comprised the 100 most-used words in written business communications in Nigeria?

5. How are the 100 most-used words of this study ranked in the word lists of Horn-Peterson, Mellinger and Perry?

6. Is there any significant difference between the ranking of the 100 most-used words in the business word list of this study and the ranking of the same words in the business word lists of Horn-Peterson, Mellinger and Perry?

The word lists of Horn-Peterson, Mellinger and Perry were selected for comparison in this study because they were the business word lists generally used by the authors of textbooks for business

subjects, such as shorthand and typewriting, in the United States of America and Great Britain. As a matter of fact, there are only four widely known business vocabulary word lists in the United States of America and Great Britain--Horn-Peterson, Silverthorn, Mellinger, and Perry. Both Mellinger and Perry studies updated Silverthorn's word list; hence, Silverthorn's word list was omitted from the comparison made in this study.

III. IMPORTANCE OF THE STUDY

The importance of this study rests on the following facts:

1. Business education subjects are principally concerned with social interactions, and there is a general desire in Nigeria that the contents of textbooks for schools dealing with social subjects should be treated within Nigerian context. This desire was recently emphasized by the Federal Government of Nigeria when it said:

> Texts and educational aids for primary and secondary education in those subjects which have moral, social, and cultural overtones should be treated largely within a Nigerian or African context.[10]

2. The result of this study will serve as a source of reference for business vocabulary in Nigeria. Such a source of reference will be useful to all educators engaged in training people for occupations in which written business communications are involved.

3. The result of this study will provide the Nigerian shorthand teacher with the actual vocabulary used in business communications in Nigeria. One of the primary objectives of shorthand instruction is the development of prevocational skill; and as indicated by Reese and Smith,[11] if the shorthand learner is to use his or her limited time

effectively, the vocabulary used in the learning process should be that which he or she will use on the job. The material will then possess a degree of meaningfulness and usefulness during the learning process as well as during the job application. This opinion is supported by West when he wrote:

> The principal issue is that of using instructional material that will best prepare the individual for the materials he will later encounter on the job. . . . The pertinent underlying concept or principle is that of maximum positive transfer (from school training to later job performance), an outcome that requires as close as possible a match between the materials of the training and those of the job. By every definition, the words used in business communications are the job materials for the typist and stenographer.[12]

4. The result of this study will provide the Nigerian shorthand teacher with the high frequency words used in business communications in Nigeria. As pointed out by Crawford,[13] not all words contained in the vocabulary of business are of the same importance to the teacher of shorthand; some are more meaningful than others, for they have a higher "use" value. The importance and uses of high frequency words in shorthand instruction were further explained by Wellman when she declared:

> A fundamental assumption of the training of stenographers is that the learner must master the shorthand symbolism for the most frequent words. To this end arbitrary forms for some 350 words and 250 phrases must be memorized to the point of automatic response; and provision is made for repetitive practice of the 3,000 most common words. The learner is expected to be able to write the 5,000 most-used shorthand forms and know the principles for reproducing phonetically any words beyond that level. As a basis for the grading of shorthand dictation materials with respect to difficulty, vocabulary frequency is assumed to be highly important.[14]

5. The result of this study will aid shorthand teachers in Nigeria in constructing instructional materials composed of high frequency words that could be used as supplements to the regular

textbook materials. The studies of Prince[15] in 1968, Anderson[16] in 1969, and Rice[17] in 1975, have indicated that students who receive dictation from specially prepared high-frequency materials achieve higher scores in beginning shorthand classes than those who do not.

6. The result of this study will provide the shorthand teachers in Nigeria with the actual syllabic intensity of the average words used in written business communications in Nigeria which they could use as one of the criteria for constructing their shorthand teaching and testing materials. Several researchers, Mellinger, Perry, and Henrie[18] have indicated that syllabic intensity could be used as a factor in determining the difficulty of shorthand dictation materials.

7. Finally, it is hoped that this study will stimulate further research in the field of business vocabulary in Nigeria; the technical vocabulary of the different specialized areas of business (petroleum, medical, legal, and so forth) may be studied. In other words, this study will provide a basis for further research efforts in the sub-fields of business education in Nigeria.

IV. DELIMITATIONS OF THE STUDY

The following delimitations were made in this study:

1. Only correspondence from business reported as employing secretaries, stenographers, or typists was analyzed. The participating business organizations were restricted to those operating in Nigeria.

2. The business organizations which participated in this study were selected from business directories in Nigeria. Because of the size of the sample and because of the assumption that all similar organizations would have similar written vocabularies, it was believed

that this sample would be as representative of the population as possible.

3. Only business letters, memoranda, and reports were analyzed in this study, excluding telegrams, statistical reports, and other forms of business communications.

4. Since a business executive or his secretary in each participating organization selected the business communications in this study, no attempt was made to proportion the communications with regard to usage, length, or relevance to the individual organizations.

5. Only the words appearing in the text and postscript of each piece of communication were counted in this study. Words appearing in the addresses, salutations, and complimentary closings of letters were omitted. Words representing organizations, brand names, individual names, and other names related solely to the organization represented by the business communications were not used in this study.

6. Numbers appearing as digits in business communications were not included in the word frequency analysis. However, since digital numbers are dictated as speech syllables and are written and typed, they were included in the stroke and syllabic intensity analysis. Numbers spelled as words in the business communications were treated as words and were counted in all the studies.

7. Homographs (words identical in spelling but different in pronunciation and meaning) and homologs (words identical in spelling and pronunciation but different in meaning) are lumped together as the same type. Thus the words like "kind" a style, and "kind" humane behavior, are not distinguished nor are "bear" to carry and "bear" an animal.

8. Variant spellings of phonologically and lexically identical words are listed and counted separately. Thus "catalogue" British spelling and "catalog" American spelling were separated as were words like "non-payment" and "nonpayment."

V. ASSUMPTIONS

The following assumptions were made in this study:

1. All similar business organizations, regardless of size, have similar business vocabulary. For example, it was assumed that the written vocabulary of those banking organizations included in this study was similar to the written vocabulary of all other banking organizations.

2. The functional types of business communications in this study are representative of all written business communications of those particular functions as far as the vocabulary is concerned. For example, it was assumed that the written vocabulary of the letters, memoranda, and reports used in this study was similar to the written vocabulary of business communications in general in Nigeria.

3. The business communications selected for use in this study are representative of all business communications used by Nigerian businesses as far as the vocabulary is concerned.

VI. DEFINITION OF TERMS

The following terms and words are defined as they apply to this study:

Business Category. A grouping of related types of businesses; e.g. wholesale trade, transportation, and so on.

Business Communications. Written messages that have been typed for use in business.

Stroke Intensity. The average number of typewriter strokes per word.

Syllabic Intensity. The average number of speech syllables per word (total syllables divided by total actual words).

Word. A continuous string of letters, uninterrupted by space, which carries a definite meaning in a particular context.

Word Frequency. The total number of times a word occurred in the business communications analyzed in this study.

VII. ORGANIZATION OF THE STUDY

This study is divided into five chapters. Chapter I contains the introduction, statement of the problem, the purpose of the study, the importance of the study, delimitations of the study, assumptions, definition of terms, and the organization of the study.

Chapter II presents the review of related literature and is divided into three parts: general vocabulary studies, business vocabulary studies, and studies on the effect of word frequency on shorthand instruction.

Chapter III gives details of the procedures used in this study with regard to selection of the sample, collection of data, the analysis of word frequency, stroke intensity, and syllabic intensity, including the comparison of word lists.

Chapter IV presents the findings of the study.

Chapter V contains the summary, conclusions, and recommendations.

The appendices present the occurring words in the written business communications in Nigeria used in this study, the data collection instruments and documents not included in the body of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

A search through the literature reveals that most vocabulary studies have been concentrated largely on two components--words and sounds. These studies have been made with a variety of purposes in mind. Some have been made to determine the most frequent sounds in the language, and others have determined the most frequently used words in various types of reading or spelling materials. Despite the differences in these studies, it would seem that the motive behind them all is to produce a list of words or sounds in common use.

The purpose of the present study is to determine words in common use in written business communications in Nigeria; therefore, this chapter reviews literature on words in common use. The review is divided into three parts--the first section presents studies on General Vocabulary Word Lists; the second section covers Business Vocabulary Word Lists; and the final section is concerned with the effect of word frequency or controlled vocabulary materials on shorthand instruction. Shorthand is the only business education subject on which the effect of the use of common words has been researched. A summary of these sections is given at the end of this chapter for the reader to see how these sections relate to the present study.

I. GENERAL VOCABULARY STUDIES

Five studies are reviewed here and they comprised the investigations by Ayres, Dewey, Horn, Thorndike, and Kucera-Francis.

The studies by Ayres, Dewey, Horn, and Thorndike are regarded as pioneer investigations in the field of word frequencies and were conducted when computers were not in general use. The study by Kucera-Francis is relatively recent and represents one of the most advanced statistical analyses of word frequencies made possible by the use of computer.

Ayres Study[19]

In 1913, Ayres conducted a study of the vocabulary of 2,000 short business and personal letters. The object of the study was to determine whether or not there existed a fairly definite body of words so generally used in ordinary correspondence that they should form the core of the spelling vocabulary taught in the lower grades of elementary schools.

The communications from which words were analyzed in the study included correspondence from mail-order business, doctors, inquiry department of a newspaper, lawyers, school teachers, publishing firms, YWCA secretaries, playground associations, philanthropic organizations, a family, and an inquiry department of a magazine. In addition, a varied collection of love letters was used.

The procedure used consisted of tabulating the words in the body of every letter and making separate tabulations of the salutations and the complimentary closings. Numbers and names of persons and places were omitted.

The total number of running words tabulated was 23,629. The total number of individual words encountered was 2,001. Of the 2,001 individual words, one word appeared 1,080 times in the 23,629 running

words, and 751 words appeared only once each. Ayres found that after the words from the first 1,000 letters had been tabulated, the cumulative total of the individual words grew slowly. Also he found that the occurrence of 43 words in the list constituted one-half of the tabulated words.

Dewey Study[20]

In 1923, Dewey conducted a study of Relative Frequency of English Speech Sound. The purpose of the study was to determine the relative frequency of occurrence of syllables and words in written and spoken English language.

The following sources provided materials for the study:

1. Newspaper editorial English
2. Newspaper news English
3. Modern fiction
4. Modern American speeches
5. Personal correspondence
6. Business correspondence
7. Modern advertising
8. Religious English
9. Popular scientific English
10. Modern special articles
11. Magazine editorial English
12. Saturday Evening Post
13. Literary Digest[21]

The word count was carried out mechanically with the aid of special printed record cards, Veeder counters, Rand card holders, Smith steel signals, and special card ledger desk. The word count and the phonetic transcription occupied in all about 1,200 hours.

The study had a total running words of 100,000. Of this figure, 1,131 words occurred more than 10 times and had a combined frequency of 87,358. Further analysis of the word count showed that 10 of the most common words accounted for 25 percent of the total

words; 100 words accounted for 50 percent, and 1,000 words accounted for 75 percent. As a result of these findings, Dewey concluded that any specimen of connected English communications sufficiently long to be fairly representative would produce the same result as his own study.

Horn Study[22]

The purpose of the Horn Study was to provide data for the selection of words for spelling in the elementary schools. In 1922, Horn reported that he had combined the words of all vocabulary studies which had been made up to that time and referred to the list as the compilation of 1922. Six new investigations were then made by Horn as follows:

1. The vocabulary of business correspondence.
2. The vocabulary of personal letters.
3. The vocabulary of letters of people of more than average literary ability.
4. The vocabulary of letters of application and recommendation.
5. The vocabulary of adult writing other than correspondence.
6. The vocabulary of letters of a single individual written over a period of eight years.[23]

In the six new investigations, all words were tabulated including slang, colloquial, and supposedly obsolete words, with the exception of (a) all names of persons, places, and the months and days, (b) all words of less than four letters because they were considered to have relatively little spelling difficulty, and (c) additional 41 common words which the compilation of 1922 indicated would be found with high frequency regardless of how much material was examined.

The frequencies from the new investigations were combined with those of the compilation of 1922, making a total running words

of 5,136,815. From this figure, the 10,000 appearing most frequently were published in 1926 as A Basic Writing Vocabulary.

Thorndike Study[24]

The purpose of the Thorndike Study was to produce reading vocabulary word lists. The work of Thorndike in this field was continued for many years, and during this period, he compiled, at intervals of a decade, three influential word lists.

In 1921, Thorndike published his first study, The Teacher's Word Book, an alphabetical list of the 10,000 words which were found to occur most widely in a count of about 625,000 words from literature for children; about 3,000,000 words from the Bible and English classics; about 300,000 words from elementary school text books; about 50,000 words from books about cooking, sewing, farming, the trades, and the like; and 500,000 words from correspondence. Forty-one sources were used. With the publication of this count, Thorndike was regarded as a leader in this area of study in the United States.[25]

In 1932, Thorndike published an expanded word count--A Teacher's Word Book of the 20,000 Words Found Most Frequently and Widely in General Reading for Children and Young People.[26] This list added the count from over 200 sources including about 5,000,000 running words and incorporated the results of other published counts.

In 1944, together with Irving Lorge, Thorndike published The Teacher's Word Book of 30,000 Words,[27] based on counts of over 20,000,000 running words. The 1944 publication was organized to emphasize counts from four sources indicated separately by letters

T, L, J, and S. The letter T indicates counts from readers, textbooks, the Bible, and the English classics. The letter L presents the counts from recent and popular magazines. The letter J covers counts from books recommended for boys and girls in grades three to eight, and the letter S refers to words from miscellany of juvenile and adult reading--of old and recent, and of matter-of-fact and imaginative--but omitted school readers and textbooks.

Kucera-Francis Study[28]

In 1967, Kucera-Francis published a collection of lexical and statistical information obtained from the analysis of the standard corpus of present day edited American English, a study of language texts assembled at Brown University during 1963-64. The purpose of the study was not just to determine the basic vocabulary or the most common words of English language, but rather to compile a body of printed American English and present a basic analysis of the data based on the following criteria:

> 1. Definite and specific delimitation of the language texts included, so that scholars using the corpus may have a precise notion of the composition of the material.
> 2. Complete synchronicity; texts published in a single calendar year only are included.
> 3. A predetermined ratio of the various genres represented and a selection of individual samples through a random sampling procedure.
> 4. Accessibility of the corpus to automatic retrieval of all information contained in it which can be formally identified.
> 5. An accurate and complete description of the basic statistical properties of the corpus and of several subsets of the corpus with the possibility of expanding such analysis to other sections or properties of the corpus as may be required.[29]

The study was made up of 1,014,232 running words of natural language text, collected from 500 samples of approximately 2,000 words each. To ensure representativeness, the 500 samples were distributed among 15 categories, representing the full range of subject matter and prose styles, from the sports page of the newspaper to the scientific journal and from popular fiction to abstruse philosophical discussion. The subject categories and proportions were decided by a committee of six members as follows:

1.	Press: Reportage	44
2.	Press: Editorial	27
3.	Press: Reviews	17
4.	Religion	17
5.	Skills and Hobbies	36
6.	Popular Lore	48
7.	Belles Letters, Biography, etc.	75
8.	Miscellaneous	30
9.	Learned and Scientific Writings	80
10.	Fiction: General	29
11.	Fiction: Mystery and Detective	24
12.	Fiction: Science	6
13.	Fiction: Adventure and Western	29
14.	Fiction: Romance and Love Story	29
15.	Humor	9

Computer programs were used for data analysis in this study. In preparing the text materials for computer analysis, footnotes, tables, and picture captions were omitted. Also in keypunching the

materials for word frequency study, all marks of punctuation--except the hyphen and apostrophe--that were followed by another mark of punctuation or by space were omitted.

The results of the study included a frequency listing of all the words, word-length analysis, sentence-length analysis, and analysis of a lognormal model of word frequency distribution.

II. BUSINESS VOCABULARY STUDIES

In this section, six studies are reviewed. Four of the studies--Horn-Peterson in 1943, Silverthorn in 1955, Perry in 1968, and Mellinger in 1970--were conducted to compile business vocabulary word lists. The other two studies--Lessenbery-Robinson in 1968 and West in 1968--were conducted to modify existing word lists.

Horn-Peterson Study

In 1943, Horn and Peterson published The Basic Vocabulary of Business Letters. This publication was based largely on the data of the investigation designed to determine the vocabulary of business correspondence in the Horn study.

The investigation from which the Horn-Peterson list was derived involved letters from 26 types of business as follows:

1. Miscellaneous
2. Florists
3. Automobile manufacturers and sales companies
4. Wholesale and retail druggists
5. Manufacturers of clothing and textiles
6. Dealers in lumber and furniture

7. Manufacturers, wholesalers, and retailers of foodstuffs
8. Law firms
9. Insurance companies
10. Dealers in crockery and china
11. Building and construction companies
12. Community organizations
13. Coal and oil companies
14. Electrical supply houses
15. Medical supply companies
16. School supply companies
17. Banks, loan and investment companies
18. Public utilities
19. Dealers in hardware and machinery
20. Car and truck companies
21. Railroad and express companies
22. Steel and iron manufacturers
23. Schools, churches, and libraries
24. Department stores
25. Publishers
26. Farmers

The average number of different firms included in each type was 6, making a total of approximately 156.

The data for the study were initially analyzed to show two significant factors--the frequency of a word and the total number of types of business correspondence in which the word occurred. As there was no standard method of combining these two factors, the investigators

decided to determine the relative importance of a word by multiplying its total frequency by the approximate square root of the number of different types of business in which the word was found. Square roots were taken to the nearest integer according to the following:

Number of Types of Business	Number Used for Weighting
1-2	1
3-6	2
7-12	3
13-20	4
21-26	5

The application of the above in determining the weighted frequency of words in the study is illustrated in the following example:

> "Consider" was found in 23 types of business, with a total frequency of 414. The square root of 23 to the nearest integer is five. The weighted total for "consider" is therefore five times 414, which is 2,070.[30]

Two separate word lists were compiled by the study. One list, in alphabetical order, gave both the actual number of occurrences and the weighted frequency of words, and the other list consisted of the frequency distribution in which the most frequently occurring words were arranged in order of the frequency of their occurrence.

Silverthorn Study[31]

The purpose of the Silverthorn study was to provide a source of reference for words used most frequently in written business communications.

The data for the study comprised words appearing in various kinds of communications--reports, telegrams, intercompany messages, and numerous types of business letters--from business firms in the United States of America. In order to secure the data, individual letters were sent to 34 firms and personal visits were made by the investigator to 60 firms requesting communications for use in the study. In addition, a letter requesting the cooperation of business firms was published in Office Executive, the internationally circulated publication of the National Office Management Association.

A sampling procedure was used in the collection of the data. The report, Occupations of Employed Persons in Each Industry, for the United States, March, 1940, was used for securing a list of types of business. The types of business were grouped into categories according to those used by the Census Bureau. Words were drawn from communications representing each of the categories in proportion to its probable proportion of all business writing. The criterion for estimating the proportionate representation for each category was the percentage of all secretaries, stenographers, and typists who were employed in each category. The following list shows the category of business used in the study:

1. Agriculture, forestry and fishery
2. Mining
3. Construction
4. Durable manufactures
5. Nondurable manufactures
6. Other manufactures
7. Transportation, communication and other utilities
8. Wholesale and retail trade
9. Finance, insurance, and real estate
10. Business and repair services
11. Personal services
12. Amusement, recreation, etc.

13. Professional and related services
14. Government
15. Industry not elsewhere classified

Two thousand and thirty-nine pieces of business communications, representing 1,012 writers from the 15 categories of business in 41 states were collected for the study. In order to analyze the data, words were punched on cards and punched-card machines were used for sorting and tabulating. The number of words analyzed was extended until tests for adequacy of sample revealed that the sample was adequate.

The sample was considered adequate when: (a) communications from which the words were tabulated were representative of the whole of written business communication, (b) all high-frequency words were included, (c) frequency positions of the words occurring with high frequency were established, and (d) approximate frequency positions of the less frequently occurring words were established.

The study produced 300,000 running words. The number of individual words actually encountered was 11,564. The 50 words used most frequently accounted for approximately 45 percent of the occurrences of all words; the first 100, slightly more than 50 percent; the first 500, approximately 70 percent; the first 1,000, about 80 percent; and the first 5,000, approximately 95 percent. The word "the" has the highest frequency, the number of occurrences accounting for approximately 5 percent of the total running words.

Perry Study

The purposes of the Perry Study were to determine the most frequently occurring word combinations in business correspondence and the most frequently occurring phrases in selected Gregg and Pitman

shorthand textbooks; and to determine if any significant difference existed between the use of phrases in shorthand textbooks and their corresponding use as word combinations in business letters. The study also determined the most frequently used words in business letters, the average stroke intensity, and the average syllabic intensity.

The data for word frequency study were obtained from business letters. The business letters were collected from only those businesses employing secretaries, stenographers, and typists. A publication, United States Census of Population 1960, Occupation by Industry, was used to determine the sampling percentages for the study. Business firms and professional and service organizations were selected from specialized directories, using a stratified sampling approach and a table of random numbers. The following list shows the categories of business used in the study:

1. Agriculture, forestry, and fisheries
2. Mining
3. Construction
4. Manufacturing--durable goods
5. Manufacturing--nondurable goods
6. Transportation
7. Communications
8. Utilities and sanitary services
9. Wholesale trade
10. Retail trade
11. Finance, insurance, and real estate
12. Business and repair services
13. Personal services
14. Entertainment and recreation services
15. Industry not elsewhere classified[32]

In order to secure the data for the study, letters soliciting copies of three recently written business letters were mailed to 1,500 business firms and service organizations. A representative return from 44 percent of the sample produced 2,061 business letters. The body

and postscript of each letter were keypunched on data cards and the computer listed the frequency of each word in the 2,061 business letters.

The study produced a total of 317,306 running words, with 12,109 different words. In order to determine whether the frequency of the words obtained from the population sample was consistent with the actual frequency of usage in business letters, periodic checks were made to determine whether the point of stabilization had been reached. The point of stabilization was defined as the point at which each additional business letter would not change the ranking of the 50 most frequently occurring words.

In order to determine the syllabic intensity--the average sum of speech syllables per word--the following formula was used: the sums of syllables multiplied by frequency divided by total words. To determine stroke intensity--the average number of typewriter strokes per word--three factors were summed: the average number of alphabetic letters and numeric digits in a word, the space that exists between one word and another, and the incidence of punctuation and nonalphabetic and non-numeric symbols in the business letters. Each factor was ascertained individually and totaled to determine the stroke intensity, or the length of the average word.

The major findings[33] of the Perry Study include:

1. The ten most frequently used words account for 25 percent of the total word usage in business letters. One hundred words account for over 50 percent of the usage, and 1,000 words constitute over 75 percent of the business letter vocabulary.

2. The average syllabic intensity of words is 1.630, which indicates that each word appearing in a business letter contains an average of 1.6 syllables.

3. The average stroke intensity of words is 5.834, which indicates that each word appearing in a business letter contains an average of 5.8 strokes.

Mellinger Study

In 1970, Mellinger published the Basic Vocabulary for Written Business Office Communication as a result of a study which was designed to test the effect of the communication revolution on written business office communications. In this study, Mellinger examined approximately 2,000 letters, reports, and memoranda from the files of 5,000 firms, schools, and nonprofit-making organizations in all critical occupations in the major metropolitan areas of 43 states in the United States of America. The communications were collected in proportion to the relative number of stenographers, secretaries, and typists in each occupational category listed in the 1960 census.

The study produced 295,271 running words and 12,897 different words. Numbers, nouns, and abbreviations were not included in the word analysis.

Mellinger compared his word list with Silverthorn's word list and found that on both lists:

1. approximately 1/4 of all the running words were accounted for by the ten most-frequently used words;
2. the tally for the 50 most-frequently used words went beyond the 100,000 mark;
3. the first 500 words included more than 70 percent of the words appearing in all communications; and
4. all but 4 percent of the total running words were included in the first 5,000 words.[34]

A further comparison of the two lists showed, among other things, that:

> 1. Ninety-three of Silverthorn's first 500 words had declined in importance to the point they no longer appeared among the first 500 words on the new list; and
> 2. all but two of the first 200 words on the Silverthorn list were present on the new list.[35]

Based on the findings of the study, Mellinger concluded that, except for a relatively small number of words, substantial changes have occurred during the previous 15 years in the relative frequency of words used in written business office communications.

Lessenberry-Robinson Study

The purpose of the Lessenberry-Robinson Study was to develop a basic vocabulary word list that could constitute the essential core of basic skill building and measurement material for all typewriting students.

The procedure adopted in the study was to compare general vocabulary word lists with business vocabulary word lists, and to compile from these lists words that were common to all of them. Four word lists were compared:

1. a general vocabulary word list by Dewey,
2. a general vocabulary word list by Thorndike-Lorge,
3. a business vocabulary word list by Horn-Peterson, and
4. a business vocabulary word list by Silverthorn.

For a word to be included on the composite list, it had to appear as a high-frequency word on at least three of the four original lists, appearing on at least one business list and, at least on one general list.

From the comparisons of the four word lists, the investigators found:

> 1. Within the first 1,000 most-used words the 4 word lists are similar rather than dissimilar; within the next 1,000 most-used words, however, far greater dissimilarity is evident.
> 2. Considerably greater similarity exists between the two business word lists than between the two general lists.
> 3. Almost as much similarity exists between each business word list and each of the general word lists as exists between the two general word lists themselves.
> 4. A core of words is common to the 4 word lists, and this core has its greatest impact in the first 1,000 most-used words.
> 5. Many of the words migrated from one 1,000-word group to another 1,000-word group among the lists.[36]

The core of words they found common to the 4 word lists was presented in a composite word list of 1,254 words and derivatives in 1968. The composite word list was updated in 1975 to include the words from Perry (business) and Kucera-Francis (general) word lists.

West Study

The purpose of the West Study was to provide stroke intensity and syllabic intensity information for the entire Silverthorn word list using a modified definition for a "word." Silverthorn originally considered compound words (do-it-yourself, easy-to-use) to be one word. Further, he considered different spellings as separate words; that is, enclosure, inclosure, incl., encl., enc., were considered to be six separate words in the Silverthorn study.

The modifications by West reduced the total number of different words reported by Silverthorn from 11,564 to 11,055. Another change was to increase from 107 to 109 the number of different words that occur, at least, once in every 1,000 words of written business communications. From the data analyzed for the study, West found that the

business vocabulary had a syllabic intensity of 1.54 and average stroke intensity of approximately 6.0, as against the conventional assumptions of 1.4 syllabic intensity and 5.0 stroke intensity.

As a result of his findings, West recommended that, during training in shorthand and typewriting, substantial amounts of practice and test materials should be at 1.54 syllabic intensity and 6.0 stroke intensity levels so that the maximum positive transfer to proficiency at the vocabulary of job materials could be attained.

III. THE EFFECT OF CONTROLLED VOCABULARY ON SHORTHAND INSTRUCTION

The vocabulary of shorthand materials is controlled by the use of specified proportions of high-frequency words. Several studies have been conducted to determine the effect of controlled vocabulary on shorthand teaching and testing. Four of these studies--Gallion in 1968, Anderson in 1969, Michelson in 1970, and Rice in 1975--are reviewed here.

Gallion Study[37]

The purpose of the Gallion Study was to determine which combination of two different types of supplementary speed development materials and two methods of dictation skill building would be most effective in college beginning shorthand classes. The two types of dictation materials were: (a) vocabulary-controlled materials based on the 1,500 most frequently used words in the Silverthorn list that could be related to the theory that had been presented and (b) contextual materials taken from the Gregg textbook.

The two methods of skill building were: (a) presentation of preview words prior to the dictation practice and (b) the tracing of specially prepared shorthand plates during dictation practice. Students were randomly assigned to the treatment groups.

Dictation materials, prepared by the investigator, were based on the first 1,500 most frequently used words. The first 10 lessons were written from the first 500 most frequently used words; the next 10 lessons were written from the first 1,000 words; and the final 20 lessons were written from the first 1,500 words. All materials were correlated with lessons in the Gregg textbook.

All groups followed the same daily schedule; the only differences occurred in the content of dictation materials and the speed-development procedures. Class time used for dictation ranged from 10 minutes each day during the first week to approximately 30 minutes each day during the last week of the study. All dictation, including dictation from textbook letters, was recorded on magnetic tape at predetermined speed levels using a traditional speed-building approach.

Practice tests were given at intervals during the presentation of theory. The first test, given after lesson 24, contained 1-minute letters based on the first 500 more frequently used words; the second test, after lesson 35, used only the first 1,000 words; and the third test, after lesson 47, used the first 1,500 words.

Criterion measures were three dictation tests given three days after the completion of shorthand theory. Each dictation test contained 2 2-minute letters written from the first 1,500 most frequently used words. The letters were so constructed because the students in the groups receiving controlled vocabulary materials had not had

practice materials other than that based on these words. The 6 tests were recorded on tape and ranged in speed from 60 to 80 words per minute. The actual number of words correctly transcribed constituted the score of each test. No errors were charged in transcription for spelling, capitalization, punctuation, or English usage.

A two-way classification analysis of variance was used to test the following hypotheses:

1. Mean achievement scores of students receiving dictation from textbook materials were not different from scores of students receiving vocabulary controlled materials.
2. Mean achievement scores of students tracing outlines while taking dictation from the vocabulary controlled dictation materials were not different from scores of students receiving preview words of vocabulary controlled dictation material.
3. Mean achievement scores of students receiving preview words of dictated material taken from the textbook were not different from scores of students receiving preview words of dictated material that was vocabulary controlled.
4. Mean achievement scores of students tracing outlines while taking dictation from textbook material were not different from scores of students tracing outlines while taking dictation from vocabulary controlled dictation material.[38]

The results of the study indicated that higher mean scores were found for students using the vocabulary controlled materials on five of the six tests. It was only in 1 test after lesson 35 in the 1,000 words was there a significant difference at the .05 level in favor of the vocabulary controlled materials.

Anderson Study

The purpose of the Anderson Study was to investigate combinations of practice materials and procedures that would produce more efficient learning of shorthand. She sought to determine the relative effectiveness of two speed-development methods and two speed-practice materials using a micromolar approach.

The research design was the same as the Gallion Study except for speed-building approach. Students in ten colleges were randomly assigned to four treatment combinations: textbook materials with preview lists, textbook materials with tracing, vocabulary controlled materials with preview lists, and vocabulary controlled materials with tracing. All practice dictation materials, prepared by Gallion, were recorded on tape at 90 words per minute.

To the 3 criterion tests constructed by Gallion and containing 2 letters per test, Anderson added 1 letter to each test at 90 words per minute. The first 2 letters were also constructed from the first 1,500 words on the Silverthorn list but with a greater proportion of brief forms per test. The third letter contained 15 percent of the outlines beyond the 1,500 word level. Three letters were given at each of the 3 test periods; dictation speed ranged from 60 to 90 words per minute.

The two-factor analysis of variance was used to test for significant differences for each criterion measure. The major findings in the study indicate that students receiving the vocabulary controlled dictation practice achieved slightly higher mean scores on seven of the nine terminal tests, including the one with uncontrolled vocabulary. However, the differences in achievement were not statistically significant.

Because of higher achievement shown by students using the vocabulary controlled materials, Anderson recommended that dictation materials employing the first 1,500 most frequently used words be used extensively in the initial stages of skill building in beginning shorthand.

Michelson Study[39]

The Michelson Study was conducted to determine the contributory effect of word frequency upon the accuracy of the completed shorthand transcripts of high school students in fourth semester shorthand classes. The null hypothesis[40] tested was:

> The mean raw error scores on the shorthand transcripts having high-frequency word indices of 100, 70, and 40 percent respectively will not vary significantly when the letters are dictated at 80 words per minute and syllabic intensity is held at 1.43 in the 3 tests.

Three letters were constructed, each with 240 actual words. The first 500 words from the Perry list, comprising 71.93 percent of the total vocabulary of business communications, were used as the frequency index in the preparation of the letters. The letters were classified according to word indices as easy (containing 100 percent of the words in the first 500), average (70 percent), or difficult (40 percent).

The raw error means on the three tests were found to be statistically significant when the analysis of variance was applied to raw data scores. Dunn's "C" test for multiple comparisons showed each mean to be statistically different from every other mean. The analysis of errors by vocabulary level in the combined tests indicate that the percentage of error, based on actual occurrences of words by 500-word blocks, tended to increase as the familiarity of the vocabulary decreased. Thus, when the 1,500-word block unit was used, the error percentage had increased at each 500-word level. Additional findings showed that the longest words, five syllables, were missed less often than any other word length, and the highest percentage of errors occurred in two-syllable words.

On the basis of these findings, Michelson made the following conclusions:

> 1. The indices of high frequency words used in this study were highly successful in determining three distinct dictation levels. Familiarity of vocabulary appears to be a very significant factor in measuring the difficulty of stenographic dictation materials.
> 2. Although it was not the purpose of this study to determine the effectiveness of syllabic intensity as a measure of the difficulty of shorthand dictation materials, it was indirectly observed and concluded that syllabic intensity was an inadequate measure of the difficulty of the dictation tests used in this study.
> 3. Transcription errors in this study were directly related to vocabulary level. Low frequency words caused more transcription errors than high frequency words when the percentage figure was based on frequency of occurrences in the tests.
> 4. The belief that long words result in more efforts than short words was not validated in this study.[41]

Rice Study

The purpose of the Rice Study was to determine the effectiveness of using vocabulary controlled materials on achievement of college-level beginning shorthand students during the presentation of shorthand theory as measured by dictation speed tests and theory vocabulary tests.

The study was conducted over a period of 15 weeks, in 7 teacher-training institutions in 6 states. One hundred and nineteen students with no previous shorthand instruction participated in the experiment--75 students in experimental classes and 47 students in control classes. The Otis Mental Ability Test, Gamma, Form Em, was administered to all students to establish homogeneity of the treatment groups to use as covariate. The specially prepared vocabulary controlled materials, used exclusively by the experimental classes, were composed of

programmed theory, taped reinforcement material, and printed new-matter dictation letters. Students in the control classes used the traditional Gregg shorthand textbook and theory tapes. The same time schedule was observed in these classes as in experimental classes. Criterion measures were three dictation tests and two theory/vocabulary tests.

Rice found that students who learn shorthand theory using the specially prepared vocabulary controlled materials achieved higher scores on dictation tests at speeds from 40 to 80 words per minute and write more accurate outlines on word tests when the words emphasize shorthand principles or are selected at random from the first 5,000 words in the Perry list than students who learn shorthand theory using the traditional Gregg textbook materials.

IV. SUMMARY

This three-part chapter presented the literature on vocabulary studies and the impact of business vocabulary on shorthand instruction. The first part reviewed the studies on development of general vocabulary word lists which were prepared to aid school teachers and students in their spelling and reading lessons.

The second section was devoted to studies concerned with the development of business vocabulary word lists, stroke intensity and syllabic intensity. These studies were undertaken to improve the teaching and learning of business education subjects, especially shorthand and typewriting, by providing for use in the learning situation the same materials that are used in the real business

world. Thus the difference between classroom and employment situation materials is reduced and the student's difficulty in the transition from classroom learning situation to the office work conditions is minimized.

The third section presented studies dealing with the effect of business vocabulary on shorthand instruction, the only business education subject on which the effect of the use of high-frequency business vocabulary has been researched. Although in some cases there were no statistically significant differences, all the studies reviewed in this chapter showed that the students who use controlled business vocabulary in the beginning shorthand classes, do better than those who do not. These studies, therefore, demonstrate the need for the compilation of business vocabulary word lists.

Each of the studies reviewed in this chapter relates to the present study in content, methodology, or objective. The present study presents the vocabulary, the stroke intensity, and the syllabic intensity of written business communications in Nigeria. In this respect, the present study is related to the studies of Ayres, Horn, Kucera-Francis, Horn-Peterson, Silverthorn, Mellinger, Perry, and West because these studies dealt with the vocabulary, the stroke intensity, or the syllabic intensity of written communications in the United States of America.

The procedures adopted in the present study included the use of proportional sampling, computer analysis of data, and the omission of proper or special names, figures, and digits from vocabulary analysis. In this regard, the methodology adopted in this study is

almost the same as those employed by Ayres, Horn, Kucera-Francis, Silverthorn, and Perry in their studies.

Finally, the main objective of the present study is to help improve the teaching and learning of business education subjects, especially shorthand in Nigeria, by providing the students and teachers with materials that are useful in both learning and employment situations. To this end, the present study is related to all the studies reviewed in this chapter because these studies were all directed at improving the educational attainments of students vis-a-vis the learning of business communication skills.

CHAPTER III

PROCEDURES

The purposes of this investigation were to compile the basic vocabulary used in written business communications in Nigeria and to determine whether there was any significant difference between the frequently-used words in business communications in Nigeria and the frequently-used words in business communications in the United States of America. In addition, this study determined the syllabic and stroke intensities of words used in written business communications in Nigeria. This chapter explains the methods and procedures utilized in this study with regard to literature search, selection of the sample, the analysis of the word frequency, the stroke intensity, and the syllabic intensity, as well as the comparison of the word lists.

I. LITERATURE SEARCH

This study began with a detailed examination of the Business Education Index,[42] the Education Index,[43] Business Periodical Index,[44] and Reader's Guide to Periodical Literature. Other sources reviewed for research included the National Business Education Quarterly,[45] which indicates research studies in Business Education completed and in process; Ruth Anderson's dissertation,[46] which reviewed shorthand studies completed prior to 1945, Inez Frink's dissertation,[47] which reviewed shorthand studies completed between 1946 to 1957; James Barr's dissertation,[48] which reviewed shorthand studies completed from 1957 to

1967; and the Educational Resources Information Center (ERIC) which contained several completed studies.

After it had been determined that a study identical to this one had not been completed previously, and after the related literature had been reviewed, a proposal was written and presented in a research methods class in the College of Education at The University of Tennessee, Knoxville, in the Spring Quarter of 1979. After the necessary revisions were made, the revised proposal was presented to the candidate's advisory committee in the Summer of 1979 at which time it was approved.

The collection of written business communications for this study, the keypunching of the data, and the computer analysis of the materials were undertaken between October, 1979 and August, 1980, at the University of Benin, in Bendel State of Nigeria.

II. SELECTION OF THE SAMPLE

The population for this study consisted of all the business organizations in Nigeria. In order to obtain a representative sample of business communications for this study, several publications by the Nigerian Census Office, the Nigerian Chamber of Commerce, and the Nigerian Federal and State Governments were consulted. Included in these publications was the Report on the Industrial Directory and Manpower Survey 1977,[49] which contained all categories of business and the number and type of workers employed.

On the basis of the information contained in this publication, the sample size of 5 percent, the business classifications, and the proportional representation of business categories in this study were

determined. Only those businesses employing secretaries, stenographers, and typists were used in this study as stated in the delimitations. The number of secretaries, stenographers and typists in each category of business was used to determine the percentage of the proportional representation.

From the data contained in the above publications, the total number of secretaries, stenographers, and typists in each category of business in each industry contained within each category of business was determined. The number of secretaries, stenographers, and typists in each category of business was divided by the overall total for each category. For example, the total of 95,000 secretaries, stenographers, and typists were employed in all categories of business. Of this number, 4,750 were employed in "Finance, Insurance and Real Estate." By dividing 4,750 by 95,000 it was determined that 5 percent of the total secretaries, stenographers, and typists were employed in "Finance, Insurance, and Real Estate." In order to determine the percentage employed within each industry in this category, 4,750 was divided into the number of secretaries, stenographers, and typists in each industry. Banking with 3,005 secretaries, stenographers, and typists had 63.20 percent of this category. The business classifications, the percentage of the total secretaries, stenographers, and typists employed in each category, and the proportional number in the sample are shown in Table I.

The business organizations were selected from specialized directories, using a stratified sampling approach and a table of random numbers. Included in the directories were the latest Telephone

TABLE I

PERCENT AND PROPORTIONAL SAMPLING OF THE TOTAL SECRETARIES, STENOGRAPHERS, AND TYPISTS EMPLOYED IN EACH CATEGORY OF BUSINESS

	Category of Business	Percent of Secretaries, Stenographers, and Typists	Proportional Sample (N=500)
1.	Agriculture, Forestry, and Fisheries	4	20
2.	Oil, Gas, and Coal	3	15
3.	Construction	3	15
4.	Manufacturing	3.5	17
5.	Transportation	2	10
6.	Communications	5	25
7.	Health and Medical	5	25
8.	Wholesale/Retail Trades	8	40
9.	Finance, Insurance, and Real Estate	5	25
10.	Legal Services	1	5
11.	Education	5	25
12.	Government--State/Local	55	275
13.	Others	.5	3
	TOTAL	100.00	500

Directory of the Federal Republic of Nigeria, and Nigeria Industrial Directory by the Manufacturers Association of Nigeria.

The percentages indicated in Table I were used in selecting the appropriate number of business organizations for participation in this study. For example, 4 percent of the total samples was selected from agriculture, forestry, and fisheries, 3 percent for oil, gas, and coal, and so forth.

The above selection procedure insured a representative sample of participants. In order to further strengthen the sampling procedure by insuring a representative return, a tabulation was made of the number of organizations in every industry and category of business participating in the study. Where a particular industry or type of business did not respond with a sufficient number of business communications, additional business communications were solicited from similar types of business in Bendel State of Nigeria.

Through the stratified selection of participants, the representative return, and the large number of business communications collected, the sampling procedures produced a representative cross section of all business organizations employing secretaries, stenographers, and typists in Nigeria.

III. WORD FREQUENCY ANALYSIS

A letter was mailed to each of the 500 business organizations selected for this study on November 5, 1979, explaining the nature of the study and requesting copies of two recently written letters, memoranda, or reports. A copy of this letter is in Appendix C. A

form, contained in Appendix D, was also enclosed on which each organization could indicate whether the letters, memoranda, or reports used in the study were to be returned. If the organization desired its letters, memoranda, or reports returned, they were photocopied and returned immediately together with a thank-you letter.

Of the original 500 business organizations selected for this study, a total of 150 responded, resulting in an initial 30 percent return. A follow-up letter was mailed on January 2, 1980, to those firms which had not responded. As a result of the follow-up letter, 210 returns were received. A total of 360 responses were finally received, which represented 62 percent return. However, 50 of the responses were not useful as they contained either letters of regret or the request letters sent to the organization concerned. In order to obtain a representative return as well as sufficient sample, 60 establishments from the Bendel State of Nigeria were contacted and asked to submit 2 copies of letters, memoranda, or reports sent out by them. These establishments were selected from the categories of business in which an insufficient return had been received. In this way, a representative sample was obtained with a total of 370 business organizations participating and a 74 percent return from the 500 business organizations invited to participate. Table II indicates the total response with the percent of the total returns from each category of business. Business communications from all the 19 States of Nigeria were represented in this study. A total of 721 pieces of business communications was received and analyzed.

TABLE II

NUMBER OF PARTICIPATING FIRMS IN EACH CATEGORY OF BUSINESS

Category of Business	Number of Participating Firms	Percent of Total Firms
1. Agriculture, Forestry and Fisheries	10	2.7
2. Oil, Gas, and Coal	10	2.7
3. Construction	8	2.1
4. Manufacturing	10	2.7
5. Transportation	5	1.3
6. Communications	20	5.4
7. Health and Medical	25	6.7
8. Wholesale/Retail Trades	35	9.5
9. Finance, Insurance and Real Estate	20	5.4
10. Legal Services	5	1.3
11. Education	20	5.4
12. Government: State/Local	200	54.0
13. Others	3	.8
TOTAL	370	100.0

After the business communications had been collected, they were sent to the Computer Center at the University of Benin for keypunching and analysis. The body and postscripts of the business communications were keypunched in their entirety on data cards. Proper names, letter headings, addresses, salutations, and complimentary closings of business letters were left out. In keypunching the contents of the business communications, all punctuations were omitted in order to conform to the computer program. Any punctuation forming part of a word was retained; for example, hyphens were retained in words normally hyphenated such as ex-student.

When the contents of the business communications had been keypunched on approximately 12,000 individual cards, the computer was programmed to provide (a) the number of words used in the communications, (b) alphabetic listing of all the words, and (c) frequency listing of all the words. The final print-out of the computer analysis showed the frequency order of each word--the word having the greatest frequency was given the first place, and the word having the second greatest frequency was given the second place, etc.

Unlike the procedures adopted by Silverthorn[50] and Perry, no periodic checks were made during the word frequency analysis to determine whether or not the point of stabilization had been reached. The point of stabilization is said to refer to the point at which each additional business communication analyzed would not change the ranking of the 50 or so most-frequently occurring words. Instead, in this study, all the business communications received were analyzed whether or not they changed the ranking of the 50 most-frequently occurring words.

IV. STROKE INTENSITY ANALYSIS

Stroke intensity is used, among other things, to measure the difficulty of typewriting teaching and testing materials. It is the average number of typewriter strokes per word. To determine the stroke intensity of the business communications used in this study, the following factors in the communications were summed: (a) the total number of alphabetic characters, (b) the total number of numeric characters, (c) the total number of non-alphabetic and non-numeric characters, and (d) the total number of spaces between words. The sum of these four factors was divided by the total number of the running words in the study to arrive at the average stroke intensity of the communications used in the study.

The average number of alphabetic letters and spaces between words was provided by the computer. To determine this figure, the computer was programmed to total the number of strokes in each word plus the following space: two spaces at the end of a sentence. The total strokes were divided by the number of running words.

Because punctuation, numeric digits, and special characters were not originally keypunched on data cards, the incidence of punctuation, numeric digits, and special characters was completed using an electronic calculator. To determine this percentage, the total occurrence of punctuation, numeric digits, and special symbols was totaled for each business communication. The total occurrence in all the communications was divided by the total number of running words to determine the incidence of punctuation, numeric digits, and symbol strokes.

The average number of alphabetic letters and the space that existed between words, and the incidence of punctuation, numeric digits, and symbols were summed to determine the stroke intensity. These calculations and the findings are given in Chapter IV.

V. SYLLABIC INTENSITY ANALYSIS

Syllabic intensity is one of the variables that affects the difficulty of shorthand teaching and testing materials. It is the average number of speech syllables per word. To determine the syllabic intensity of the communications used in this study, the following formula was used: the sum of syllables multiplied by frequency divided by total words. All calculations for this phase of the study were carried out through the use of an electronic calculator.

The number of syllables in each of the individual words was determined. The Oxford English Dictionary was consulted for words in which a question existed concerning the number of syllables due to differing pronunciations. In each case the first preference was used.

After the number of syllables of a particular word had been established, the number was multiplied by the word's frequency. After the number of syllables in each of the individual words had been ascertained and multiplied by frequency, the products were totaled. This sum represented the total number of syllables in the running words. This total was then divided by total number of running words to determine the syllabic intensity.

The results of these calculations and the findings of the syllabic intensity analysis are presented in Chapter IV.

VI. WORD LISTS COMPARISON

After the frequencies of the basic words used in written business communications in Nigeria had been compiled and their ranks determined, the 100 most-used words appearing on the word list were compared with those appearing on the written business word lists of Horn-Peterson, Mellinger, and Perry to ascertain:

1. If the 100 most-used words on the word list of this study were the same as those appearing on the word lists of Horn-Peterson, Mellinger, and Perry;

2. If the ranking of the 100 most-used words in the word list of this study were the same as the ranking of the same words in the word lists of Horn-Peterson, Mellinger, and Perry; and

3. If there were any significant differences between the ranking of the most-used 100 words in the word list of this study and the other word lists.

In order to determine whether the most-used 100 words on the word list of this study were the same as those on the word lists of Horn-Peterson, Mellinger, and Perry, each of the words was physically checked against the other three word lists. Secondly, the positions occupied by the 100 words on the individual lists were compared to see if there were differences in the ranking. All the ranking differences found as a result of this comparison are indicated in Chapter IV.

In order to determine the relationships between the ranking of the most-used 100 words in the word list of this study and each of the

other word lists, the following formula* of Pearson Product Moment Correlation was used as a test, after converting the sets of the rank order figures logarithm:

$$r = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{(N\Sigma X^2 - (\Sigma X)^2)(N\Sigma Y^2 - (\Sigma Y)^2)}}$$

Where r = Correlation Coefficient

ΣX = the total number of items from the word lists of this study

ΣY = the total number of items from the other word list being compared

N = the total number of paired items compared

In order to determine whether or not the obtained correlation coefficient figures were significant, the "r" table, which lists the significant figures for correlation coefficients at varying degrees of freedom was consulted for comparison.

The results of the computations and comparisons are discussed in Chapter IV.

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*J.P. Guilford and B. Fruchter, Fundamental Statistics in Psychology and Education. New York: McGraw-Hill Book Company, 1973, page 85.

CHAPTER IV

FINDINGS

This chapter presents the findings of the investigation about the basic vocabulary used in written business communications in Nigeria and the comparison of the 100 most-used words in the business word list with the 100 most-used words in the business word lists compiled by Horn-Peterson, Mellinger, and Perry. The chapter also presents the findings with regard to the investigations about the stroke intensity and the syllabic intensity of the basic words used in written business communications in Nigeria. Specifically, the findings of this study are presented in this chapter in the following order: (a) Word frequency analysis; (b) Stroke intensity analysis; (c) Syllabic intensity analysis; and (d) Word lists comparison.

I. WORD FREQUENCY ANALYSIS

Based on the data collected for this study, an analysis to determine the frequencies of words used in written business communications in Nigeria was completed with the aid of a computer.

The computer was programmed to list all the words, with the frequencies, used in the 721 business letters, memoranda, and reports analyzed in this study. The computer printout showed that a total of 18,388 words were used in the business communications and contained 3,053 different words.

Appendix A of this study contains the alphabetical listing of the 3,053 occurring words in the business communications used in this study, and Appendix B presents the same words listed by frequency.

Table III gives the 100 most-frequently used words in the 721 pieces of business communications collected for this study and indicates the rank and frequency of each word. As some ties in frequencies occurred, the first or lowest rank was given to each tied group of words. For example, any and such both had a frequency of 49. As these two words would have been ranked 44 and 45, both were given the lower rank, the rank of 44.

As indicated in the limitations of this study, only the body or message of the business communications was included in this study. Addresses, figures, and symbols as well as salutations and complimentary closings of business letters were omitted. Thus, any words normally appearing in salutations and complimentary closings of business letters such as "dear," "sir," "madam," and "yours," appear at the rank and frequency with which they were used within the body of the 721 letters, memoranda and reports used in this study.

The five most frequently used words--the, of, to, and, in--had a total occurrence of 4,173 which represented 22.69 percent of the total word usage in all the letters, memoranda, and reports used in this study. When the second 5 words--for, a, be, is, on--are added, the frequency of usage of the first 10 words in the business communications was 5,429 which was 29.52 percent of the total usage. This indicated that the 10 words accounted for approximately 30 percent of all the words used in the written business communications employed in this study.

TABLE III

THE 100 MOST FREQUENTLY USED WORDS IN WRITTEN BUSINESS COMMUNICATIONS IN NIGERIA

Rank	Word	Frequency
1	the	1626
2	of	997
3	to	616
4	and	497
5	in	437
6	for	315
7	a	288
8	be	261
9	is	231
10	on	161
11	as	155
12	will	146
13	this	145
14	are	142
15	that	140
16	at	111
17	has	109
18	or	109
19	it	97
19	not	97
21	which	95
22	should	92
22	with	92
24	been	91
25	by	85
26	year	83
26	you	83
28	from	75
29	time	74
30	an	71

TABLE III (continued)

Rank	Word	Frequency
30	us	71
32	letter	68
33	i	66
34	have	65
35	all	64
36	your	63
37	these	62
38	if	59
39	new	53
40	service	49
41	state	49
41	order	49
41	was	49
44	any	48
44	such	48
46	one	46
46	would	46
48	their	43
49	his	42
50	enclosed	41
50	who	41
52	department	40
53	office	39
54	information	38
54	may	38
54	total	38
54	also	38
58	no	36
58	so	36
58	very	36
61	please	35
61	thank	35
61	other	35
64	course	34
64	two	34

TABLE III (continued)

Rank	Word	Frequency
66	know	33
66	like	33
66	they	33
69	about	32
69	business	32
71	now	31
71	most	31
72	each	30
72	up	30
72	appreciate	30
72	my	30
72	could	30
72	when	30
79	interest	29
79	than	29
79	hope	29
79	them	29
79	there	29
79	were	29
79	date	29
86	above	28
86	made	28
86	more	28
89	am	27
89	many	27
89	had	27
92	only	26
92	pay	26
92	he	26
92	others	26
96	being	25
96	do	25
96	further	25
96	what	25
100	under	24

Table IV highlights in greater detail the frequency and the percentage of usage of words in word-occurrence groups of the total running words. Table IV shows by word groups the total number of occurrences from the most frequently used word to the end of a particular word group and the percentage those words were used of the total 18,388 occurrences. For example, the first 25 words were used a total of 7,138 times. This occurrence represented 38.82 percent of all the occurrences in the business communications; 50 words occurred 8,605 times and represented 46.80 percent of all the words in the written business communications; and 70 words occurred 9,902 times and represented 50.68 percent of the words in the business communications. The first 100 most frequently occurring words shown in Table III were used in a combined total of 10,148 times and represented 55.24 percent of the total occurrence. The first 500 words occurred 14,438 times and represented 78.52 percent of all the words used in the business communications. The first 1,500 words had a combined frequency of 16,259 which represented 89.97 percent of the total usage. The remaining 1,553 words represented less than 11 percent of the total usage of words in the business communications used in this study.

Table V lists the first ten items of the word occurrence groups of this study and those of Perry study, the most recent work in business vocabulary word lists.

An examination of Table V shows that the percentages for the word groups of 15, 20, 25, 30, 35, 40, 45, 50, and 100 of the 2 studies were quite similar. There were, however, dissimilarity in the percentages of the word groups of 5, 10, 500, 1,000, and 1,500 in the 2 studies.

TABLE IV

FREQUENCY AND PERCENTAGE IN WORD OCCURRENCE
GROUPS OF 18,388 RUNNING WORDS

Word Group	Number of Occurrences	Percentage of Total Occurrences
First 5	4,173	22.69
First 10	5,429	29.52
First 15	6,157	33.48
First 20	6,680	36.33
First 25	7,138	38.82
First 30	7,524	40.92
First 35	7,858	42.73
First 40	8,144	44.29
First 45	8,387	45.61
First 50	8,605	46.80
First 60	8,983	48.85
First 70	9,319	50.68
First 80	9,619	52.31
First 90	9,902	53.85
First 100	10,158	55.24
First 200	11,896	64.69
First 300	13,022	70.82
First 400	13,812	75.11
First 500	14,438	78.52
First 600	14,941	81.25
First 700	15,341	83.43
First 800	15,691	85.33
First 900	15,991	86.96
First 1000	16,259	88.42
First 1500	16,359	89.97

TABLE V

PERCENTAGE IN WORD OCCURRENCE GROUPS OF THE RUNNING WORDS OF THIS STUDY AND OF PERRY STUDY

	Percentage of Total Occurrence	
Word Group	This Study	Perry Study
First 5	22.69	17.40
First 10	29.52	25.70
First 15	33.48	31.36
First 20	36.33	35.79
First 25	38.82	39.07
First 30	40.92	41.23
First 35	42.73	42.94
First 40	44.29	44.33
First 45	45.61	45.47
First 50	46.80	46.49
First 100	55.24	53.43
First 500	78.52	71.93
First 1000	88.42	80.66
First 1500	89.97	85.58

The results of the word frequency analysis of this study were also used to determine the stroke intensity and the syllabic intensity of the words used in written business communications in Nigeria. The stroke intensity and the syllabic intensity analyses follow in the next two sections of this chapter.

II. STROKE INTENSITY ANALYSIS

A secondary objective of this research study was to determine the stroke intensity of the average word used in written business communications in Nigeria. In typewriting textbooks and materials used in schools in Nigeria and the United States of America, the average word is considered to be five typewriting strokes. This study sought to verify if the average word of the written business communications in Nigeria contained five typewriting strokes.

Employing the words and frequencies of the word frequency analysis, including the omitted digital symbols and numbers, an investigation was made to determine the average stroke intensity--the typewriting length of the average word--in the written business communications in Nigeria. According to the formula devised by West[51] and used by Perry stroke intensity is the sum of the average letter, number, and the incidence of punctuation and symbol strokes per word. This formula was utilized in this study. Table VI shows the findings of the average stroke intensity based on the 18,388 running words in the 721 pieces of written business communications analyzed in this study.

TABLE VI

AVERAGE STROKE INTENSITY PER WORD
BASED ON 18,388 RUNNING WORDS

Stroke Intensity Factor	Number of Strokes
Average letter and space bar strokes per word	5.654
Incidence of punctuation, number, and symbol strokes per word	.091
Average stroke intensity per word	5.745

Table VI shows that the average stroke intensity of typewritten length of the average word used in the business communications analyzed in this study was 5.745 or 5.7 rather than 5.0 as indicated in typewriting textbooks and materials in use in schools in Nigeria.

The average letter and space bar strokes per word was 5.654, approximately 5.7. This figure was provided on the computer printout. The computer was programmed to divide the total letter and space bar strokes in the 721 pieces of business communications by the total number of words. To the figure of 5.654 was added .091 which represented the incidence of punctuation, number, and symbol strokes per word. The incidence of punctuation, number, and symbol strokes was obtained by dividing the total number of punctuation, number, and symbol strokes (1,673) by the total number of running words (18,388). The .091 score indicated that a mark of punctuation, number, or symbol stroke was typewritten for every 10.99 or 11 words in the communications used in this study.

By summing the average letter and space bar strokes per word and the incidence of punctuation, number, and symbol strokes per word, the stroke intensity, or the typewritten length of the average word, was found to be 5.745 rather than 5.0 indicated in typewriting textbooks and materials in use in schools in Nigeria.

The stroke intensity of 5.745 found in this study supports the finding of Perry Study and the recommendation of West Study. Perry found that the average stroke intensity of written business communications in the United States of America was 5.836, and he recommended the use of 6.0 stroke intensity materials in the classrooms so that the maximum positive transfer to proficiency at the vocabulary of job materials could be attained. West made the same recommendation.

The following section will discuss the findings regarding the syllabic intensity of the business communication analyzed in this study.

III. SYLLABIC INTENSITY STUDY

Another secondary objective of this study was to determine the syllabic intensity of the written business communications in Nigeria. Syllabic intensity is the average number of speech syllables per word and is used in counting shorthand dictation materials in order to provide for uniformity in reading speed. It could also be used to equate classroom shorthand dictation materials with real life business materials by using the determined business material syllabic intensity for classroom dictation materials.

The words and frequencies obtained in the word frequency analysis were employed in determining the syllabic intensity of this

study. The number of syllables in each of the 18,388 running words was determined and multiplied by the word's frequency. The total number of syllables was divided by the total number of words to determine the average syllabic intensity as shown in Table VII.

TABLE VII

AVERAGE SYLLABIC INTENSITY OF WRITTEN BUSINESS COMMUNICATIONS IN NIGERIA BASED ON 18,388 RUNNING WORDS

Syllabic Intensity Factor	Quantity
Total number of syllables	29,089
Total number of words	18,388
Average syllabic intensity	1.582

Table VII gives the total number of syllables in the 721 letters, memoranda, and reports used in this study as 29,089. This figure divided by the total number of running words (18,388) gives 1.58 as the average syllabic intensity for the written business communications in Nigeria. This finding indicated that approximately 1.6 syllabic intensity was a more accurate measure of classroom teaching materials for shorthand than the 1.4 currently being used. The finding also supported the finding and recommendation of Perry. Perry found and recommended 1.63 syllabic intensity for use in the classroom shorthand materials.

The next section of this chapter deals with word lists comparison.

IV. WORD LISTS COMPARISON

The major concern of this study was to compile a list of frequently occurring words in written business communications in Nigeria. At the same time, the study sought to verify the truth in the assumption by Dewey and Holland that the high frequency words of all English language word lists would generally be the same. In carrying out the verification, the first 100 words of the word list of this study were compared with those appearing on the word lists compiled by Horn-Peterson, Mellinger, and Perry. Table VIII gives the first 100 words appearing in the word list of this study and the ranking of the same words in the word lists of Horn-Peterson, Mellinger, and Perry.

Table VIII shows that the word "the" was ranked first in the word list of this study, second in Horn-Peterson list and first in both the Mellinger and Perry lists. Out of the first 100 words of the word list of this study, 2 words had the same ranked positions on the Horn-Peterson list, 8 on the Mellinger list, and 6 on the Perry list. A further examination of Table VIII showed that 29 out of the 100 words were not included in the first 100 words on the Horn-Peterson list, 21 on the Mellinger list, and 13 on the Perry list. Although all the word lists ranked many of the words differently, all the words were included in the first 500 words in all the lists.

In order to determine the relationship between the ranking of the first 100 words on the word list of this study and the ranking of the same words in each of the other word lists, the Pearson Product-Moment coefficient of correlation was computed.

TABLE VIII

THE RANKING OF THE FIRST 100 WORDS IN THE WORD LIST OF THIS STUDY AND THE RANKING OF THE SAME WORDS IN THE WORD LISTS OF HORN-PETERSON, MELLINGER AND PERRY

	Ranked Positions in the Word List of			
Word	This Study	Horn-Peterson	Mellinger	Perry
the	1	2	1	1
of	2	7	2	2
to	3	4	3	3
and	4	3	4	4
in	5	8	5	5
for	6	10	8	9
a	7	5	7	7
be	8	17	11	13
is	9	13	12	14
on	10	26	16	19
as	11	20	18	22
will	12	16	15	17
this	13	23	13	12
are	14	18	19	21
that	15	12	14	11
at	16	22	24	24
has	17	56	32	35
or	18	59	26	31
it	19	19	29	27

TABLE VIII (continued)

Word	Ranked Positions in the Word List of			
	This Study	Horn-Peterson	Mellinger	Perry
not	20	54	27	28
which	21	11	22	23
should	22	106	78	57
with	23	24	21	20
been	24	45	43	38
by	25	69	25	26
year	26	154	77	72
you	27	6	6	6
from	28	36	31	30
time	29	39	47	40
an	30	82	33	32
us	31	63	34	34
letter	32	46	53	39
i	33	1	23	15
have	34	15	20	18
all	35	28	32	41
your	36	14	10	10
these	37	212	44	45
if	38	27	28	29
new	39	171	48	46
service	40	137	67	66

TABLE VIII (continued)

Word	Ranked Positions in the Word List of			
	This Study	Horn-Peterson	Mellinger	Perry
state	41	182	198	111
order	42	21	72	74
was	43	31	41	33
any	44	53	37	37
such	45	213	98	79
one	46	38	46	42
would	47	48	30	25
their	48	155	82	78
his	49	118	102	83
enclosed	50	100	68	55
who	51	159	93	93
department	52	164	105	107
office	53	148	79	65
information	54	91	54	52
may	55	123	51	44
total	56	431	344	246
also	57	78	66	62
no	58	105	59	63
so	59	29	61	61
very	60	32	45	59
please	61	43	42	43

TABLE VIII (continued)

Word	Ranked Positions in the Word List of			
	This Study	Horn-Peterson	Mellinger	Perry
thank	62	106	78	56
other	63	110	57	58
course	64	221	207	206
two	65	132	90	88
know	66	66	65	67
they	67	52	55	60
like	68	153	106	81
about	69	51	74	69
business	70	128	87	80
now	71	88	81	97
most	72	381	103	90
each	73	197	73	94
up	74	71	115	77
appreciate	75	135	143	82
my	76	34	110	70
could	77	140	119	103
when	78	50	63	76
interest	79	143	127	87
than	80	272	91	91
hope	81	127	104	86
them	82	85	85	92

Table VIII (continued)

Word	Ranked Positions in the Word List of			
	This Study	Horn-Peterson	Mellinger	Perry
there	83	60	58	54
were	84	103	71	75
date	85	116	112	120
above	86	189	146	130
made	87	74	84	84
more	88	138	60	68
am	89	37	92	50
many	90	301	94	101
had	91	34	101	85
only	92	130	83	89
pay	93	324	271	266
he	94	40	80	71
other	95	110	57	58
being	96	131	131	139
do	97	44	49	47
further	98	186	111	113
what	99	99	121	122
under	100	313	113	106

Appendix G contains the details of the computation. The computation resulted in correlation coefficients of .501 for Horn-Peterson list, .755 for Mellinger list, and .675 for Perry list.

In order to determine whether or not the computed correlation coefficients of .501, .755, and .675 showed significant relationships to assume that the word lists compared came from the same population, the "r" table which gives the significant figures for correlation coefficients at varying degrees of freedom was consulted. The table indicated that, with 98 degrees of freedom, correlation coefficients of .205 and .267 are significant at .05 and .01 levels respectively. There was, therefore, a significant relationship between the compared word lists.

Summary

To recapitulate, four major findings with regard to written business communications in Nigeria have been discussed in this chapter--the word frequency analysis, the stroke intensity analysis, the syllabic intensity analysis, and the word lists comparison. The written business communications collected and analyzed for this study contained 18,388 running words and 3,053 different words. The 3,053 different words were compiled as the Nigerian business word list of this study. A further analysis of the business communications used in this study revealed that the stroke intensity and the syllabic intensity of written business communications in Nigeria were 5.745 and 1.582 respectively. These findings compared favorably with the findings of earlier researchers like West and Perry.

The comparison of the Nigerian business word list of this study with the word lists of Horn-Peterson, Mellinger, and Perry showed that there was no significant difference between the ranking of the most-used 100 words in the word list of this study and the ranking of the same words in the other word lists. This finding supported the view that the common words in the four word lists are similar.

Based on the findings in this chapter, conclusions and recommendations were made and are presented in the next chapter.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter is divided into three sections. The first section gives the summary of the purposes, procedures, and the findings of this study. The second section presents the conclusions derived from the findings of the investigations, and the third section contains the recommendations made as a result of the findings and conclusions of the study.

I. SUMMARY

This study was designed (a) to determine and compile the basic common words used in written business communications in Nigeria, (b) to determine the average stroke intensity of the words used in written business communications in Nigeria, (c) to determine the average syllabic intensity of the words used in written business communications in Nigeria, and (d) to determine if there was any significant difference between the ranking of the most-used 100 words in the written business communications in Nigeria and the ranking of the same words in the business word lists of Horn-Peterson, Mellinger and Perry.

In order to accomplish the objectives of this study, letters soliciting copies of 2 recently written letters, memoranda, or reports were mailed to a representative sample of 500 business organizations in Nigeria. A representative return of 74 percent of the sample produced 721 pieces of business communications. The body

or message of each piece of letter, memorandum, or report was keypunched on data cards; and the computer was programmed to tabulate and list the frequencies of the different words used in the business communications. Punctuation marks, numbers, and symbols were omitted from the punched materials.

The printout enumerating the 3,053 occurring words provided the data for the word frequency study and the Nigerian business word list compiled in this study.

The average number of strokes in the 3,053 occurring words multiplied by word frequency, added to the average space bar strokes and incidence of punctuation, number, and symbol strokes gave the average stroke intensity of the business communications used in the study.

The total number of syllables in each of the 3,053 occurring words multiplied by word frequency and divided by the total number of words gave the average syllabic intensity of the communications used in this study.

The Pearson's Product-Moment correlation was employed to determine if a significant relationship existed between the ranking of the 100 most-used words in the word list of this study and the ranking of the same words in the business word lists compiled by Horn-Peterson, Mellinger, and Perry.

Major Findings

The findings of these investigations were presented and discussed in Chapter IV. The following were the major findings.

1. There were 3,388 running words and 3,053 different words in the written business communications in Nigeria used in this study; the different words were listed in Appendices A and B of this study as the Nigerian business word list.

2. The ten most frequently used words in written business communications in Nigeria used in this study were the, of, to, and, in, for, a, be, is, and on.

3. The 10 most used words in written business communications in Nigeria used in this study accounted for 30 percent of the total word usage; 50 words accounted for 47 percent; 100 words, 55 percent; 200 words, 65 percent; 500 words, 76 percent; and 1,000 words, 88 percent of the total word usage.

4. The average stroke intensity of words appearing in the written business communications in Nigeria used in this study was 5.74.

5. The average syllabic intensity of words appearing in the written business communications in Nigeria used in this study was 1.58.

6. There was a strong positive relationship between the ranking of the most-used 100 words in the word list of this study and the ranking of the same words in the word lists of Horn-Peterson, Mellinger, and Perry; the correlation coefficients being .501 for Horn-Peterson list, .755 for Mellinger list, and .675 for Perry list.

II. CONCLUSIONS

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

1. Articles, prepositions, or monosyllabic words made up the ten most-used words in written business communications in Nigeria (Findings, Number 2).

2. The stroke intensity and the syllabic intensity of written business communications in Nigeria are compatible with the stroke intensity and syllabic intensity of written business communications in the United States of America (Findings, Numbers 4 and 5).

3. A high congruence exists between the 100 most-used words in written business communications in Nigeria and the 100 most-used words in written business communications in the United States of America (Findings, Number 6).

III. RECOMMENDATIONS

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

1. The business word list compiled in this study should be used as reference by business educators and authors of business textbooks in Nigeria.

2. The word frequency list of this study should be used by Nigerian shorthand teachers. Since the first 100 words constitute over half of the vocabulary of the written business communications in Nigeria used in this study, outlines should be devised for these 100 words in all the shorthand systems used in Nigeria and included as a part of the instruction.

3. Since the first 1,000 words constitute over 3/4 of the vocabulary of the written business communications in Nigeria used in

this study, business educators should ascertain that these words are given proper exposure so that students can thoroughly master these high frequency business words.

4. The shorthand teacher should cycle the 1,000 words of the business word list of this study so that a student is exposed to each word a minimum number of times in a designated pattern to enable the student master the words and the shorthand outlines for them.

5. Since the average stroke intensity of words used in written business communications employed in this study is 5.74, authors and teachers of typewriting materials should adopt a new method of determining typewriting speed so as to match more closely the actual uses of typewriting skills in the business world. Therefore, 6.0 strokes should be used as the average word rather than 5.0 currently being used. This recommendation is also supported by the recommendations of earlier researchers like West and Perry.

6. Since the syllabic intensity of the written business communications used in this study is 1.58, the syllabic intensity for shorthand practice and testing materials should be raised to 1.6 instead of the 1.4 currently being used so as to match the actual business communications criteria. This recommendation is also supported by the recommendations of earlier researchers like West, Mellinger, and Perry.

7. Since the high frequency words in the written business communications in Nigeria used in this study compare favorably with the high frequency words in the business word lists of Horn-Peterson, Mellinger, and Perry, textbooks printed in the United States of

America for Nigerian schools should, as far as possible, incorporate the high frequency words in these word lists to avoid language difficulty for Nigerian students.

8. Further research studies should be conducted in the field of business vocabulary in Nigeria, especially in such specialized areas as legal, medical, and petroleum fields, in order to enhance students' learning progress in these subfields of business communications.

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LIST OF REFERENCES

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APPENDICES

APPENDIX A

ALPHABETICAL LISTING OF THE OCCURRING WORDS IN THE WRITTEN BUSINESS COMMUNICATIONS IN NIGERIA USED IN THIS STUDY

Word	Frequencies	Word	Frequencies
a	288	accredited	1
abated	1	accummulation	1
ability	2	accurate	1
able	8	accurately	2
abolished	4	achieve	2
about	32	achieved	1
above	28	achievements	2
above-named	2	achieves	1
abroad	2	acids	2
abrupt	2	acknowledge	2
abruptly	1	acquire	2
absence	1	acquired	3
absolute	1	acquisition	4
absorb	2	acres	1
academic	8	across	1
accordingly	1	act	2
accelerate	1	acted	1
accelerated	3	acting	5
accept	1	action	14
acceptable	2	active	1
accepted	4	activities	1
accidental	2	acts	1
accidentally	1	actual	8
accommodated	1	ad-hoc	1
accommodation	6	add	4
accommodations	1	added	7
accompanied	2	addition	7
accord	1	additional	14
accordance	5	address	7
accorded	3	addresses	2
according	3	adequate	13
accordingly	2	adequately	3
account	4	adhere	1
accountancy	3	adjusted	1
accountant-general	1	adjustment	1
accounts	2	adjustments	1

Word	Frequencies	Word	Frequencies
administer	1	allowance	15
administration	9	allowances	13
administrations	1	allowed	3
administrative	3	almost	1
admiralty	1	alone	1
admission	1	already	12
adopted	2	also	36
adopting	1	altered	3
adoption	1	alternative	1
advance	3	although	2
advanced	5	always	11
advancement	7	am	27
advances	9	ambulance	1
advantage	2	amend	1
advantages	1	among	2
advice	4	amount	13
advisability	1	an	71
advise	3	analysed	1
advising	1	analysis	1
affairs	1	analytical	1
affected	1	and	497
affecting	1	animal	2
after	15	annex	8
Afuze	2	annexes	3
again	4	annexure	7
against	6	annexures	2
age	3	announced	1
agency	1	announcement	1
agent	2	annual	4
agents	2	annually	1
agree	2	annum	13
agreed	3	another	1
agreeing	1	answer	10
agricultural	4	answering	3
agriculture	4	answers	5
agro-based	1	anticipated	2
ahead	5	anxious	3
aid	1	any	48
aids	1	anything	1
aim	1	apart	2
air	1	appear	2
air-conditioning	1	appearance	1
Ajaokuta	1	appears	2
all	64	appelant	1
allegations	1	appendix	6
allied	1	applicable	2
allocated	10	applicants	1
allocation	2	application	7
allow	1	applications	4

Word	Frequencies	Word	Frequencies
applied	1	assured	1
applies	1	assuring	1
apply	7	at	111
appointed	2	atmosphere	1
appointment	10	attack	1
appointments	4	attached	14
appreciably	1	attachment	2
appreciated	4	attachments	1
appreciation	1	attain	1
appreciations	3	attempt	2
appropriate	30	attempts	6
appropriation	6	attend	1
approval	3	attendance	1
approved	14	attendant	1
approving	1	attendants	1
approximated	1	attending	4
approximately	2	attention	13
April	8	attorney	1
architecture	1	attractive	2
are	142	Auchi	12
area	8	audio-visual	1
areas	14	audit	3
arising	2	auditor	1
army	2	augmentations	1
arose	1	August	2
around	1	Austrian	1
arrange	1	authorities	8
arrangement	2	authority	1
arrangements	4	authorize	1
arrears	3	auto	1
arrest	1	automatic	1
art	8	automatically	1
artery	1	availability	1
artisan	1	available	11
artisans	1	avenue	1
as	155	average	1
asaba	3	avoid	4
aside	5	avoids	1
asked	4	awarded	1
aspect	1	aware	9
assembly	4	b	9
asset	1	back	9
assets	4	backed	1
assistance	6	bad	1
assistant	6	bailiffs	1
assistants	6	balance	1
assume	1	balanced	1
assuming	1	bank	6

Word	Frequencies	Word	Frequencies
banked	1	body	1
banking	1	bonding	1
barley	1	bonds	1
barrier	1	booking	1
bars	2	books	6
based	4	bookshop	3
basic	7	boost	1
basically	1	bore-holes	1
basins	1	boredom	2
basis	2	borehole	1
battling	1	borne	1
be	261	both	11
bearer	1	bracketed	4
became	3	branch	2
because	6	break-down	3
become	4	brief	3
becomes	4	briefing	1
been	95	bring	4
before	19	briskly	2
begin	1	Britain	2
begins	1	British	13
beginning	6	broadcast	1
behalf	2	broadly	2
being	26	brought	3
Belgian	1	Brussel	2
Belgians	1	Brussels	1
Belgium	3	budget	8
belief	1	budgetary	3
believed	1	build	2
below	3	building	12
Bendel	8	buildings	3
Bendelite	1	built	1
benefit	3	bulk	1
benefits	6	bulldozer	1
Benin	14	bunker	1
best	3	bursaries	1
between	5	bursary	1
beyond	3	Burutu	2
bill	12	bush	1
bills	5	business	32
birthday	3	businesslike	1
bisected	1	busy	2
block	6	but	21
blocks	2	buyers	1
board	8	by	85
boarding	10	c	11
boards	3	calculating	1
boat	1	calculation	1
bodies	4	call	20

Word	Frequencies	Word	Frequencies
call-letter	1	change	1
call-say	1	changes	2
called	2	chant	2
caller	11	charge	2
caller-advise	1	charged	2
calling	8	chargemen	1
calls	11	chart	1
came	1	check	4
campaign	1	checking	1
campus	7	chemistry	1
can	8	cheque	1
canals	1	chest	1
candidates	5	chicks	1
cannot	7	chief	3
capacity	2	chieftaincy	1
capital	2	child	20
car	4	children	17
cardinal	4	children's	2
care	5	child's	1
career	1	choose	1
careful	1	chosen	1
carefully	2	Christmas	1
carriage	1	circular	17
carried	4	circulars	1
cars	4	circulation	1
case	13	circumstance	2
cases	13	circumstances	2
cash	7	city	6
casino	1	civil	2
casual	1	civilian	1
catalog	1	claim	7
catalogue	1	claimed	1
categorically	1	claiming	1
categories	1	claims	5
category	1	clarification	1
cause	1	class	3
cent	9	classes	2
central	8	classified	1
centrally	2	classroom	1
centre	8	clean	1
centres	6	clear	3
ceramics	3	clearance	2
certain	5	cleared	1
certificate	5	clearing	3
certificates	2	clearly	5
certification	1	clerical	5
chairman	3	clerk	1
chairmen	1	clientele	1
challenged	1	climatic	1

Word	Frequencies	Word	Frequencies
climinate	1	compalints	13
clinic	2	complete	5
clinics	1	completed	24
close	2	completing	1
closed	3	completion	10
closing	2	comply	3
co	1	composition	1
co-operation	3	comprehensive	2
co-operations	1	comprising	2
co-operative	14	compulsory	1
co-operatives	2	concentrating	1
coastal	1	concept	2
colleagues	2	concern	1
collected	1	concerned	5
collectors	3	concerning	2
college	4	concession	1
colleges	4	conclude	1
come	1	concluded	1
coming	1	conclusions	2
command	6	condition	2
commands	2	conditioning	1
commence	3	conditions	12
commencement	3	conducive	1
commencing	1	conduct	1
commended	1	conducted	3
comments	2	confered	1
commerce	1	confidence	2
commercial	3	confidential	3
commission	13	confinements	1
commissioned	1	confirmation	5
commissioning	1	confirmed	2
commissions	2	confirms	1
commitment	1	confronting	2
committed	1	congested	1
committee	15	connect	7
committees	3	connecting	5
commodity	1	connection	10
common	2	connections	1
communication	1	conquered	1
communications	1	consecutive	2
communities	2	consequently	4
community	4	considerable	6
company	7	considerably	2
company's	1	consideration	7
comparative	1	considered	6
compared	7	considering	1
compensate	1	consists	1
compensation	1	consolidated	7
compiled	1	constitute	1
compilation	1	constitution	10

Word	Frequencies	Word	Frequencies
constraints	3	corridor	2
construct	1	cost	8
constructed	2	costain	1
construction	15	costs	2
constructions	1	could	8
consultancy	2	count	8
consulted	1	country	19
consumed	1	counts	1
consumers	2	county	1
contains	1	course	34
contents	3	courses	16
continuance	1	court	6
continue	7	courteous	3
continued	1	courteously	1
continuing	1	courts	6
continuity	1	cover	2
contract	2	crafts	1
contracts	3	creates	1
contrary	1	credit	6
contravened	2	credited	1
contributed	1	crop	2
contribution	1	crops	2
contributions	1	cross	1
control	1	crown	1
conveniently	1	crucial	1
conversant	1	cs	2
conversation	3	ct	3
conversion	7	cultural	1
conversions	1	current	5
convert	11	curriculum	1
converted	1	custody	1
convey	1	cutting	2
conveys	1	cycle	3
cooperation	2	d	7
cope	3	d-assurances	2
copies	13	daily	2
copy	35	dam	1
cord	2	dams	2
corded	2	data	2
cordless	2	date	29
core	1	dated	5
corporations	2	dates	9
correct	1	daughter	2
corrected	1	day	10
correction	2	days	7
correctly	2	dazed	1
correspondence	9	deal	1
correspondences	1	dealing	11

Word	Frequencies	Word	Frequencies
dealt	1	destroys	1
death	1	detailed	2
debriefing	1	details	8
December	1	determinate	1
decided	4	determine	1
deciding	1	determined	4
decision	2	develop	2
declare	2	developed	4
declared	2	development	23
declaring	1	development-acres	1
decree	22	diagnostic	1
decrees	3	dialogue	1
deducted	1	dictate	1
deemed	6	did	2
defence	1	died	1
deferred	1	difference	1
deficit	1	differently	1
defining	1	difficult	1
definite	1	difficulties	1
definitely	3	difficulty	2
delay	2	dining	2
deliberate	1	direct	6
delivered	1	directed	15
demand	2	direction	1
department	40	directions	2
departments	6	director	2
departmental	6	directory	1
departure	22	disciplinary	1
depend	1	discipline	2
dependance	11	disciplines	1
dependent	23	disconnect	2
depending	11	disconnecting	1
depends	12	disconnection	1
deployed	14	discreetly	1
deposit	11	discretion	1
deposited	11	discuss	1
deputy	12	discussions	1
derived	22	disobedience	1
described	11	dispensary	1
deserve	111	display	2
deserving	2	displeasure	1
design	12	disregard	1
designated	4	dissatisfaction	1
designations	3	disseminated	2
designed	5	distance	1
designing	1	distinctly	1
desirable	1	distributed	2
desire	1	distribution	3

Word	Frequencies	Word	Frequencies
diverted	1	earlier	1
divided	1	earliest	1
division	7	early	1
divisions	1	earmarked	7
divorce	2	earned	2
divorced	2	earning	1
do	25	earth	1
doctor	1	eases	2
doctors	1	easily	2
document	2	Easter	3
documents	1	eastern	1
does	3	easy	3
doing	1	economic	4
donated	1	economy	1
done	1	ed.	1
donor	1	edge	1
don't	2	edict	10
door	1	edicts	3
doubt	2	educated	6
doubts	1	education	8
down	1	educational	5
down-graded	1	effect	10
Dr.	1	effected	1
draft	3	effecting	1
drainage	10	effective	7
drained	1	effectively	10
draw	3	efficient	3
drawing	1	efficiently	1
drawn	3	effort	2
draws	1	efforts	2
dreams	1	Eghosa	1
dredging	1	ego	10
drift	1	eight	1
drilled	2	either	2
drilling	2	Ekpoma	3
drug	1	electoral	1
drugs	3	electrical	2
dry	1	electricity	3
dual	3	electrification	1
dual-campus	1	electronic	1
due	11	electronics	1
duplicate	2	element	1
duration	2	eligibility	2
during	18	eligible	23
duties	2	Elwood	3
duty	15	embark	1
e	11	embarked	3
e.g.	2	embassy	3
each	30	emergency	3

Word	Frequencies	Word	Frequencies
emoluments	1	entitled	1
emphasis	3	entitlement	10
emphasize	2	entry	3
emphasized	1	Enugu	1
employed	1	envelope	1
employee	4	environmental	2
employees	6	equipment	12
employer	1	equipped	3
employers	1	equity	4
employing	3	erected	1
employment	7	erosion	1
enable	10	error	1
enables	2	errors	1
enabling	1	especially	1
enclose	1	essential	3
enclosed	41	establish	1
encouraged	1	established	2
encouragement	1	establishment	11
end	9	establishments	7
endeavour	2	estate	8
endeavours	1	estimated	22
ends	1	estimates	11
energy	2	estimating	1
enforcement	1	etc	7
engaged	3	even	6
engaged-report	1	event	2
engineering	18	ever	1
engineers	1	ever-increasing	1
English	1	every	12
enhance	5	everyone	1
enhancement	1	evidence	1
enhancing	1	evidences	1
enjoyed	1	evil	1
enjoying	2	ex-gratia	1
enjoyment	1	exact	1
enlightening	1	examination	5
enough	3	examinations	2
enquiries	1	examine	2
enquiring	1	examined	2
enrolled	4	example	3
enrollment	1	exceeding	1
ensuing	3	exceeds	2
ensure	7	excellency	1
ensuring	3	excellent	2
enter	1	except	6
entered	1	excepted	6
entertained	1	exception	2
entire	1	exceptionally	1
entirely	2	excess	1

Word	Frequencies	Word	Frequencies
exchange	5	face	2
exchanges	1	facilitate	1
exclude	1	facilitates	1
excluding	1	facilities	15
execution	2	facility	1
executive	3	facing	1
exemption	1	fact	2
exercise	5	factor	2
exercised	4	facts	1
exercising	1	faculties	1
exigencies	2	failure	1
existence	2	fair	1
existing	15	fairly	1
exists	4	fall	1
expand	2	fallen	1
expanded	5	familiarize	1
expansion	5	family	2
expatriate	4	far	4
expectation	1	fares	1
expected	10	farm	1
expects	1	farmers	2
expended	1	farming	1
expenditure	4	father	1
expense	1	fathers	1
expenses	1	fatten	1
expensive	1	faults	2
experience	6	favour	1
experienced	1	feasible	1
experiments	1	features	2
expertise	1	February	2
explain	1	federal	14
explained	1	federation	2
exploitation	1	feed	1
exploited	1	feeding	2
exploring	1	feel	1
exporters	1	feeling	2
expressed	1	fees	4
expression	4	felt	1
expressions	1	fertilizers	1
extend	2	festival	1
extended	1	few	1
extension	23	field	4
extensions	2	fields	2
extensive	1	fifth	1
extent	4	figure	2
exterior	1	figures	3
extremely	4	file	3
f	12	filed	1
f.i.	1	filled	1

Word	Frequencies	Word	Frequencies
finance	5	forms	3
finances	2	formula	3
financial	16	forty	2
find	2	forward	4
finding	1	forwarded	7
fine	1	forwarding	3
finished	5	found	5
fire	1	foundation	1
fires	24	four	16
first-say	2	four-year	1
fiscal	4	fourth	1
fish	3	foy	1
fisheries	4	fraction	1
fishermen	1	frankness	1
fishing	1	free	13
five	4	frequency	1
flashing	2	frequent	2
flats	2	fresh	1
fleet	1	freshers	1
floated	1	freshwater	1
flood-lights	1	from	75
floor	1	frustration	1
flow	1	full	8
focused	1	full-time	4
foe	1	fullest	1
follow	1	fully	3
followed	3	functioning	2
following	14	fund	9
follows	12	fundamental	2
food	7	funds	13
for	317	furnance	1
force	3	furnished	2
forced	1	furnishings	2
forcing	2	furniture	3
foremen	1	further	25
forest	1	furthermore	3
forestry	1	future	8
foreword	1	g.	1
forefeiting	1	gained	2
forfeiture	3	gaining	2
forget	1	gazette	1
form	15	gazetting	1
formalities	1	geared	1
format	3	general	12
formation	1	general-supervision	1
formed	1	generally	2
former	7	generate	1
formerly	1	generators	1
formidable	1	geographical	1

Word	Frequencies	Word	Frequencies
German	1	he	26
give	11	head	16
given	14	headquarters	4
gives	1	heads	10
giving	4	health	19
go	5	hear	2
good	10	heard	1
govern	1	heavy	1
governing	3	heights	1
government	12	held	1
governments	4	help	2
governor	5	helpful	2
grade	6	hence	2
grades	6	henceforth	1
grading	3	her	5
gradings	5	here	3
grammar	1	hereafter	1
grant	9	hereby	1
granted	9	hereunder	2
granting	1	herewith	8
grants	4	high	8
graphic	4	higher	6
grateful	4	highest	6
great	2	highlights	1
greater	4	highly	1
greatly	1	highway	1
ground	3	him	7
grounds	1	hiring	1
group	1	his	42
groups	1	history	1
growers	1	hitherto	1
guarantee	1	hold	6
guarantees	1	holding	4
guardians	4	holiday	15
guidance	3	holidays	5
guide-lines	1	home	1
guilds	1	honour	1
Guobadia	1	honourable	10
h.v.p.	4	hope	29
habit	1	hoped	5
had	27	hospital	2
half	2	hospitals	7
hand	4	hostel	2
handle	2	hostels	2
happened	2	hotel	5
hard	1	hotels	1
has	109	house	10
have	65	houses	2
having	3	housing	7

Word	Frequencies	Word	Frequencies
how	3	increased	3
however	16	increasing	2
human	3	increment	11
hundred	2	incremental	9
hundreds	1	incurred	1
hydraulics	1	incurring	1
i	66	indeed	3
Ibadan	1	independent	1
id	1	indicate	2
identification	1	indicated	2
identify	2	indicates	1
if	59	indicating	1
Igarra	1	indication	3
ill	4	indicator	1
Ijebu-ode	1	indigenous	5
Ikpilla	1	indiscriminately	1
immediate	2	indispensable	1
immediately	6	individual	2
immensely	1	induce	1
impatient	1	induces	1
implement	3	industrial	2
implementation	2	industrialist	1
implementing	2	industrialists	1
implications	1	industries	4
importance	1	industry	2
important	5	ineffective	2
impressed	2	inflection	3
impression	1	influx	1
improve	2	inform	7
improved	5	information	38
improvement	5	informed	4
improvements	1	infrastructural	2
improving	1	infrastructure	4
in	437	infrastructures	1
in-service	23	inherited	2
in-take	1	inheriting	1
inability	1	initial	9
inadequate	2	initiated	1
incapacity	1	inland	4
incentives	1	inshore	1
inception	1	insists	1
include	5	inspector	1
included	1	inspectors	7
includes	3	installations	1
including	7	instance	1
incompetence	1	instances	1
inconsistent	1	instead	2
incorporation	1	institute	2
increase	15	institution	22

Word	Frequencies	Word	Frequencies
institutional	3	irrespective	1
institutions	4	irritation	1
instruction	1	is	231
instructional	1	Issele-uku	1
instructions	5	issue	2
insufficient	1	issued	5
integrated	1	issues	1
integration	1	issuing	2
intend	1	it	95
intended	5	items	5
intends	4	its	17
intensified	1	January	13
intensifying	1	job	3
intensive	1	jointly	1
intention	3	judge	1
intentionally	1	judges	1
intents	1	judicial	2
interest	29	juncture	1
interested	4	June	2
interferred	1	just	1
interior	4	justice	1
intermediate	1	justify	1
internal	5	juvenile	1
international	1	keep	3
interruptions	2	keeping	2
interval	1	keeps	2
intervals	3	kept	4
intervening	1	key	7
into	13	kilo	3
introduce	2	kilometers	2
introduced	1	kingdom	11
introduction	1	kitchen	1
invalidity	1	kitchens	3
invariably	1	know	33
inventory	1	knowledge	7
invest	1	known	3
investigation	1	laboratories	3
investment	8	laboratory	2
invite	1	labour	1
involve	3	lacks	1
involved	6	Lagos	5
involvement	2	laid	3
involves	2	land	4
involving	1	lands	1
Ireland	5	language	1
Irish	3	lapses	1
iron	1	large-scale	1
irregular	1	largely	3

Word	Frequencies	Word	Frequencies
last	6	limits	1
later	2	line	7
law	15	link	1
law-maker	1	linking	1
lawfully	2	list	6
laws	8	listen	2
lay	2	litigation	1
layout	1	livestock	1
lead	1	loads	1
leading	1	loans	3
leaflets	1	local	17
leap	1	located	5
leaping	1	location	1
least	8	locational	1
leave	14	lodging	1
leavers	1	log	1
leaving	2	London	1
lecture	1	long	2
lecturers	1	longer	1
led	1	loss	2
left	2	low	1
legal	2	lower	4
legislations	1	lowest	6
legislative	1	Ltd	5
length	3	lying	1
leprosy	2	m	1
less	8	M.Sc.	1
let	3	machinery	1
letter	68	machines	1
letters	17	made	28
level	5	magistrates	2
levels	1	mail	2
levies	1	main	5
liable	1	mainly	1
liaise	1	maintain	3
liaison	2	maintained	2
librarian	1	maintains	1
librarians	1	maintenance	1
library	4	major	2
lieu	3	make	13
life	1	makes	2
liftout	1	making	3
light	4	man	1
lightning	1	man-power	1
like	33	management	9
likely	4	manager	4
limit	1	manpower	7
limited	5	manufacturers	1

Word	Frequencies	Word	Frequencies
manufacturing	2	military	14
many	27	mill	2
March	2	million	10
marked	1	mills	7
market	1	mind	1
marketing	1	mine	1
marks	1	minimal	1
marriage	1	minimum	4
mast	1	ministers	1
master	6	ministries	6
masters	1	ministry	8
materials	3	ministry-department	1
matter	3	minority	1
matters	3	minute	2
maturity	2	minutes	1
maxima	2	misappropriation	1
maximum	12	misinterpreted	1
may	18	misuse	2
me	4	model	1
mean	1	modelling	1
meaning	1	modern	1
means	13	modification	3
measure	2	modifications	1
measures	4	modified	1
mechanical	3	modules	1
medical	4	moment	1
medium	2	monotonous	1
meat	2	month	11
members	15	months	22
memo	3	more	28
mentioned	4	mortgage	1
mere	1	most	31
merely	1	mostly	2
merit	1	mother	1
messages	1	mothers	1
met	1	motor	4
metallic	1	motor-cycle	5
method	2	motor-cycles	1
methods	1	mount	1
meticulous	1	mouths	3
metres	3	move	1
metric	1	moved	1
mid-west	1	movement	5
middle	2	much	4
midwest	1	must	18
midwestern	1	my	30
midwifery	1	n	1
might	1	n.b.	1

Word	Frequencies	Word	Frequencies
nail	3	nor	2
nails	1	norm	1
naira	2	normal	4
name	12	normally	13
namely	3	not	97
names	5	note	5
nation-wide	1	notes	9
national	2	nothing	1
natural	2	notice	6
naturally	3	noticed	1
nature	2	notices	1
nd	1	notion	3
near	2	notional	6
nearing	2	now	31
necessary	21	number	16
nee	1	nurses	2
need	8	nursing	1
needed	3	nuts	1
needless	1	obeyed	1
needs	5	object	2
neglected	1	objective	5
negotiations	3	observation	1
neither	2	observations	1
NEPA	4	observe	3
network	1	observed	8
never	2	observing	1
new	53	obsolete	1
newer	1	obtain	6
newly	1	obtainable	1
next	7	obtained	6
Nigeria	22	obtains	1
Nigerian	8	occasions	1
Nigerians	3	occupies	1
nights	1	occur	1
nine	9	October	3
nineteenth	2	od	1
ninety	8	of	997
no	32	off	3
No.	4	offer	3
nominated	4	offering	2
nominating	2	office	39
nomination	4	officer	15
nominations	1	officers	3
nominee	1	offices	3
nominees	1	official	15
nonpayment	1	often	1
non-payment	1	Ogor-ughelli	1
non-statutory	1	Okene	1

Word	Frequencies	Word	Frequencies
old	22	out	19
oldest	1	outstanding	1
olympic	1	over	9
on	161	over-head	1
on-going	5	overhaul	2
once	13	overheard	1
ond	3	overseas	15
one	46	overseers	3
one-half	2	overtime	4
one-quarter	1	own	4
one-third	2	p	3
one/third	1	p.b.x.	2
ones	2	pace	1
ongoing	1	paces	1
only	26	paid	6
onto	1	pains	1
open	1	painting	1
opened	1	pairs	1
opening	2	panel	1
operate	2	paper	3
operated	1	papers	2
operating	6	paragraph	9
operation	1	paragraphs	1
operational	1	parastatals	4
operative	3	parent	4
operator	4	parents	8
operators	6	parliament	2
opinion	1	part	8
opportunity	1	participants	1
opposite	1	participating	3
optimum	1	participation	1
option	5	particular	5
options	3	particularly	4
or	109	partnership	1
order	49	parts	2
orders	5	party	13
ordinances	1	passage	10
ordinary	1	passages	15
organisation	2	passed	5
organised	2	passing	3
organisers	1	past	3
organization	1	patients	3
organizational	1	pay	26
original	6	payable	3
other	35	payment	7
others	26	pex	3
otherwise	1	po	7
our	14	peace	1

Word	Frequencies	Word	Frequencies
pedestrian	1	pleasure	2
penalty	1	plot	1
pension	1	plug	1
people	1	plus	1
per	7	point	15
percent	2	points	21
performance	2	poles	1
performed	1	policies	2
perhaps	1	policy	7
period	9	polite	1
periodicals	1	polytechnic	8
periods	4	pools	1
permanency	1	population	2
permanent	3	portion	1
perminute	1	position	5
permission	1	positive	1
permitted	1	positivists	1
person	9	possess	6
personal	4	possession	1
personally	1	possibility	2
personnel	1	possible	7
persons	5	post	7
perused	1	posts	15
ph.d.	1	poultry	1
pharmaceuticals	1	power	8
phase	9	powerful	1
phased	1	powers	4
phases	1	practicable	1
photo	1	practice	9
physical	5	practices	1
physically	1	pre-Elwood	1
physics	1	precise	1
picked	1	precludes	1
piggery	1	preferably	1
pigs	1	preference	1
place	4	prejudice	1
placed	3	preliminary	4
places	1	premiums	1
placing	1	preparation	4
plan	15	prepare	1
planned	2	prepared	3
planners	1	preparing	1
planning	11	prescribed	2
plans	9	presence	2
play	1	present	8
plays	1	presented	2
please	35	presently	5
pleased	1	preservation	1

Word	Frequencies	Word	Frequencies
preserved	1	promotion	13
president	1	prompt	3
press	2	promptly	3
prevail	1	promulgated	1
prevalent	1	property	2
prevent	1	proposal	1
previous	1	proposals	7
previously	1	proposed	6
price	2	proposes	1
prices	1	prospective	2
primary	7	prospects	3
prime	1	protracted	1
principal	5	proved	1
principally	2	proven	1
principals	1	provide	8
principle	2	provided	21
printing	3	provides	2
prior	12	providing	2
priority	4	provincial	1
priorities	1	provision	10
private	8	provisions	4
probably	1	ps	2
probate	1	public	18
problem	3	publication	1
problems	4	pupil	1
procedure	4	pupils	4
proceed	4	purchase	4
proceedings	1	purchased	1
process	2	purely	1
processes	1	purport	1
proclamations	1	purported	1
produce	2	purpose	6
producing	1	purposes	4
production	9	pursue	1
productivity	1	pursued	3
professional	8	pursuing	1
professor	1	put	2
proforma	3	putting	1
programme	19	quadruplicate	1
programmes	8	qualification	4
progress	1	qualifications	8
progressing	2	qualified	6
prohibited	1	qualifying	6
prohibition	1	qualitative	1
project	11	qualities	1
projects	17	quality	4
prominent	2	quarter	4
promote	1	quarterly	1
promoted	3	quarters	2

Word	Frequencies	Word	Frequencies
question	3	recognized	4
questionnaire	1	recognition	2
quickly	3	recommences	1
quinquennium	3	recommend	1
quite	5	recommendations	3
quota	1	recommended	3
quote	1	recommending	1
quoted	2	reconsidered	1
raised	2	record	4
raising	1	recorded	2
ramifications	2	recording	2
ramps	1	records	1
rate	5	recreational	1
rates	12	recruit	1
rather	1	recruiting	1
re-enactment	1	recruitment	2
re-issuing	1	recurrent	23
re-negotiated	1	redesignated	1
re-ordered	1	reduce	1
reach	1	reduced	1
reached	6	reducing	1
reaches	1	ref.	1
read	1	refer	3
reading	1	reference	6
ready	1	references	1
realise	1	referred	8
reality	1	referring	1
realized	1	refers	1
reason	2	reflected	1
reasonable	7	reflects	1
reasons	3	refresh	1
reawarded	1	refresher	4
rebated	1	refuses	1
recalibration	1	regard	8
recall	2	regarded	4
recalled	1	regards	2
receipt	5	regeneration	2
receipted	1	region	3
receipts	9	regional	1
receive	4	registrars	4
received	8	registration	1
receives	1	registry	1
receiving	10	regarded	1
recent	2	regret	1
recently	1	regretfully	1
receiption	2	regretted	1
reckon	1	regular	4
reckoned	2	regulation	2
reclaimed	1	regulations	1

Word	Frequencies	Word	Frequencies
rehabilitation	3	resealing	2
reimbursed	2	reserved	1
reinforce	1	reside	1
relate	1	resided	1
relating	1	residence	4
relations	1	resident	4
relationship	1	residential	3
relative	2	residing	1
relay	1	resources	2
relevant	3	respect	15
reliably	1	respective	2
remain	3	respectively	6
remaining	1	responding	1
remains	1	response	4
remand	1	responsibilities	2
remind	2	responsibility	4
render	2	responsible	2
rendering	1	rest	3
renders	1	restore	4
rendition	1	restrict	1
renew	1	rests	1
rent	1	result	5
rental	1	resultant	2
repeat	5	resulting	8
repetition	4	resumes	1
replaced	4	resuscitate	1
replacement	1	retain	6
reply	15	retaining	1
report	22	retention	1
reported	3	retirement	2
reporters	1	retrospective	1
reporting	1	return	18
reports	10	returned	6
representative	1	returning	1
represents	6	returns	1
republic	10	result	1
republican	1	revenue	7
request	7	revenues	1
requested	6	review	3
requesting	1	reviewed	6
requests	1	reviewing	1
require	6	revised	16
required	23	revision	1
requirement	1	revitalise	1
requirements	2	revitalised	1
requires	7	right	2
requiring	1	rights	2
requisite	1	ring	12
rescinded	1	ringing	2

Word	Frequencies	Word	Frequencies
rising	2	school	53
resistant	1	schools	16
river	1	sciences	1
riverrine	2	sculpture	3
road	12	season	1
roads	6	second	10
role	1	second-hand	1
room	2	secondary	7
rooms	1	seconds	10
round	3	secrecy	1
route	1	secret	1
routed	2	secretarial	4
routine	1	secretariat	4
royal	1	secretaries	4
rule	1	secretary	7
ruled	1	section	4
rules	16	sections	1
ruling	2	sector	9
run	5	sectoral	1
running	6	secure	1
runs	2	see	5
rural	8	seek	2
s	2	seeking	1
safe	1	seem	4
said	6	seen	2
salaries	6	sees	1
salary	4	segment	2
sale	1	seized	1
same	10	selected	1
sanction	1	selecting	1
Sapele	2	selection	2
satisfactorily	2	self-addressed	1
satisfactory	4	seminar	1
satisfied	1	send	1
satisfy	1	sending	1
save	1	senior	6
saved	1	seniority	3
say	20	sense	1
saying	3	sent	3
scale	8	sentence	1
scales	13	separate	1
schedule	6	service	1
schedules	1	serve	2
scheme	22	served	8
schemes	7	service	49
scholarship	3	serviced	1
scholarships	1	services	11
scholastic	1	serving	10

Word	Frequencies	Word	Frequencies
session	6	size	4
set	13	sizeable	1
setting	1	small	2
settlement	1	small-scale	1
settlements	1	smell	1
seven	3	smoke	1
seventy	1	smoking	1
several	1	so	36
severe	1	social	3
sewage	2	societies	1
shall	7	sofar	1
share	1	soft	2
shared	1	some	23
shareholder	1	something	1
she	1	son	3
shift	1	soon	5
shopping	2	sorry	7
short	5	sound	2
short-staffed	1	source	3
short-term	1	sources	6
shorter	1	sovereign	4
shortfall	2	sovereignty	1
shorthand	1	space	9
should	97	spaces	1
show	5	span	1
showed	1	speak	3
showing	1	speaking	1
shown	17	special	4
shows	3	specialisation	1
side	5	specialised	1
sign	3	specialist	1
signal	1	specialization	1
signals	1	specialize	2
signatory	1	specializing	1
signature	1	specially	1
signatures	2	specific	2
signed	4	specified	6
similar	2	speeds	2
similarly	2	speedy	1
since	10	spelt	2
sing	1	spend	1
single	1	spent	5
site	7	split	1
sitting	2	sporting	1
situated	2	sports	3
situation	2	spread	1
situations	1	st	3
six	8	stadia	1
sixty-six	1	staff	5

Word	Frequencies	Word	Frequencies
staffing	2	students	20
stages	1	studied	2
stairs	1	studies	15
stand	1	studio	2
standard	1	study	14
standards	1	styled	1
stands	5	sub-sections	1
start	1	subject	9
started	1	subject-matter	1
starting	1	submit	4
state	49	submitted	9
stated	5	subscriber	1
statement	2	subscribers	1
states	2	subsector	1
station	1	subsequent	5
stations	1	subsequently	1
stadium	1	subsidized	1
status	2	subsistence	1
statutes	1	substantial	1
statutory	8	substantially	1
stay	1	substantive	1
stays	1	subventions	1
steadily	2	success	1
steady	1	successful	3
steel	1	successfully	1
stem	1	such	48
stems	1	sufficient	3
stenographers	2	sufficiently	1
stenography	2	suggested	3
step	1	suitable	1
step-daughter	1	suitably	1
steps	1	sum	19
stepson	1	summarised	1
still	12	summary	2
stimulate	1	Sunday	1
stipulates	1	superintendents	2
stock	2	superscale	1
stood	2	supersession	3
storage	1	supersessions	2
stores	2	supervise	3
strategies	2	supervising	1
street	2	supervision	3
street-lighting	1	supervisory	3
strengthened	1	supplementary	1
strengthening	1	supplementation	5
strength	1	supplements	3
strongly	1	supplied	2
structure	6	supply	13
student	9	support	2

Word	Frequencies	Word	Frequencies
supremacy	2	text	2
supreme	2	textile	1
sure	2	textiles	3
surely	1	than	29
surplus	4	thank	35
survey	2	thanking	1
surveyors	1	thanks	1
suspended	1	that	140
suspension	3	the	1626
sweets	1	theft	1
switchboard	16	their	43
synonymous	1	them	29
system	5	themselves	2
t	4	then	10
tabe	2	there	29
tables	5	thereafter	4
take	7	therefore	18
take-over	1	therein	1
taken	15	these	62
taking	1	they	33
tankers	1	things	2
tarred	1	think	2
tax	1	third	4
taxation	1	this	145
teach	1	those	11
teacher	2	though	4
teachers	2	thousand	2
teaching	5	threat	1
team	1	three	18
technical	12	through	16
technician	1	throughout	2
technicians	3	thus	2
techniques	1	tickets	1
technology	1	tides	1
telephone	19	tidiness	1
telephones	2	tidy	2
television	1	time	35
tempo	1	times	1
temporary	3	to	616
ten	1	together	3
tenancy	3	tone	1
tenure	2	too	1
tenures	1	top	1
term	6	topography	1
terminates	1	total	38
termination	1	tour	6
terms	8	touring	1
test	1	tourism	1
tests	1	tourist	2

Word	Frequencies	Word	Frequencies
towards	12	under	25
town	9	undergoing	1
towns	2	undergone	2
township	2	underlining	1
tractor	1	understand	1
trade	1	undertaken	1
tradition	1	unfair	1
traffic	3	unfortunate	1
training	29	unfortunately	1
transfer	3	unhappy	1
transferable	1	unhealthy	1
transition	1	unique	1
transitional	2	unit	2
transmission	2	united	12
transmitters	1	units	2
transport	3	university	4
transportation	3	unless	6
transversed	1	unmarried	2
traveling	1	unnecessary	1
treasury	7	unreliable	1
treat	1	unrestricted	1
treated	2	unsatisfactory	1
treatment	1	unspent	1
trees	1	unsympathetic	1
trend	1	until	11
tribunal	1	UNO	1
troubled	1	up	30
truck	1	up-date	2
trunks	1	up-to-date	2
try	3	upgraded	1
trying	5	upgrading	1
tuition	5	upon	4
turn	2	upper	5
tutor	1	urban	6
twelve	7	urban-rural	1
two	34	us	71
two-year	1	usable	1
type	3	usage	2
typewriting	3	use	8
typing	1	used	6
typists	4	useful	4
Udo	1	user	1
Ugborikoko	1	usual	3
Ugbowo	1	usually	2
ultimately	1	Utagba-ogbe	1
unaltered	1	utilisation	1
unattended	1	utilise	2
unchanged	2	v	1
unconfirmed	2	vacancy	1

Word	Frequencies	Word	Frequencies
vacation	8	waterways	4
vacations	2	wave	2
validation	1	way	2
validity	2	we	12
valley	1	welcome	3
valuable	1	welcomed	1
value	2	welfare	5
valuers	1	well	18
varied	2	well-equipped	1
varieties	1	were	29
various	7	west	1
vehicle	3	western	4
venture	1	what	25
very	36	whatever	3
via	2	whatsoever	1
viable	1	when	30
view	6	whenever	2
vigorous	1	where	17
vigorously	1	whether	6
villages	1	which	97
virtually	1	while	11
virtue	1	white	3
vis-a-vis	1	who	41
visible	2	whole	4
visibly	1	wholly	1
visit	23	whom	2
visitation	24	whose	4
visitations	1	why	1
visited	2	widely	1
visiting	1	wider	1
visits	4	widow	1
visual	2	widower	1
vital	1	width	1
vocational	1	will	146
voice	4	willed	1
voices	4	wires	3
void	2	wiring	1
volume	1	wish	6
volumes	1	wishes	4
vote	1	wishing	1
waiting	1	with	92
walkways	1	within	8
want	5	without	25
wanted	1	word	1
warm	1	words	6
warn	1	work	14
Warri	4	workers	1
was	49	working	4
watch	1	works	5
water	20	workshops	2

Word	Frequencies
worth	2
worthy	1
would	46
write	2
writer	1
writing	3
written	4
x	3
y	1
yard	1
year	83
years	11
yet	2
yielding	1
you	83
young	3
your	63
yourself	2
zonal	1

APPENDIX B

FREQUENCY LISTING OF THE OCCURRING WORDS IN THE WRITTEN BUSINESS COMMUNICATIONS IN NIGERIA USED IN THIS STUDY

Word	Frequencies	Word	Frequencies
the	1626	new	53
of	997	service	49
to	616	state	49
and	497	order	49
in	437	was	49
for	315	any	48
a	288	such	48
be	261	one	46
is	231	would	46
on	161	their	43
as	155	his	42
will	146	enclosed	41
this	145	who	41
are	142	department	40
that	140	office	39
at	111	information	38
has	109	may	38
or	109	total	38
it	97	also	36
not	97	no	36
which	97	so	36
should	92	very	36
with	92	please	35
been	91	thank	35
by	85	other	35
year	83	course	34
you	83	two	34
from	75	know	33
time	74	they	33
an	71	like	33
us	71	about	32
letter	68	business	32
i	66	now	31
have	65	most	31
all	64	each	30
your	63	up	30
these	62	appreciate	30
if	59	my	30

Word	Frequencies	Word	Frequencies
could	30	child	20
when	30	say	20
interest	29	students	20
than	29	water	20
hope	29	country	19
them	29	health	19
there	29	training	19
were	29	out	19
date	29	programme	19
above	28	telephone	19
made	28	sum	18
more	28	during	18
am	27	must	18
many	27	public	18
had	27	return	18
only	26	engineering	18
pay	26	therefore	18
he	26	three	18
others	26	well	17
being	25	children	17
do	25	where	17
further	25	its	17
what	25	letters	17
under	25	local	17
without	25	projects	17
first	24	shown	17
visitation	24	four	16
completed	23	head	16
eligible	23	however	16
in-service	23	financial	16
development	23	courses	16
recurrent	23	number	16
required	23	revised	16
some	23	rules	16
extension	23	schools	16
visit	23	switchboard	16
institution	22	through	16
decree	22	after	15
estimated	22	allowance	15
months	22	committee	15
Nigeria	22	construction	15
old	22	courses	15
report	22	directed	15
scheme	22	duty	15
but	21	existing	15
necessary	21	facilities	15
points	21	form	15
provided	21	holiday	15
call	20	increase	15

Word	Frequencies	Word	Frequencies
law	15	already	12
members	15	Auchi	12
officer	15	bill	12
official	15	building	12
overseas	15	conditions	12
passages	15	government	12
plan	15	entitled	12
point	15	equipment	12
ports	15	every	12
reply	15	f	12
repeat	15	follows	12
studies	15	general	12
taken	15	maximum	12
action	14	name	12
additional	14	prior	12
approved	14	rates	12
areas	14	ring	12
attached	14	road	12
Benin	14	still	12
leave	14	technical	12
federal	14	united	12
following	14	we	12
given	14	always	11
study	14	available	11
military	14	both	11
our	14	c	11
adequate	13	contained	11
allowances	13	convert	11
amount	13	due	11
annum	13	e	11
British	13	equipments	11
case	13	establishment	11
cases	13	estimates	11
commission	13	give	11
complaints	13	increment	11
copies	13	kingdom	11
free	13	month	11
funds	13	project	11
make	13	services	11
promotion	13	those	11
into	13	until	11
January	13	allocated	10
means	13	answer	10
normally	13	appointment	10
once	13	million	10
party	13	boarding	10
scales	13	completion	10
set	13	connection	10
supply	13	constitution	10

Word	Frequencies	Word	Frequencies
day	10	town	9
heads	10	actual	8
edict	10	annex	8
educational	10	area	8
effect	10	Bendel	8
efficiency	10	board	8
etc	10	budget	8
enable	10	calling	8
entitlement	10	can	8
expected	10	central	8
good	10	centre	8
honourable	10	cost	8
house	10	scale	8
provision	10	count	8
receiving	10	details	8
reports	10	education	8
republic	10	estate	8
second	10	full	8
seconds	10	herewith	8
serving	10	high	8
since	10	investment	8
then	10	laws	8
advances	9	least	8
aware	9	less	8
b	9	April	8
cent	9	ministry	8
dates	9	need	8
end	9	Nigerian	8
fund	9	nod	8
grant	9	parents	8
granted	9	part	8
incremental	9	power	8
initial	9	present	8
management	9	private	8
nine	9	professional	8
notes	9	provide	8
paragraph	9	qualifications	8
person	9	received	8
phase	9	referred	8
plans	9	regard	8
practice	9	resulting	8
production	9	rural	8
receipts	9	served	8
sector	9	six	8
period	9	use	8
space	9	vacation	8
student	9	within	8
subject	9	added	7
submitted	9	action	7

Word	Frequencies	Word	Frequencies
address	7	site	7
administration	7	sorry	7
advancement	7	take	7
annexure	7	treasury	7
application	7	twelve	7
apply	7	revenue	7
basic	7	per	7
campus	7	accommodation	6
cannot	7	against	6
cash	7	appendix	6
claim	7	assistance	6
compared	7	assistant	6
connect	7	assistants	6
consideration	7	attempts	6
continue	7	bank	6
conversion	7	because	6
d	7	benefit	6
days	7	block	6
division	7	books	6
effective	7	centres	6
ensure	7	city	6
establishment	7	command	6
etc	7	considerable	6
formerly	7	considered	6
him	7	court	6
hospitals	7	courts	6
housing	7	credit	6
including	7	deemed	6
inform	7	departmental	6
inspectors	7	direct	6
key	7	educated	6
knowledge	7	employees	6
line	7	even	6
manpower	7	expect	6
mills	7	experience	6
next	7	grade	6
payment	7	grades	6
policy	7	higher	6
possible	7	highest	6
post	7	hold	6
primary	7	immediately	6
proposals	7	involved	6
reasonable	7	last	6
request	7	list	6
require	7	lowest	6
schemes	7	master	6
secondary	7	ministries	6
secretary	7	notice	6
shall	7	national	6

Word	Frequencies	Word	Frequencies
detain	6	claims	5
detained	6	clerical	5
operating	6	complete	5
operators	6	concerned	5
original	6	confirmation	5
paid	6	connecting	5
possess	6	current	5
proposed	6	dated	5
purpose	6	designed	5
qualified	6	enhance	5
qualifying	6	examination	5
reached	6	exchange	5
reference	6	exercise	5
requested	6	expansion	5
respectively	6	finance	5
retain	6	found	5
returned	6	go	5
reviewed	6	governor	5
roads	6	gradings	5
running	6	group	5
said	6	her	5
salaries	6	holiday	5
schedule	6	hoped	5
senior	6	hotel	5
session	6	important	5
sources	6	improved	5
specified	6	improvement	5
structure	6	include	5
term	6	indigenous	5
tour	6	instructions	5
unless	6	intended	5
urban	6	educational	5
departments	6	internal	5
used	6	Ireland	5
view	6	issued	5
wish	6	items	5
words	6	staff	5
accordance	5	Lagos	5
acting	5	limited	5
advanced	5	located	5
ahead	5	Ltd.	5
answers	5	main	5
aside	5	motor-cycle	5
aware	5	movement	5
between	5	names	5
bills	5	needs	5
candidates	5	noted	5
care	5	objective	5
certificate	5	on-going	5

Word	Frequencies	Word	Frequencies
option	5	avoid	4
orders	5	based	4
particular	5	become	4
passed	5	becomes	4
persons	5	bodies	4
physical	5	bracketed	4
position	5	bring	4
presently	5	car	4
principal	5	cardinal	4
quite	5	carried	4
rate	5	cars	4
receipt	5	check	4
repeat	5	college	4
result	5	colleges	4
run	5	community	4
see	5	consequently	4
short	5	December	4
show	5	deployed	4
side	5	designated	4
spent	5	determined	4
stands	5	economic	4
stated	5	employee	4
subsequent	5	enclosed	4
supplementation	5	enrolled	4
system	5	equity	4
tables	5	exercised	4
trying	5	exists	4
tuition	5	expatriate	4
upper	5	expression	4
want	5	extremely	4
welfare	5	far	4
works	5	fees	4
abolished	4	field	4
accepted	4	fiscal	4
account	4	fisheries	4
acquisition	4	five	4
add	4	forward	4
advice	4	full-time	4
again	4	giving	4
agricultural	4	governments	4
agriculture	4	grants	4
annual	4	graphic	4
applications	4	grateful	4
appointments	4	guardian	4
appreciated	4	guardians	4
arrangements	4	hand	4
asked	4	holding	4
assembly	4	hope	4
assets	4	ill	4

Word	Frequencies	Word	Frequencies
formed	4	registrars	4
infrastructure	4	regular	4
inland	4	repetition	4
institutions	4	replaced	4
intends	4	residence	4
interested	4	resident	4
interior	4	responsibility	4
kept	4	restore	4
land	4	satisfactory	4
library	4	secretarial	4
light	4	secretariat	4
likely	4	secretaries	4
lower	4	section	4
me	4	sined	4
measures	4	size	4
medical	4	sovereign	4
mentioned	4	submit	4
minimum	4	surplus	4
motor	4	t	4
much	4	expenditure	4
NEPA	4	thereafter	4
no.	4	third	4
nominated	4	though	4
nomination	4	typists	4
normal	4	undertaken	4
operator	4	university	4
ordinances	4	upon	4
overtime	4	useful	4
own	4	visits	4
parent	4	voice	4
periods	4	voices	4
personal	4	Warri	4
place	4	waterways	4
powers	4	western	4
preliminary	4	whole	4
preparation	4	whose	4
problems	4	wishes	4
procedure	4	written	4
proceed	4	accorded	3
provisions	4	according	3
pupils	4	accountancy	3
purchase	4	acquired	3
purposes	4	adequately	3
qualification	4	administrative	3
quality	4	advance	3
quarter	4	advise	3
record	4	age	3
refresher	4	agreed	3
regarded	4	allowed	3

Word	Frequencies	Word	Frequencies
altered	3	designations	3
annexes	3	distribution	3
answering	3	does	3
anxious	3	draft	3
approval	3	draw	3
arrears	3	drawn	3
Asaba	3	drugs	3
audit	3	dual	3
became	3	Easter	3
Belgium	3	easy	3
below	3	edicts	3
benefit	3	efficient	3
best	3	executive	3
beyond	3	expanded	3
birthday	3	figures	3
boards	3	film	3
bookshop	3	fish	3
break-down	3	force	3
brief	3	forfeiture	3
brought	3	format	3
budgetary	3	forms	3
buildings	3	formula	3
built	3	forwarding	3
ceramics	3	fully	3
chairman	3	furniture	3
chief	3	furthermore	3
class	3	governing	3
clear	3	grading	3
clearing	3	ground	3
closed	3	guidance	3
co-operation	3	having	3
collectors	3	here	3
commence	3	how	3
commencement	3	human	3
commercial	3	implement	3
comply	3	includes	3
conducted	3	increased	3
confidential	3	indeed	3
constraints	3	indication	3
contents	3	inflection	3
contracts	3	instrumental	3
conversation	3	intention	3
cope	3	intervals	3
courteous	3	involve	3
ct	3	Irish	3
cycle	3	issue	3
degrees	3	job	3
definitely	3	keep	3
dependent	3	kilo	3

Word	Frequencies	Word	Frequencies
kitchens	3	prompt	3
known	3	promptly	3
laboratories	3	prospects	3
laid	3	question	3
length	3	quickly	3
let	3	quinquennium	3
lieu	3	reasons	3
loans	3	recommendations	3
maintain	3	recommended	3
making	3	refer	3
materials	3	region	3
matter	3	rehabilitation	3
matters	3	relevant	3
mechanical	3	remain	3
memo	3	reported	3
met	3	residential	3
metres	3	rest	3
modification	3	review	3
mouths	3	round	3
nail	3	saying	3
namely	3	scholarship	3
naturally	3	sculpture	3
needed	3	seniority	3
negotiations	3	sent	3
Nigerians	3	seven	3
notion	3	shows	3
observe	3	sign	3
October	3	social	3
offer	3	son	3
offices	3	source	3
ond	3	speak	3
operative	3	sports	3
options	3	so	3
overseers	3	successful	3
p	3	suggested	3
paper	3	supersession	3
participating	3	supervise	3
passing	3	supervision	3
past	3	supervisory	3
patients	3	supplements	3
payable	3	suspension	3
pex	3	technicians	3
permanent	3	temporary	3
placed	3	tenancy	3
prepared	3	textiles	3
printing	3	together	3
problem	3	traffic	3
proforma	3	transfer	3
promoted	3	try	3

Word	Frequencies	Word	Frequencies
type	3	arrange	2
typewriting	3	arrangements	2
usual	3	artisans	2
welcome	3	assemble	2
whatever	3	attachment	2
white	3	attempt	2
wires	3	attractive	2
working	3	August	2
writing	3	availability	2
x	3	bars	2
young	3	basis	2
ability	2	beging	2
above-named	2	behalf	2
abroad	2	beneficiary	2
abrupt	2	blocks	2
absorb	2	bore-holes	2
acceptable	2	borehole	2
accidental	2	branch	2
accordingly	2	briskly	2
accounts	2	Britain	2
accurately	2	broadly	2
achieve	2	Brussel	2
achievements	2	build	2
acids	2	Burutu	2
acknowledge	2	busy	2
acquire	2	called	2
act	2	capacity	2
addresses	2	carefully	2
adopted	2	certificates	2
advantage	2	changes	2
Afuze	2	children's	2
Agbor	2	circumstance	2
agent	2	circumstances	2
agents	2	civil	2
agree	2	classes	2
allocation	2	clearance	2
although	2	clinic	2
among	2	close	2
animal	2	closing	2
annexures	2	co-operatives	2
anticipated	2	colleagues	2
apart	2	commands	2
appear	2	comments	2
appears	2	commissions	2
applicable	2	common	2
apprenticeship	2	communities	2
approximately	2	companies	2
arising	2	comprehensive	2
army	2	comprising	2

Word	Frequencies	Word	Frequencies
concept	2	dining	2
concerning	2	directions	2
conclusions	2	director	2
condition	2	discipline	2
confidence	2	disconnect	2
confirmed	2	display	2
confronting	2	disregard	2
consecutive	2	disseminated	2
considerably	2	distributed	2
constructed	2	divorce	2
consultancy	2	divorced	2
consumers	2	document	2
contain	2	don't	2
contract	2	doubt	2
contravened	2	drilled	2
cooperation	2	drilling	2
cord	2	duration	2
corded	2	duties	2
cordless	2	e.g.	2
corporations	2	earned	2
correction	2	eases	2
correctly	2	easily	2
corridor	2	effort	2
costs	2	efforts	2
cover	2	either	2
crop	2	electrical	2
crops	2	eligibility	2
cs	2	emphasize	2
cutting	2	enables	2
d-assurances	2	encouraged	2
daily	2	endeavour	2
dams	2	energy	2
data	2	enjoying	2
daughter	2	environmental	2
decision	2	established	2
declare	2	event	2
declared	2	examinations	2
delay	2	examine	2
demand	2	examined	2
departure	2	exceeds	2
depends	2	excellent	2
deputy	2	exception	2
derive	2	execution	2
deserving	2	exigencies	2
detailed	2	existencies	2
develop	2	existence	2
did	2	expand	2
difficulty	2	extend	2

Word	Frequencies	Word	Frequencies
extensions	2	increasing	2
face	2	indicate	2
facilitate	2	indicated	2
fact	2	individual	2
factor	2	industrial	2
family	2	industry	2
farmers	2	ineffective	2
faults	2	infrastructural	2
feasible	2	inherited	2
features	2	instead	2
February	2	institute	2
federation	2	interruptions	2
feeding	2	introduce	2
feeling	2	involvement	2
fields	2	involves	2
figure	2	issuing	2
finances	2	judicial	2
fund	2	June	2
flashing	2	keeping	2
flats	2	keeps	2
forcing	2	kilometers	2
forty	2	laboratory	2
frequent	2	later	2
functioning	2	lawfully	2
fundamental	2	lay	2
furnished	2	leaving	2
furnishings	2	left	2
gaining	2	legal	2
generally	2	leprosy	2
half	2	liaison	2
handle	2	listen	2
happened	2	long	2
hear	2	loss	2
help	2	mail	2
helpful	2	maintained	2
hereunder	2	major	2
hospital	2	manufacturing	2
hostel	2	capital	2
hostels	2	March	2
houses	2	medium	2
hundred	2	meet	2
identify	2	method	2
immediate	2	middle	2
implementation	2	mill	2
implementing	2	minute	2
impressed	2	misuse	2
improve	2	mostly	2
inadequate	2	naira	2

Word	Frequencies	Word	Frequencies
national	2	reason	2
natural	2	recall	2
nature	2	recent	2
near	2	reception	2
nearing	2	reckoned	2
neither	2	recognition	2
never	2	recording	2
nineteenth	2	recruitment	2
nominating	2	regards	2
nor	2	regeneration	2
nurses	2	regulation	2
o	2	reimbursed	2
object	2	relative	2
offering	2	remind	2
one-half	2	render	2
one-third	2	requirements	2
opening	2	resealing	2
operate	2	resources	2
organisation	2	respective	2
organised	2	responsibilities	2
overhaul	2	responsible	2
p.b.x.	2	resultant	2
papers	2	retirement	2
parliament	2	right	2
parts	2	rights	2
planned	2	ringing	2
pleasure	2	rising	2
policies	2	riverrine	2
population	2	room	2
possibility	2	routed	2
prescribed	2	ruling	2
presence	2	runs	2
press	2	s	2
price	2	Sapele	2
principally	2	satisfactorily	2
principle	2	seek	2
process	2	seen	2
produce	2	segment	2
progressing	2	selection	2
prominent	2	serve	2
property	2	settlement	2
prospective	2	sewage	2
provides	2	shopping	2
providing	2	shortfall	2
ps	2	signatures	2
put	2	similar	2
quarters	2	similarly	2
quoted	2	sitting	2
raised	2	situated	2

Word	Frequencies	Word	Frequencies
situation	2	undergone	2
small	2	unit	2
soft	2	units	2
sound	2	unmarried	2
specialize	2	up-date	2
specific	2	up-to-date	2
speeds	2	usage	2
spelt	2	usually	2
staffing	2	utilise	2
statement	2	vacations	2
states	2	validity	2
status	2	value	2
steadily	2	varied	2
stenographers	2	visible	2
stenography	2	visited	2
stores	2	visual	2
strategies	2	void	2
street	2	wave	2
studied	2	way	2
studio	2	whenever	2
summary	2	whom	2
superintendents	2	workshops	2
supersessions	2	worth	2
supplied	2	white	2
support	2	yet	2
supremacy	2	yourself	2
supreme	2	abated	1
sure	2	abruptly	1
survey	2	absence	1
table	2	absolute	1
teacher	2	accordingly	1
teachers	2	accept	1
telephones	2	accidentally	1
tenure	2	accommodated	1
text	2	accommodations	1
themselves	2	accord	1
things	2	accountant-general	1
think	2	accredited	1
thousand	2	accummulation	1
throughout	2	accurate	1
thus	2	achieved	1
tidy	2	achieves	1
tourist	2	acres	1
towns	2	across	1
township	2	active	1
treated	2	activities	1
turn	2	acts	1
uncharged	2	ad-hoc	1
unconfirmed	2	adhere	1

Word	Frequencies	Word	Frequencies
adjusted	1	architecture	1
adjustment	1	arose	1
adjustments	1	around	1
administer	1	arranged	1
administrations	1	arrest	1
admiralty	1	artery	1
admission	1	arts	1
adopting	1	aspect	1
adoption	1	assist	1
advantages	1	assume	1
advisability	1	assuming	1
advising	1	assured	1
affairs	1	assuring	1
affected	1	atmosphere	1
affecting	1	attach	1
agency	1	attachments	1
Agenebode	1	attain	1
agreeing	1	attend	1
aid	1	attendance	1
aids	1	attendant	1
aim	1	attendants	1
air	1	attorney	1
air-conditioning	1	audio-visual	1
Ajaokuta	1	auditor	1
allegations	1	augmentations	1
allied	1	Austrian	1
allow	1	authorised	1
almost	1	authority	1
alone	1	auto	1
alternative	1	automatic	1
ambulance	1	automatically	1
amend	1	avenue	1
analysed	1	average	1
analysis	1	avoid	1
analytical	1	awarded	1
announced	1	back	1
announcement	1	backed	1
annually	1	bad	1
another	1	bailiffs	1
anything	1	balance	1
appearance	1	balanced	1
appelant	1	banked	1
applicants	1	banking	1
applied	1	barley	1
applies	1	barrier	1
appreciably	1	basically	1
appreciation	1	basis	1
approving	1	batting	1
approximated	1	bearer	1

Word	Frequencies	Word	Frequencies
begins	1	chargemen	1
Belgian	1	chart	1
Belgians	1	checking	1
belief	1	chemistry	1
believed	1	cheque	1
Bendelite	1	chicks	1
bisected	1	chieftaincy	1
boat	1	child's	1
body	1	choose	1
bonding	1	chosen	1
bonds	1	Christmas	1
booking	1	circulars	1
boost	1	circulation	1
borehole	1	civilian	1
bone	1	claimed	1
briefing	1	claiming	1
broadcast	1	clarification	1
Brussels	1	classified	1
bulk	1	classroom	1
bulldozer	1	clean	1
bunker	1	cleared	1
bursaries	1	clerk	1
bursary	1	clientele	1
bush	1	climatic	1
businesslike	1	climinate	1
buyers	1	clinics	1
calculating	1	co	1
calculation	1	co-operations	1
call-letter	1	coastal	1
caler-advise	1	collected	1
came	1	come	1
canals	1	coming	1
career	1	commencing	1
careful	1	commended	1
carriageway	1	commerce	1
casino	1	commissioned	1
casual	1	commissioning	1
catalog	1	commitment	1
catalogue	1	committed	1
categorically	1	commodity	1
categories	1	communication	1
category	1	communications	1
cause	1	company's	1
celebrated	1	comparative	1
certification	1	compensate	1
chairmen	1	compensation	1
challenged	1	compiled	1
change	1	completing	1
chant	1	composition	1

Word	Frequencies	Word	Frequencies
compulsory	1	cross	1
concentrating	1	crown	1
concern	1	crucial	1
concession	1	cultural	1
conclude	1	curriculum	1
concluded	1	custody	1
conditioning	1	dam	1
conducive	1	de	1
conduct	1	deal	1
confered	1	dealing	1
confinements	1	dealt	1
confirms	1	death	1
congested	1	debriefing	1
connections	1	decided	1
conquered	1	deciding	1
considering	1	declaring	1
consists	1	deducted	1
constitute	1	defence	1
construct	1	deferred	1
constructed	1	deficit	1
consulted	1	defining	1
consumed	1	definite	1
contains	1	deliberate	1
continuance	1	delivered	1
continued	1	depend	1
continuing	1	dependence	1
continuity	1	depending	1
contrary	1	deposit	1
contributed	1	deposited	1
contribution	1	describe	1
contributions	1	deserve	1
control	1	designing	1
conveniently	1	desirable	1
conversant	1	desire	1
conversions	1	destroys	1
converted	1	determinate	1
convey	1	determine	1
conveys	1	development-acres	1
core	1	diagnostic	1
correct	1	dialogue	1
corrected	1	dictate	1
correspondences	1	died	1
costain	1	difference	1
counts	1	differntly	1
county	1	difficult	1
courteously	1	difficulties	1
crafts	1	direction	1
creates	1	directory	1
credited	1	disciplinary	1

Word	Frequencies	Word	Frequencies
disciplines	1	eg	1
disconnecting	1	Eghosa	1
disconnection	1	eight	1
discreetly	1	electoral	1
discretion	1	electrification	1
discuss	1	electronic	1
discussions	1	electronics	1
disobedience	1	element	1
dispensary	1	embark	1
displeasure	1	emoluments	1
dissatisfaction	1	emphasized	1
distance	1	employed	1
distinctly	1	employees	1
diverted	1	employers	1
divided	1	enabling	1
divisions	1	enchance	1
doctor	1	encourage	1
doctors	1	encouragement	1
documents	1	endeavours	1
doing	1	ends	1
donated	1	enforcement	1
done	1	engaged-report	1
donor	1	engineers	1
door	1	English	1
doubts	1	enhancement	1
down	1	enhancing	1
down-graded	1	enjoyed	1
of	1	enjoyment	1
drained	1	enlightening	1
drawing	1	enquiries	1
drawl	1	enquiry	1
dreamy	1	enrollment	1
dredging	1	enter	1
drift	1	entered	1
drug	1	entertained	1
dry	1	entire	1
dual	1	entirely	1
duplicate	1	Enugu	1
ear	1	envelope	1
earlier	1	erected	1
earth	1	erosion	1
eastern	1	error	1
economy	1	errors	1
ed.	1	especially	1
edge	1	establish	1
effected	1	estimating	1
effecting	1	ever	1
effectively	1	ever-increasing	1
efficiently	1	everyone	1

Word	Frequencies	Word	Frequencies
evidence	1	fathers	1
evidences	1	fatten	1
evil	1	favour	1
ex-gratia	1	featured	1
exact	1	feeds	1
exceeding	1	feel	1
excellency	1	fertilizers	1
exceptionally	1	festival	1
excess	1	few	1
exchanges	1	fight	1
exclude	1	filed	1
excluding	1	filled	1
exemption	1	finding	1
exercising	1	fine	1
expectation	1	fire	1
expects	1	fishermen	1
expended	1	fishing	1
expense	1	fleet	1
expenses	1	floated	1
expensive	1	flood-lights	1
experienced	1	floor	1
experiments	1	flow	1
expertise	1	focused	1
explain	1	foe	1
explained	1	follow	1
exploitation	1	forced	1
exploited	1	foremen	1
exploring	1	forest	1
exporters	1	forestry	1
expressed	1	forests	1
expressions	1	forward	1
extended	1	forefeiting	1
extensive	1	forget	1
exterior	1	formalities	1
f.i.	1	formation	1
facilitates	1	formed	1
facing	1	formerly	1
facts	1	formidable	1
faculties	1	foundation	1
failure	1	four-year	1
fair	1	fourth	1
fairly	1	foy	1
fall	1	fraction	1
fallen	1	frankness	1
familiarise	1	frequency	1
fares	1	fresh	1
farm	1	freshers	1
farming	1	freshwater	1
father	1	frustration	1

Word	Frequencies	Word	Frequencies
fullest	1	impatient	1
g.o.	1	implications	1
gazette	1	importance	1
geared	1	impression	1
general-supervision	1	improvements	1
generate	1	improving	1
generators	1	in-take	1
geographical	1	inability	1
German	1	incapacity	1
gives	1	incentives	1
govern	1	inception	1
grammar	1	included	1
granting	1	incompetence	1
greatly	1	inconsistent	1
grounds	1	incorporating	1
groups	1	incurred	1
growers	1	incurring	1
guarantee	1	independent	1
guarantees	1	indicates	1
guide-lines	1	indicating	1
guilds	1	indicator	1
Guobadia	1	indiscriminately	1
habit	1	indispensable	1
hard	1	induce	1
heart	1	induces	1
heavy	1	industrialist	1
heights	1	industrialists	1
held	1	influx	1
hence	1	infrastructures	1
henceforth	1	inheriting	1
hereafter	1	inshore	1
hereby	1	insists	1
highlights	1	inspector	1
highly	1	installations	1
highway	1	instance	1
history	1	instances	1
hitherto	1	instruction	1
home	1	instructional	1
honour	1	insufficient	1
hotels	1	integrated	1
h.v.p.	1	integration	1
hydraulics	1	intend	1
Ibadan	1	intensified	1
id	1	intensifying	1
identification	1	intensive	1
Igarra	1	intentionally	1
Ijebu-ode	1	inter	1
Ikpoga	1	interferred	1
immensely	1	intermediate	1

Word	Frequencies	Word	Frequencies
international	1	levies	1
interval	1	liable	1
interviewing	1	liaise	1
introduce	1	librarian	1
introduced	1	librarians	1
introduction	1	life	1
invalidity	1	liftout	1
invariably	1	lighting	1
inventory	1	limit	1
invest	1	limits	1
investigation	1	link	1
invite	1	linking	1
involving	1	litigation	1
iron	1	livestock	1
irregular	1	loads	1
irrespective	1	location	1
irritation	1	locational	1
Issele-uku	1	lodging	1
issues	1	log	1
jointly	1	London	1
judge	1	longer	1
judges	1	low	1
juncture	1	lying	1
just	1	m	1
justice	1	M.Sc.	1
justify	1	machinery	1
juvenile	1	machines	1
kitchen	1	mainly	1
labour	1	maintains	1
lack	1	maintenance	1
lands	1	man	1
language	1	man-power	1
lapses	1	manufacturers	1
large-scale	1	marked	1
largely	1	market	1
law-maker	1	marketing	1
layout	1	marks	1
lead	1	marriage	1
leading	1	mast	1
leaflets	1	match	1
leap	1	mean	1
leaping	1	meaning	1
leavers	1	mere	1
lecture	1	merely	1
lecturers	1	merit	1
led	1	messages	1
legislations	1	metallic	1
legislative	1	methods	1
levels	1	meticulous	1

Word	Frequencies	Word	Frequencies
metric	1	noticed	1
mid-west	1	nursing	1
midwest	1	nuts	1
midwestern	1	Oarhe	1
midwifery	1	obeyed	1
might	1	observation	1
mine	1	observations	1
minimal	1	observing	1
ministers	1	obsolete	1
ministry/department	1	obtainable	1
minority	1	occasions	1
minutes	1	occupies	1
misappropriation	1	occur	1
misinterpreted	1	often	1
model	1	Ogor-ughelli	1
modelling	1	Okene	1
modern	1	oldest	1
modifications	1	olympic	1
modified	1	one-quarter	1
modules	1	one/third	1
moment	1	ongoing	1
monotonous	1	onto	1
mortgage	1	open	1
mother	1	opened	1
mothers	1	operated	1
motor-cycles	1	operation	1
mount	1	operational	1
move	1	opinion	1
moved	1	opportunity	1
n	1	opposite	1
n.b.	1	optimum	1
nails	1	ordinary	1
nation-wide	1	organisers	1
nd	1	organization	1
needless	1	organizational	1
neglected	1	others	1
negotiation	1	otherwise	1
network	1	outstanding	1
newer	1	over-head	1
newly	1	overheard	1
nights	1	pace	1
nominations	1	paces	1
nominee	1	pains	1
nominees	1	painting	1
nonpayment	1	pairs	1
non-payment	1	panel	1
non-statutory	1	paragraphs	1
norm	1	participants	1
nothing	1	participation	1

Word	Frequencies	Word	Frequencies
partnership	1	preferably	1
peace	1	preference	1
pedestrian	1	prejudice	1
penalty	1	premiums	1
pension	1	prepare	1
people	1	preparing	1
performed	1	preservation	1
perhaps	1	preserved	1
periodicals	1	president	1
permanency	1	prevail	1
perminute	1	prevailent	1
permission	1	prevent	1
permitted	1	previous	1
personally	1	previously	1
person	1	prices	1
perused	1	prime	1
Ph.D.	1	principals	1
pharmaceuticals	1	priorities	1
phased	1	probably	1
phases	1	probate	1
photo	1	proceedings	1
physically	1	processes	1
physics	1	proclamations	1
picked	1	producing	1
piggery	1	productivity	1
pigs	1	professor	1
places	1	progress	1
placing	1	prohibited	1
planners	1	prohibition	1
play	1	promote	1
plays	1	promulgated	1
pleased	1	proposal	1
plot	1	proposes	1
plug	1	protracted	1
plus	1	proved	1
poles	1	proven	1
polite	1	provincial	1
pools	1	publication	1
portion	1	pupil	1
positive	1	purchased	1
positivists	1	purely	1
possession	1	puport	1
poultry	1	purported	1
powerful	1	pursue	1
practicable	1	pursuing	1
practices	1	putting	1
pre-Elwood	1	quadruplicate	1
precise	1	qualitative	1
precludes	1	qualities	1

Word	Frequencies	Word	Frequencies
quarterly	1	registration	1
questionnaire	1	registry	1
quota	1	regarded	1
quote	1	regret	1
raising	1	regretfully	1
ramps	1	regretted	1
rather	1	regulations	1
re-enactment	1	reinforce	1
re-issuing	1	relate	1
re-negotiated	1	relating	1
re-ordered	1	relations	1
reach	1	relationship	1
reaches	1	relay	1
read	1	reliably	1
reading	1	remaining	1
ready	1	remains	1
realise	1	remand	1
reality	1	rendering	1
realized	1	renders	1
reawarded	1	rendition	1
rebated	1	renew	1
recalibration	1	rent	1
recalled	1	rental	1
receipted	1	replacement	1
receives	1	reporters	1
recently	1	reporting	1
reckon	1	representative	1
reclaimed	1	republican	1
recommences	1	requesting	1
recommend	1	requests	1
recommending	1	requirement	1
reconsidered	1	requiring	1
records	1	requisite	1
recreational	1	rescinded	1
recruit	1	reserved	1
recruiting	1	reside	1
redesignated	1	resided	1
reduce	1	residing	1
reduced	1	responding	1
reducing	1	restrict	1
ref.	1	rests	1
references	1	resumes	1
referring	1	resucitate	1
refers	1	retaining	1
reflected	1	retention	1
reflects	1	retrospective	1
refresh	1	returning	1
refuses	1	returns	1
regional	1	result	1

Word	Frequencies	Word	Frequencies
revenues	1	severe	1
reviewing	1	share	1
revision	1	shared	1
revitalise	1	shareholder	1
revitalised	1	she	1
resistant	1	shift	1
river	1	short-staffed	1
role	1	short-term	1
rooms	1	shorter	1
route	1	shorthand	1
routine	1	showed	1
royal	1	showing	1
rule	1	signal	1
ruled	1	signals	1
safe	1	signatory	1
sale	1	signature	1
sanction	1	sign	1
satisfied	1	single	1
satisfy	1	situations	1
save	1	sixty-six	1
saved	1	sizeable	1
schedules	1	small-scale	1
scholarships	1	smell	1
scholastic	1	smoke	1
sciences	1	smoking	1
season	1	societies	1
second-hand	1	sofar	1
secrecy	1	tickets	1
secret	1	tides	1
sections	1	tidiness	1
sectoral	1	times	1
secure	1	tone	1
seeking	1	too	1
sees	1	top	1
seized	1	topography	1
selected	1	touring	1
selecting	1	tourism	1
self-addressed	1	tractor	1
seminar	1	trade	1
send	1	tradition	1
sending	1	transferable	1
sense	1	transition	1
sentence	1	transversed	1
separate	1	traveling	1
service	1	treat	1
serviced	1	treatment	1
setting	1	trees	1
settlements	1	trend	1
several	1	tribunal	1

Word	Frequencies	Word	Frequencies
troubled	1	vis-a-vis	1
truck	1	visibly	1
trunks	1	visitations	1
tutor	1	visiting	1
two-year	1	vital	1
typing	1	vocational	1
Ugo	1	volume	1
Ugbonikoko	1	volumes	1
Ugbowo	1	waiting	1
ultimately	1	walkways	1
unaltered	1	wanted	1
unattended	1	warm	1
undergoing	1	warn	1
underlining	1	watch	1
understand	1	welcomed	1
unfair	1	well-equipped	1
unfortunate	1	west	1
unfortunately	1	whatsoever	1
unhappy	1	wholly	1
unhealthy	1	why	1
unique	1	widely	1
unnecessary	1	wider	1
unreliable	1	widow	1
unrestricted	1	widower	1
unsatisfactory	1	width	1
unspent	1	willed	1
unsympathetic	1	writing	1
U.N.O.	1	wishing	1
upgraded	1	word	1
upgrading	1	something	1
urban-rural	1	sovereignty	1
usable	1	spaces	1
user	1	span	1
Utagba-ogbe	1	speaking	1
utilization	1	specialisation	1
v	1	specialised	1
vacancy	1	specialist	1
validation	1	specialization	1
valley	1	specializing	1
valuable	1	specially	1
valuers	1	speedy	1
varieties	1	spend	1
venture	1	split	1
viable	1	sporting	1
vigorous	1	sports	1
vigorously	1	spread	1
villages	1	stadia	1
virtually	1	stages	1
virtue	1	stairs	1

Word	Frequencies
stand	1
standard	1
standards	1
start	1
started	1
starting	1
station	1
stations	1
stadium	1
statutes	1
stay	1
stays	1
steady	1
steel	1
stem	1
stems	1
step	1
step-daughter	1
steps	1
stepson	1
stimulate	1
stipulates	1
storage	1
street-lighting	1
strength	1
strengthened	1
strengthening	1
strongly	1
styled	1
sub-sections	1
subject-matter	1
subscriber	1
subscribers	1
subsector	1
subsequently	1
subsidized	1
subsistence	1
substantial	1
substantially	1
substantive	1
subventions	1
success	1
successfully	1
sufficiently	1
suitable	1
suitably	1
summarised	1
Sunday	1
superscale	1
supervising	1
supplementary	1
surely	1
surveyors	1
suspended	1
synonymus	1
take-over	1
taking	1
tankers	1
tarred	1
tax	1
taxation	1
teach	1
team	1
technician	1
techniques	1
technology	1
television	1
tempo	1
ten	1
ter	1
terminates	1
termination	1
test	1
tests	1
textile	1
thanking	1
thanks	1
theft	1
therein	1
thick	1
workers	1
working	1
worthy	1
writer	1
y	1
yard	1
yielding	1
zonal	1

APPENDIX C

LETTER SENT TO BUSINESS ORGANIZATIONS

Auchi Polytechnic
P.M.B. 13
Auchi, Bendel State
Nigeria

5th November, 1979

(inside address)

Dear Sir/Madam:

To help schools better prepare secretaries, reporters, stenographers, and typists for businesses, the Department of Vocational-Technical Education of The University of Tennessee, U.S.A., and the Auchi Polytechnic, Auchi, Bendel State, Nigeria, are conducting a nation-wide study of representative written business communications in Nigeria.

The purpose of this study is to determine the basic vocabulary used in written business communications in Nigeria. The result of the study will enable business education textbook authors and teachers to better prepare students for appointment in businesses by teaching them the words they will actually use in business positions.

You are specially selected to take part in this study. All you need to do is to select a copy each of two recently written letters or reports, which have been sent out by your establishment, place them in the enclosed stamped envelope, and drop the envelope in the mail within two weeks of the receipt of this letter. A photocopy of your letter or report is acceptable.

Every document received will be treated confidentially. If you desire to have your letters or reports returned to you, please complete the attached form, and they will be sent by return of mail.

We have every confidence that you will give this matter your prompt attention and we are eagerly looking forward to hearing from you soon.

Sincerely yours,

S.U. Osemota
School of Business Studies
Secretarial Studies Dept.

APPENDIX D

FORM SENT TO BUSINESS ORGANIZATIONS

If you would like to have your letter or report returned to you by return of mail, please write your name and address and return this form with your letter or report.

If you do not care to have your letter or report returned, please disregard this form.

Name_____

Establishment_____

Address_____

_____

Please return to:_____

Address (if different
from above)_____

_____

_____

APPENDIX E

LETTER SENT TO MCGRAW-HILL BOOK COMPANY

1611 Laurel Avenue, #618
Knoxville, TN 37916

January 9, 1979

McGraw-Hill Book Company
Gregg Division
Business Education Department
1221 Avenue of the Americas
New York, NY 10020

Gentlemen:

I am in the process of developing a dissertation proposal which deals with the impact of business vocabulary word lists on business education subjects.

Because of the following indication given by Robert Gregg on page iv ofthe Anniversary Edition of the Gregg Shorthand textbook, I have tentatively cited the Horn Basic Writing Vocabulary List as having influence on the preparation of the Gregg shorthand materials:

> One of the first steps in planning the Anniversary Edition, therefore was an exhaustive analysis of the words contained in the Horn and the Harvard studies of the comparative frequency of words.

Would you please confirm whether or not this is true of the other editions of Gregg shorthand textbooks, including Series 90. If not, I shall be grateful if you will please let me know what other vocabulary word lists are being used by your shorthand textbook authors.

Sincerely,

S.U. Osemota

APPENDIX F

REPLY TO APPENDIX E

February 22, 1979

Mr. S.U. Osemota
1611 Laurel Avenue
Knoxville, TN 37916

Dear Mr. Osemota:

I am pleased to respond to your letter about the impact of business vocabulary word lists on our shorthand textbook. We do, in fact, go through a number of extensive analyses of words in each revision of Gregg Shorthand.

For our Diamond Jubilee materials, we concentrated on the Horn-Peterson list. In our Series 90 materials, we examine not only the Horn-Peterson but also the Mellinger and Silverthorn-Perry lists. We use these frequency lists to determine what theory changes we will make in the revision.

However, we do not use these lists as a basis for determining what words we will put in our textbooks. We believe that a word appears in the first 50 words on a frequency list does not necessarily mean that we should put that word in the text more frequently than other words because it may, in fact, not be a difficult theory word to learn to write; for example, the word a need not appear as often as, antidisestablishmentarianism (to exaggerate the point) in order to learn the theory well enough to write it.

We, therefore, try to write everyday business letters using the principles which were based on the frequency lists. We will find in examining our materials that they do, in fact, contain the most frequently used words, few strange words, and make good sense.

Sincerely yours,

Barbara Hann
Editor, Gregg Shorthand

fps

APPENDIX G

PEARSON PRODUCT MOMENT CORRELATION

COEFFICIENT COMPUTATION

$$r = \frac{N\Sigma XY-(\Sigma X)(\Sigma Y)}{\sqrt{(N\Sigma X^2-(\Sigma X)^2)\ (N\Sigma Y^2-(\Sigma Y)^2)}}$$

		Horn-Peterson List	Mellinger List	Perry List
Where N	=	100	100	100
ΣX	=	5050	5050	5050
ΣY	=	9213	6633	6091
ΣX^2	=	338350	338350	338350
ΣY^2	=	1578043	637953	580710
ΣXY	=	588800	431979	396796

1. Horn-Peterson List

$$r = \frac{(100\text{x}588800)-(5050\text{x}9213)}{\sqrt{[(100\text{x}338350)-(5050)^2][(100\text{x}1578043)-(9213)^2]}}$$

$$= \frac{1235430}{\sqrt{8332500 \text{ x } 72924931}}$$

$$= \frac{12354350}{24650497}$$

$$= .501$$

2. Mellinger List

$$r = \frac{(100x431979)-(5050x6633)}{\sqrt{[(100x338350)-(5050)^2][(100x637953)-(6633)^2]}}$$

$$= \frac{9701250}{\sqrt{8332500 \times 19798611}}$$

$$= \frac{9701250}{12844140}$$

$$= .755$$

3. Perry List

$$r = \frac{(100x396796)-(5050x6091)}{\sqrt{[(100x338350)-(5050)^2][(100x580710)-(6091)^2]}}$$

$$= \frac{8920050}{\sqrt{8332500 \times 20970719}}$$

$$= \frac{8920050}{13218870}$$

$$= .675$$

VITA

Samuel Uwa Osemota was born at Ekpoma in Ishan Division of Bendel State of Nigeria. He attended St. Andrew's School, Ekpoma; Halliday College, Ilorin; and Garnett College, London. He won the Mcnicol prize for the best teacher trainee in secretarial subjects at the Garnett College, London. His higher education includes Certificate in Education from London University, London, a Bachelor of Arts in Education from Glenville State College, West Virginia, and a Master of Science Degree from The University of Tennessee, Knoxville. Prior to enrolling at The University of Tennessee, Knoxville, to begin work on the Doctoral Degree in Vocational-Technical Education, which he received in August, 1981, he attended Glenville State College, West Virginia.

He taught in the Staff Training Centre, Benin City, Continuing Education Centre, Benin City, and Auchi Polytechnic, Auchi, all in the Bendel State of Nigeria. He started teaching in 1965, and presently, he is a Senior Lecturer and Acting Head of the Department of Office Management and Mass Communication at the Auchi Polytechnic, Auchi.

He is a member of the American National Business Education Association, Nigerian Association of Business Educators, and Delta Pi Epsilon. He is a Chief Examiner (typewriting) with the West African Examinations Council, Nigeria, and Supervisor for the R.S.A., Pitman, and Open Grading Test Examinations in Benin City.