CORPUS-BASED ANALYSIS OF COHESION IN WRITTEN ENGLISH ESSAYS OF NIGERIAN TERTIARY LEARNERS

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ABSTRACT

The English language is the second and official language of Nigeria. English language teachers continue to complain about the poor quality of undergraduates written English texts in Nigerian universities. One of the identified reasons for the writing deficiency is the problem of cohesion and coherence. This thesis examines how Nigerian learners, who are ESL learners, achieve cohesion in their written texts, how cohesion is related to coherence in the learners’ texts, and the areas in which they show underdevelopment in their usage of cohesive devices compared to their native counterparts. Communicative competence in academic writing is crucial to the general academic performance of students at the tertiary level of education. Tertiary learners’ need to demonstrate some forms of cohesion and coherence in their text presentations.

A comparative analysis was carried out using the NLEC (Nigerian learner English corpus) and LOCNESS (Louvain corpus of native English student essays) to examine if and how learners achieve cohesion in texts. The study also used the theory of contrastive rhetoric as an interpretative framework for the analysis to interpret potential alternative composition styles, choices and use of cohesive devices by Nigerian learners that may not be due to underdevelopment but to cultural differences. The analysis of reference and conjunctive cohesion was done first using the complete data of LOCNESS and NLEC. This was followed by the analysis of ellipsis, substitution and lexical cohesion using a sample of 20,000 words from LOCNESS and NLEC respectively. The extraction of reference and conjunctive cohesive devices as well as cluster patterns was done using the WordSmith Tools 5.0.

To examine the similarities and differences in the use of reference and conjunctive cohesive items between LOCNESS and NLEC, a chi-square test of independence was done. The likelihood ratio chi-square was also used in the analysis to verify the results. The log-likelihood calculator was used for the analysis of ellipsis, substitution and lexical cohesion using a sampled data of 20,000 words from LOCNESS and NLEC to determine the significance of the difference between the frequency scores of the two groups in order to determine over and underuse.
The results show significant differences in the use of specific cohesive devices in the two corpora in the areas of conjunctions and lexical cohesion. The Nigerian learners demonstrated underdevelopment in their use of conjunctions and lexical reiteration. The two types of cohesive devices are the major areas Nigerian learners significantly differ from their L1 counterparts. The analysis evinced the NLEC learners significantly overuse some conjunctive elements and underuse the others. Lexical repetition is also overused by the learners as referential cohesive device. The theory of contrastive rhetoric enabled a better understanding and interpretation of the different rhetorical patterns observed in NLEC writing. Some of the differences identified in the Nigerian learners’ texts were traced to the L1 influence. The study indicates that the overuse of cohesive devices in the learners’ essays impede the overall quality of the Nigerian learners’ essays.

KEY WORDS:
Corpus linguistics, learner corpora, academic writing, cohesion, coherence, contrastive rhetoric, English as second language learners (ESL learners), second language (L2), second language writing, writing quality.
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CHAPTER 1
GENERAL INTRODUCTION

1.1 INTRODUCTION

English is incontestably the most widely used language in the world at present (Barber 1999). Nigeria’s earliest contact with the English language has been traced to the European colonial era, the slave trade, and the influence of British Christian missionaries (see Babatunde, 2001; Barber, 1999). The introduction and development of English in Nigeria has been thoroughly documented by the following scholars, among others: Banjo (1970, 1996), Bamgbose (1971), Ubahakwe (1979), Jowitt (1991), Adegbija (1994), Akere (2004), Alabi (1994), Awonusi (2004), and Egbe (2004). The studies of the abovementioned scholars, as well as those of others, have established that English holds a significant position as a second language in Nigeria. English is socio-linguistically significant in Nigeria, due to its functionality in fulfilling the crucial role of communication in Nigeria’s multifarious linguistic setting (Ogunsanya, 2009). It is the language of sectors such as government, communication (within and outside the country), mass media, business and commerce, religion, and so forth. Furthermore, it is the medium of instruction in the Nigerian education system.

English is the medium of instruction from primary classes to the tertiary level of education. It is also the language of educational evaluation. It is therefore understandable that much scholarly attention has been given to issues associated with the effective teaching and learning of English. Nigerian learners have to acquire English as their second language; and over time, scholars have noted that they show various problems in the proper acquisition of the language, most strongly apparent in the productive language skills of speaking and writing. Considering the present status of English in Nigeria, the attainment level of Nigerian learners and users of the language still leaves much to be desired, both in spoken and written forms. This is evident in numerous publications by the following researchers, among others: Tomori (1963), Adetugbo (1969), Bamgbose (1971), Oluikpe (1974), Aboderin (1980), Afolayan (1987), Adejare (1995), Mohammed (1995), Chigeonu (2003), Omigbule (2003), Taiwo (2003), Afolabi and Olateju (2006), Ojetunde and Okanlawan (2012), Iyere (2013), Bodunde and Sotiloye (2013), Mohammed (2015). These publications indicate that all
categories of learners display some manner of difficulty when learning to speak and write in English, at all levels of education in the country. L2 English learners are expected to focus on the acquisition of the grammatical rules, as well as the structural, for both formal and informal varieties of English, and to apply these rules and patterns appropriately in speech and writing.

Writing, one of the four language skills, is used most frequently to assess students’ performance in almost all courses in Nigerian tertiary institutions. Bodunde and Sotiloye (2013) observed that frequent comments on the writing ability of L2 English undergraduates, and even graduates, have indicated concern from both English teachers and content teachers at Nigerian universities. They have continuously pointed out the occurrence of several writing problems. These comments indicate students’ shortcomings in the knowledge and good use of English, especially in the L2 writing process. This process is complex, and influenced by many factors, such as educational background, culture, community language, and social environment (Cox et al., 2010). Researchers such as Ancker (2000), Sotiloye (2007), Bodunde (2008), Titchenelle (2011), and Crompton (2011) have documented the influence of L1 on the speaking and writing skills of L2 learners. The deficiency of L2 learners’ knowledge of English, coupled with the complexity of learning the language in the Nigerian communities, have also compounded students’ writing problems (Lengo, 1995; Sotiloye & Bodunde, 2013).

Researchers like Oguntuase (2003), Aborisade (2003), Adelabu and Fadimu (2004), Onukaogu (2005), Wayar (2008), Komolafe and Yara (2010), Daramola (2010), Ojetunde and Okanlawan (2012), Iyere (2013), and Bodunde and Sotiloye (2013), have attempted to analyse the problems encountered by Nigerian tertiary students during the acquisition and use of English as a L2, by using various pre-determined parameters, e.g. error analysis, sentence combination strategies, discourse analysis, cohesion, etc. This study delves further into the analysis of the writing of undergraduates in Nigeria, with specific consideration given to achieving cohesion and overall coherence in their writing. This study makes use of corpus linguistics as method of analysis, which I believe will provide an improved description of these advanced learners’ language use. In the preliminary literature review for this study, I observed that corpus-based description of Nigerian advanced learners’ English writing, has
not taken place. This is in contrast with studies on South African (Van Rooy, 2008, 2009; Van Rooy & Terblanche, 2006; Henning 2006) and Cameroonian (Nkemleke, 2011, 2012; Schmied & Nkemleke, 2010) advanced learners’ writing. I believe this study will contribute significantly to a better understanding of the nature of Nigerian student writing. The outcome of this study can be used for a variety of purposes, especially to assist language teachers with the improvement of language teaching and learning at the tertiary level of education. The ability to reach the necessary level of communicative competence in academic writing influences the overall academic performance of students. In order for the tertiary education system to achieve its aims and objectives, cohesion and coherence should be reflected in the text presentations of these advanced learners.

This study further aims to provide insight into the means by which advanced Nigerian learners’ texts are linguistically and logically connected for effective communication, as these connections that facilitate communication are necessary for the academic success of tertiary learners. It is against this background that this study intends to carry out a corpus-based analysis of cohesion in written English essays of Nigerian tertiary learners. Halliday and Hassan’s theory of cohesion in English (1976) forms the theoretical framework for this study. The cohesive devices identified by Halliday and Hassan that will be examined are: reference, conjunction, ellipsis, substitution and lexical cohesion.

This chapter provides a general overview of the study, presenting a discussion of the context of the research, a review of existing knowledge, the identification of problems, research questions and objectives, the research methodology and the chapter division of the thesis.

1.2 PROBLEM STATEMENT

1.2.1 CONTEXTUALISATION

Writing is one of the most complex activities necessary for the development of human literacy. It has been identified as a multidisciplinary and challenging activity (Cope & Kalantzis, 2000; Munoz-Luna & Taillefer, 2014; Pinker, 2014). The ability to write in English has always played an important part in developing language proficiency for EFL/ESL
learners, but this productive language skill continues to be a challenging task. Writing, like any other form of discourse, is a social activity. The spatial distance between a writer and his reader places certain demands on the former, one of which is explicitness, which may be achieved through appropriate choice of words and their relations. In writing, there is no visual or aural contact, and thus, no possibility of immediate feedback (Eggins, 1994:53). Writers make distinct and conscious choices of lexico-grammatical items that best express the meaning they are trying to convey from the system of networks that constitute language. These are combined to form a single integrated structure, which is regarded as a text (Halliday & Hasan, 1985; Bloor & Bloor, 1995). Writing has always been perceived as a field that is difficult to measure, assess, analyse and quantify (Munoz-Luna, 2013). It is considered a demanding activity, which involves many skills and sub-skills (Mazandarani, 2010). Due to its complex nature, the process of writing has been linked to external issues, which could possibly have an influence on writing (Hyland, 2002c).

Language experts, especially applied linguists, have continuously shown concern for student writing. According to Grabe and Kaplan (1996:5), ‘[...] many students learning to write before they enter the tertiary level have little consistent exposure to writing demands beyond retelling’. The process of improving the writing skills of second language writers in English medium institutions can be more complicated than for native speakers. It has been established over time that ESL students often employ linguistic and rhetorical strategies from their L1 to produce texts in English (Hinkel, 2002:4). Learning to write in English for academic purposes presents a significant challenge for non-native learner writers. Not only must they deal with linguistic and technical issues such as syntax, vocabulary, and format, but they must also become familiar with Western notions of academic rhetoric (Steinman, 2003). According to Munoz-Luna (2015), L2 academic writing is clearly composed of a set of layers, which have varied natures and purposes. All the layers are important, but writers cannot pay attention to them all simultaneously. Therefore, teachers have to plan writing strategies that students can practice and implement in their texts. These strategies are prepared from a range of perspectives, which include:

- Grammatical level: morphology and syntax, word and sentence formation
- Lexical level: lexicon and vocabulary; word register
- Discursive level: cohesion and coherence, transition between sentences and ideas
- Meta-discursive level: extra-linguistic items
- Writers’ awareness of (a) genre specifications, namely, format and text structuring, and (b) target audience awareness
- Content compilation: text content according to topic and layout.

The necessity to investigate the properties of good English texts has generated considerable interest in the analysis of the complicated relationship among texts, writers and readers. A central issue in the interaction between the writer and the reader involves the cohesion and coherence of texts. One of the most significant works that has contributed greatly to the explicit understanding of cohesion was published by Halliday and Hasan (1976). According to them, the concept of cohesion is a semantic one, referring to ‘relations of meaning’ that exist within the text, and it ‘occurs where the interpretation of some element in the discourse is dependent on that of another’. Cohesion is expressed ‘partly through the grammar and partly through the vocabulary’. Coherence is the quality of a text when it makes sense, or is pleasing because all the parts or steps fit. It is the connection that is established partly through cohesion and partly through something outside the text that is usually the knowledge which a listener or reader is assumed to possess (Renkema, 1993). Several studies are available on the theoretical views of scholars on cohesion and coherence (Halliday & Hasan, 1976, 1989; Brown & Yule, 1983; Bamberg, 1984; Cook, 1989; McCarthy, 1991; Renkema, 1993; Halliday, 2004).

Scholars have identified various reasons for the writing deficiency experienced by learners in their discourse. Cohesion and coherence have been identified by various scholars as a major problem in L2 writing (De Beaugrande & Dressler, 1981; Schiffrin, 1987; Liu & Braine, 2005; Na, 2011; Yang & Sun, 2012; Ghasemi, 2013; Crossley et al., 2016). It could be said that no meaningful discourse can take place without cohesion and coherence. The lack of cohesion and coherence in student writing causes communication problems. Communication, the primary aim of writing, has been observed by Nkemleke (2011) to receive little attention from English teachers in Cameroun, as well as some other West African countries.
Another important theory pertinent to the understanding of L2 writing is contrastive rhetoric. Writing is influenced by the rhetorical situation in which it occurs. Contrastive rhetoric holds that people in different cultures organise ideas in different ways. It acknowledges that texts may be different, but not necessarily deficient. Contrastive rhetoric is defined as an ‘area of research in second language acquisition that identifies problems in composition encountered by second language writers, and by referring to rhetorical strategies of their first language, attempts to explain them’ (Connor, 1996:5). Contrastive rhetoric provides teachers and students of ESL with a better platform to identify and understand the link between culture and writing, and how these reflect in the written products of language users. The differences in rhetorical strategies in languages can easily lead to transfers in the written products of L2 student writers. Connor (1996:4) cites text analyses performed by a number of researchers, who found that ‘this transfer involves [...] recurring patterns of organization and rhetorical conventions of students’ first language and culture’. It seems very important, then, for writing instructors to become familiar with some of the findings of (or at least the existence of) contrastive rhetoric, to learn what is expected and admired in the writing of other cultures.

With specific reference to the evaluation of the writing of non-native speakers (NNS), Ballard and Clanchy (1992) emphasise that NNS teachers are rarely sensitive enough to the rhetorical style or cultural connection that is significant in student writing. They further commented that, when faced with writing that falls outside the teachers’ notions of acceptable style and pattern of argument, they write remarks such as irrelevant, incoherent, and illogical in the margins of the learners scripts (Ballard & Clanchy, 1992:2). The possibility that these students are employing fundamentally different (and not necessarily inferior or incorrect) structures of discourse rarely occurs to instructors, who may themselves be only marginally aware of how languages and rhetorical styles vary. It is therefore important that writing instructors not only acknowledge, but also explore, rhetorical patterns of the L1 and L2 with their students. They may not produce exactly what the teachers expect or what they feel safe with, however, their texts and interpretations can challenge teachers to recognise their own rhetorical prejudice and to reconceptualise their perspectives on academic discourse as a mutually enriching process (Zamel & Spack, 1998).
The awareness of contrastive patterns may allow certain students to view their writing problems not so much as individual inadequacies, but as their participation in different discourse communities (Leki, 1992). This may well lower students’ affective filters as they better understand their own practices of writing within one culture and across cultures. The implication of this knowledge for the types and uses of cohesive devices by Nigerian learners will be examined in this study.

1.2.2 REVIEW OF EXISTING KNOWLEDGE

The position and functions of the English language in Nigerian education system is traceable to its inception in the country. The introduction of English to Nigeria has been traced to the 14th century, when freed slaves from Sierra Leone interacted with fellow Nigerians when they returned; the arrival of Christian missionaries from Europe, and the colonial era. From around 1800, Nigeria came under the colonial rule of Britain, and regained independence in 1960. During this period, English was the primary language of interaction in all areas of life. English has unwaveringly increased in stature in Nigeria, with regard to the high number of speakers, the citizens’ positive attitude to its use, and its efficacy for upward social mobility in the country (Adeyanju, 2009). Consequently, the motivation for learning English is very strong.

English enjoys a sense of prestige over other major and minor Nigerian languages. It is deeply embedded in the country’s life in most domains. It functions as the link in the multilingual Nigerian society, with more than 400 distinct indigenous languages and dialects (Bamgbose, 1971; Ogunsanya, 2009). With its status and function as the official language in Nigeria, English is the language of bureaucracy. Its official status confers on it a number of functions, among which are its role as the language of education. Nigeria believes that education is an invaluable component of all growth. The country also believes that if the majority of the citizens have efficient language skills, they will attain general success in education. Consequently, the Government places a high premium on English in the nation’s education system (Federal Republic of Nigeria, 2007).
Writing is the most used of the language skills when assessing students’ performance at all levels of education in Nigeria. Hence, the emphasis is on the importance of the skill, and the need to develop it from the basic (primary) to the highest (tertiary) level. Generally, the emphasis at the tertiary level is well justified, since it is the final opportunity that students have to perfect their skills, before entering the labour market. It is imperative for the professional success of students after graduation. As mentioned previously, frequent and increasing comments on the writing ability of ESL undergraduates, and even graduates, have been a matter of concern to English teachers. For example, Taiwo (2001:371) says ‘learners have the problem of defining the semantic boundaries that separate lexical items. As a result of this, they fail to observe the rules of restrictions on the co-occurrence of lexical items. The implication of this is that learners will find it difficult to produce coherent and meaningful texts’. Komolafe and Yara (2010:533) observe that ‘learners encounter problems such as writing ability and grammatical incompetence because of the multi-lingual background society they come from’. Olajide (2010:198) comments that ‘the Nigerian university students who are expected to be models in English usage have been observed to be greatly deficient in reading and writing’.

Adesida et al. (2011) found that university students displayed below average or poor levels of linguistic and communicative competence in English. Bodunde and Sotiloye’s (2013) study reveals that Nigerian tertiary students have problems with almost every aspect of grammar: tense, punctuation, spelling, concord, abbreviation, prepositions and word combination. Ayankogbe (2015) also finds that many students of tertiary institutions in Nigeria do not use English effectively as far as grammar and lexis are concerned. Mohammed’s study (2015) indicates that Nigerian students are yet to master the mechanics of cohesion, particularly with the use of conjunctive resources. The work of these scholars, and many others, has been concerned with the problems of teaching and learning English effectively in a way that will enhance better performance by learners in Nigerian schools, from the primary to tertiary levels of education, and they have given suggestions for improvement.
1.2.3 PROBLEM IDENTIFICATION

The Nigerian English learner has already mastered their first language by the time they begin to learn English, unlike the native English speaker, who acquires the language as a child. Since the Nigerian learner already has a language to fulfil their needs, the learner naturally transfers some features from the mother tongue to the second language. Such features may hinder or facilitate the learning of the second language. Available literature shows that researchers have worked on the writing skills of Nigerian learners at all levels of education.

At the primary level, researchers like Tomori (1963) investigated the attainment standard of written English compositions of some final year pupils in some Western Nigerian primary schools. Aboderin (1980) also worked on the problems with writing skills experienced by learners in the school certificate English language programme. Komolafe and Yara (2010) researched sentence combining strategies in primary pupils’ composition in Ibadan, Nigeria.


At the tertiary level, various scholars have carried out research on student writing at Nigerian universities. Among them, Olagoke (1975) performed an error analysis of the English of students of Lagos University students. Tinuoye (1991) investigated the common errors in usage, such as confusion between ‘their’ and ‘there’ in student essays at the University of Ilorin. Alebiosu (1997) wrote on the need for the introduction of advanced writing skills in the General Studies Curriculum for tertiary institutions. Olajide (1991) examined the pattern of student performance in the ‘Use of English programme’ at the University of Ilorin. Adegbija and Ofuya (1998) also examined the English and communicative skills in the writing of Medical and Science students at the University of Ilorin. Kamal (2000) researched the use of computers to teach writing skills at university level. Mustapha (2000) worked on English writing skills as a complement to analytical skill in research at the Bayero University, Kano. Adelabu and Fadimu (2004) examined written English errors among first year undergraduates in Nigerian universities. Wayar (2008) performed a discourse analysis of
essays written by second year English students of Gombe State University. Daramola (2010) undertook a linguistic analysis of the construction of reality in essays on stylistics of final year English students of University of Lagos.

More recently, Ojetunde and Okanlawan (2012) investigated the use of adjuncts in the English of students in selected tertiary institutions in Nigeria. Iyere (2013) conducted an investigation of lexical errors in the essays of Open and Distance Learning undergraduate students. Bodunde and Sotiloye (2013) conducted a critique of undergraduate students’ writing skill in an ESL setting, using essays of Nigerian undergraduates. Lawoyi and Adeyanju (2013) investigated errors in written English of students in two central Nigerian higher institutions. Ngadda and Nwoke (2014) performed an analytical study of errors in the written English of undergraduate Engineering students. Mohammed (2015) examined the use of conjunctions as cohesive devices in the writing of Diploma students. These researchers and many others have acknowledged unacceptable deficiencies in student writing at tertiary level. These deficiencies are regarded as unacceptable, because students at this level are considered advanced students, who have been exposed to the use of English for a period of at least twelve years prior to their university entrance.

Some of the factors responsible for the poor writing performance, as identified by various above mentioned researchers and others, include: poor knowledge of the rules of grammar, ignorance of acceptable sentence patterns, inability to construct complete sentences, inability to use adequate and innovative logical connectors, not writing coherently and poor methods of instruction. This has led to many research efforts directed towards the factors responsible for these conditions, as well as possible solutions. Researchers have attempted to provide solutions by focusing on teaching methods, the students’ language learning environment, the socio-economic background of students, effective teaching of the basic rules and principles of grammar, and production of students’ English textbooks suitable and relevant for use irrespective of their levels (Komolafe & Yara, 2010).

However, none of the studies provided recommendations to solve the problem of connector usage and how coherence could be achieved in writing. This further corroborates the
assertion that cohesion, despite its importance for adequate student writing, continues to receive little attention by Nigerian English teachers. A compulsory service course for all students in Nigerian tertiary institutions is ‘Use of English’. According to Bamgbose (1997), the main purpose of this course is to ensure that students are linguistically competent at the university level. It is a module designed to enable students obtain optimal benefits from their various disciplines, and to use the extensive literature in their various fields of study optimally. As observed by Opara (1990) cited in Adewumi (2012), the use of English programme is not limited to self-improvement in academic performance, but also extends to the enhancement of communication skills, the benefits of which spills over to their chosen fields of study. It is designed to enable students to improve their ability to communicate experiences, to articulate ideas and concepts, and to interact meaningfully not only with the selected few in their field of study, but with people in general.

However, even in the use of English modules, I observed the various aspects of cohesion and coherence are taught separately. I examined the use of English course materials at three Nigerian universities: the University of Ilorin, the University of Jos and the National Open University of Nigeria, to establish how cohesion and coherence are taught to advanced learners. In the University of Ilorin’s ‘Use of English’ course material, chapter 8 gives a review of Basic English Grammar. Coherence is briefly discussed under Properties of an English Sentence, for approximately half a page, while pronouns, adverbs, determiners and conjunctions are discussed as sub-sections under Word Groupings in English (p. 117-139). In the University of Jos’s use of English course material, coherence and clarity are discussed briefly with Paragraphing in chapter 4, while pronouns, adverbs, determiners and conjunctions are discussed under Lexis and Structure in chapter 3. The National Open University of Nigeria’s ‘Use of English’ course material is divided into two parts, GST 101 and GST 102. GST 101 focuses on listening and reading skills, while GST 102 focuses on the skills of writing, speaking, grammar and usage. In Module 1 (Unit 1) of GST 102, the notions of Topic Sentence, Coherence and Transitional Devices are discussed as sub-sections under Writing Paragraphs (in more depth compared to the other course material examined above). However, there is no section on other cohesive device groups in the course material.
From the course material examined, I observed that none have any section or sub-section on ellipsis, substitution or lexical cohesion, neither do they have reference and conjunctive cohesion discussed together as cohesive devices. As observed, there is no coordinated teaching effort for cohesive devices and their contribution to the overall coherence of written texts, even at this advanced level of education. This seems to be a phenomenon which extends beyond Nigerian universities. Nkemleke (2011) in his general introduction on academic writing in Cameroon English, observes that writing courses across universities are usually focused on usage problems in grammar (use of tense, aspect and so on), vocabulary (use of formal/informal words), punctuation and mechanics (use of commas, semi-colons, brackets, italics). It seems that scholars believe that the problem of cohesive writing will be solved automatically if basic grammar rules and writing skills are taught. Based on available research into student writing, this assumption is flawed. Cohesion and coherence in student writing remains a major problem, as indicated by reports of assessment of the quality of student writing at the tertiary level of education, despite the continuous teaching of the basic grammatical rules of English.

Furthermore, most of the abovementioned research approached learners’ writing by focusing on language skills, and it is evident that competence in basic language skills, e.g. the rules of grammar, is not enough in the production of a good quality text. It seems teachers of English find it easier to teach the sentence-level grammatical features of writing rather than teaching the more complex extended discourse features which have to do with cohesion and coherence of written text. This might account for the dominance of research focused on language skills in the writing process. Considering the continuous poor quality of learners’ writing, these approaches have not provided specific directions for the teaching of writing that will enhance the production of good quality writing by the learners. It is therefore important that a corpus-based examination of learners’ writing is done to address questions concerned with extended discourse, and to see what can be done to improve the writing quality of the learners and enable them to write cohesively and coherently.

The place of feedback in ESL remains a significant instrument in the improvement of learner performance in the target language. In his work on standardised feedback on ESL students’ writing, Louw (2006) also acknowledges that the standardised feedback tags used for issues
of coherence, paragraph structure and textual cohesion were less effective and needed revision and re-evaluation. Considering that the above mentioned areas of students’ writing are critical to their successful production of good quality texts, it is believed that more work needs to be done towards improving the quality of cohesion and coherence in students’ writing.

It is against this background that this study intends to examine cohesion in written English essays of Nigerian tertiary learners. The cohesive devices of reference, conjunctions, lexical cohesion, ellipsis and substitution will be examined in relation to coherence in their writing. The study will attempt to analyse the learners’ texts to see why their writing is said not to be coherent, how they use the cohesive devices in their texts and how these contribute to the coherence of texts. The study also intends to use the linguistic concept of contrastive rhetoric as a possible framework to interpret potential alternative composition styles and their implication for the future teaching of cohesion and coherence. It is hoped that the outcome of this study will help develop an understanding of the cohesive qualities of learners’ text and their implication for enhancing coherence. This knowledge can aid language teachers to improve the teaching of ESL writing.

This research is corpus-based, and it is hoped that the research results will offer a more accurate analysis of Nigerian learners’ language than those currently available. This is based on the observation that the data sources of previous studies on learners’ writing are mostly sampled essays from either a class or group of learners from single tertiary institutions. Most of the studies made use of limited examples in their analysis and it might not be adequate to use the result of analyses based on essays of 23 learners as seen in Wayar’s (2008) research, or 70 in Olateju’s (2006) research, and many others to form a generalised opinion of millions of learners’ writing in the country. Some of the results might be influenced by the teachers’ intuition or might be impressionistic in nature, since some of these scholars analysed the writings of the students they teach. This study’s use of a corpus linguistics method is imperative, since the corpus data is more objective and can easily be verified and shared by other researchers. It also provides the possibility of total accountability of linguistic features, i.e. the analyst is able to access and view all entry words/linguistic features from the corpus, not just selected ones. This can serve as a theoretical resource for researchers and language
teachers (Svartvik, 1992:8-10; Lindquist, 2009:9; McEnery & Xiao, 2010:11; Barker, 2010:1).

A corpus-based linguistic data analysis method will also enhance a more realistic and accurate investigation into the writing problems of the learners. This will in turn enable more precise suggestions relevant for classroom practices to more accurately help meet the language needs of the learners. It is also important to state that at the onset of this study (June 2011), the corpus-linguistic in Nigeria was still at the basic stage. The compilation of the ICE-Nigeria component of the International Corpus of English (ICE) was ongoing. A visit to the Université catholique de Louvain’s (UCL) website, which consists of a list of learner corpora around the world compiled by the Centre for English Corpus Linguistics (CECL), indicated that there was no available corpus from Nigeria or any West African Country (The UCL website is a very important resource on learner corpora). Nigeria’s name appeared under countries whose corpora were still under compilation. This study will thus be contributing to the country’s corpus compilation because it aims to conduct a corpus-based analysis of the learners’ writing. In this regard, the study would be pioneering because it would be one of the first corpus-based studies of Nigerian learners’ English writing.

1.3 RESEARCH QUESTIONS

This study addresses the following research questions:

1. How do Nigerian learners, who are ESL learners, achieve cohesion in written texts?

2. How is cohesion related to coherence in the learners’ texts?

3. In what areas do learners show underdevelopment in their usage of cohesive devices compared to the standard norms?

1.4 RESEARCH OBJECTIVES

In order to answer the research questions, a corpus-based analysis of learners’ essays was carried out to see how cohesive devices are used by learners and how they account for cohesion and coherence of learners’ text. Specifically, the objectives of this research were:
1. To compile a 200,000 words Nigerian Learner English Corpus.

2. To examine if and how learners achieve cohesion in their texts.

3. To examine the relationship between cohesion and coherence in learners texts.

4. To identify areas where learners show appropriate development and underdevelopment in their usage of cohesive devices compared to the standard norms and where they can improve.

1.5  RESEARCH METHODOLOGY

1.5.1  CORPUS LINGUISTIC APPROACH

This study adopted in general, a corpus-linguistic approach. Gries (2009:7) refers to corpus as ‘a machine-readable collection of (spoken and written) texts that were produced in a natural communicative setting, and the collection of texts is compiled with the intention (1) to be representative and balanced with respect to a particular linguistic variety of register or genre (2) to be analysed linguistically’. This is a method of research based on the use of electronic collection of naturally occurring texts or corpora. This study specifically adopted a learner corpus-data approach to the study of learners’ language use. According to Granger (2002:4), ‘The learner corpus research […] aims to provide improved description of learner language which can be used for a wide range of purposes in foreign/second language acquisition research and also to improve foreign language teaching’.

The corpus-based approach enabled the quantitative description of language use which in turn enhanced the qualitative interpretation in the analysis. This was complemented with a qualitative interpretation. A comparative analysis was carried out using the learners’ corpora to examine how learners achieve cohesion in texts, examine the relationship between cohesion and coherence in their texts as well as identifying areas where learners show underdevelopment in their usage of cohesive devices compared to the standard norms and where they can improve.

Contrastive rhetoric was also used as part of the interpretative framework of the analyses to help understand the differences in the choice and usage of cohesive devices by the learners in
their writing, which may not necessarily be as a result of deficiency or underdevelopment, but due to cultural differences. The result of these interpretations potentially enables a better understanding of this phenomenon in general and allows for the presentation of relevant pedagogical recommendations. Thus the corpora were instrumental in achieving the objective of this research.

1.5.2 LITERATURE REVIEW

A review of existing literature is undertaken in Chapter 2 in order to understand the field of cohesion and coherence, the teaching of writing in an ESL context, and how L2 learners develop writing skills. This helps to develop operational definitions and to create a synthesis that enhances a deeper understanding of the underlying issues that has necessitated this research. It also helps in the development of the theoretical framework that was used in the study. The developed framework was used in the annotation of data and the data analysis. The chapter also reviews previous insights into research that has been conducted by scholars on learners’ writing in Nigeria, as well as the problems experienced by the learners in writing as identified by these scholars. This serves as theoretical background knowledge for the research.

1.5.3 DATA COLLECTION AND ANALYSIS

The data for this study was sourced from the Nigerian Learner English Corpus (NLEC) and The Louvain Corpus of Native English Essays (LOCNESS) which is a corpus of native essays of British and American students. The Nigerian corpus is an ESL corpus while LOCNESS is an ENL (English as Native language) corpus. The choice of using the LOCNESS as comparative corpora is influenced by the fact that Nigeria’s English is tailored after the British English variety. This is because the country was formerly colonised by the Britain. The English used in Nigeria shares the syntax pattern, orthography and some lexical details with the standard British variety, and also, some lexical details with the general American English variety. LOCNESS contains British and American students’ essays. This is a comparative study and I believe that a detailed comparison of Nigerian learners’ text with their L1 counterparts helped identify specific divergences in the use of cohesive devices and how it affects the coherence of their texts. The Nigerian Learner English Corpus was not in
existence at the onset of this study, thus steps were taken to compile the corpus under the ICLE guidelines. Four hundred and sixty seven (467) essays, with a total amount of 188,008 words, were gathered. All the essays were handwritten and time-limited. After all the essays were gathered, they were typed into word documents and numbered accordingly. The corpus contains Nigerian university students’ essays written in response to topics on argumentative and expository essays.

The ENL corpora were used as guidelines for the standard use of cohesive devices in learners’ writing. The data was then analysed to show the significance of the data and to retrieve the needed information from it. The analysis enabled the interpretation of how the usage of the devices influences cohesion and coherence of the texts. It also helped to draw conclusions and recommendations about the data. Corpus-linguistic data analysis methods were used in the study. The CLAWS7 part-of-speech tagger was used to tag parts of speech in the corpora. The method involved the grammatical tagging of the data and discourse level analysis. This was done based on Halliday and Hassan’s (1976, 1989) categories of cohesive devices and the contribution of other scholars like Brown and Yule (1983), Cook (1989), Renkema (1993), McCarthy (1991) and others. WordSmith, a computer program used by linguists as an automated extraction tool, was used to perform concordance searches, wordlist retrievals and frequency searches.

The following steps were taken in this study:

1. The NLEC, containing 188,008 words of advanced learners’ written text, was compiled using the ICLE guidelines.

2. The theoretical framework for the analysis using insights from the literature review was operationalised.

3. Tags were set for the data using CLAWS7.

4. Instances of reference and conjunctive cohesion from the corpus were extracted using WordSmith linguistic software.
5. The SAS (Statistical Analysis System) was used to perform a statistical analysis of reference and conjunctive cohesion using Chi-squares ($\chi^2$) to determine the most salient differences between Nigerian students’ writing and British students’ writing.

6. Paul Rayson’s log-likelihood calculator was used as a pairwise comparison statistical instrument to determine how significant the difference between two individual frequency scores is and to determine overuse and underuse of individual items with reference to reference and conjunctive cohesion. It also helped to identify potentially significant differences that required closer analysis.

7. An in-depth quantitative and qualitative analysis and discussion of the extracted reference and conjunctive cohesive devices were carried out.

8. Sample data, containing 20,000 words each, were generated from LOCNESS and NLEC respectively by using Stat Trek’s Random Number Generator (http://stattrek.com/statistics/random-number-generator.aspx)

9. Instances of ellipsis, substitution and lexical cohesion were extracted manually from the sampled data.

10. Paul Rayson’s log-likelihood and effect size calculator for corpus frequencies was adapted for the analysis of ellipsis, substitution and lexical cohesion to establish the degree to which the differences between the two groups were significant and to have the bases for determining overuse and underuse.

11. An in-depth quantitative and qualitative sample analysis of ellipsis, substitution and lexical cohesion from each corpus were conducted.

1.6 STRUCTURE OF THE THESIS

The thesis consists of six chapters. Chapter 1 presents the general introduction and contextualisation of the study. It discusses the rationale for the study, stipulates the research objectives and questions and presents a summary of the research methodology.

Chapter 2 presents a comprehensive review of existing related literature that helps to develop operational definitions and create a synthesis which enhances a deeper understanding of the
underlying issues that necessitated this research. It also helps to develop the theoretical framework used in the annotation of data and in the data analysis.

Chapter 3 focuses on the methodology of the research. The research design is discussed to give a general outlook of the research method. The CLAWS7 part-of-speech tagger and WordSmith Tools 5.0 are the major instruments used to extract and analyse the data for the study. The research instruments are specified and discussed. The data collection procedures as well as the description of the development of the Nigerian learners’ corpus are presented. The different aspects of the quantitative and qualititative analysis procedures, including the statistical procedure and the sampling methods are also presented.

Chapter 4 focuses on the statistical analysis of reference and conjunctive cohesion. The SAS (Statistical Analysis System) software is used for the statistical analysis. The quantitative analysis is done first, thus the analysis is presented in tables. The frequency procedure table is presented first, followed by the statistics table and then the bar graphs. The interpretation and discussion of results are then presented together with the qualititative analysis.

Chapter 5 focuses on the analysis of ellipsis, substitution and lexical cohesion using a sample of 20,000 words each from LOCNESS and NLEC respectively. The instances of ellipsis, substitution and lexical cohesion were manually identified and extracted. Paul Rayson’s log-likelihood calculator and effect size calculator is used for the statistical analysis. This is followed by the discussion and interpretation of the findings.

Chapter 6 is the concluding chapter and provides a summary of the overall conclusion, highlighting the research findings. The significant contributions of the study are identified, the pedagogical implications considered and recommendations for classroom application are given. Lastly the limitations of the research are evaluated and possible future research avenues are suggested.
1.7. CONCLUDING REMARKS

The underlying objective of this research was to carry out a comparative analysis of cohesion in Nigerian tertiary learners’ and their native English counterparts’ writing. This involves the understanding of how Nigerian learners, who are ESL learners, achieve cohesion in written texts in comparison to L1 learners. It also facilitates the unearthing of areas where Nigerian learners showed underdevelopment in their usage of cohesive devices compared to the standard norms and areas where they needed improvement. This knowledge, I believe, will positively impact the teaching and learning of English language at the tertiary level of education in the ESL context.
CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a comprehensive review of relevant literature in order to develop operational definitions and create a synthesis of vital concepts. This is necessary to gain a deeper understanding of the underlying issues that underpin this research. In addition, this literature review also helps in the development of the theoretical framework used for the data analysis.

This chapter is divided into seven sections. Section 2.1 gives the general introduction to the chapter. Section 2.2 focuses on the review of literature on English as second language (ESL) learners and academic writing issues. Section 2.3 examines the position the English language occupies in West African countries in general including a particular focus of its position in Nigeria. Furthermore, the section also explores reasons that account for the prime place English continues to enjoy as the language of instruction in the education of these countries. Section 2.4 gives a summary of corpus-based research on Nigerian English. Section 2.5 focuses on student writing in Nigeria, reviewing previous insights of research conducted by scholars on students’ writing in Nigeria, especially at the undergraduate level. Section 2.6 gives an in-depth discussion on the concepts of cohesion and coherence and their importance and relevance to this research. Consequently, section 2.6 also reviews the various studies of cohesion in student writing. Section 2.7 follows, with the discussion of contrastive rhetoric and its relevance to the understanding of the different rhetorical patterns observed in L2 writing. Contrastive rhetoric forms a part of the interpretation framework for the research analyses. The theory helps to understand the differences in the choice and usage of cohesive devices by learners in their writing that might be a result of L1 influence. Section 2.8 gives the concluding remarks on the chapter.
2.2 ENGLISH AS SECOND LANGUAGE (ESL) LEARNERS AND ACADEMIC WRITING ISSUES.

2.2.1 INTRODUCTION

This section presents the discussion of literature on English as second language learners and issues relating to academic writing. The literature is examined in three sub-sections: section 2.2.2 examines academic writing in ESL classroom and the pertinent issues at the heart of successful teaching and learning of the processes required for L2 learners in academic writing. It further explores issues relating to academic writing such as writing instructions and practices, the importance and effectiveness of feedback, the role and relevance of revision and interaction among learners and the important issue of raising learners’ awareness of the target audience expectation. Section 2.2.3 examines the issue of ESL writing problems. It looks at the various areas of writing problems of L2 learners as identified by scholars. Section 2.2.4 focuses on academic writers’ identity and role in discourse. It examines how academic discourse context requires L2 learner writers to take up a certain identity and roles in order to meet the expectation of their target audience.

The review of the literature on English as second language learners and academic writing issues is pertinent to the focus of my study which is the use of cohesive devices to enhance cohesion and coherence in the writing of Nigerian advanced learners’ who are ESL learners. The review will help to situate my research in the context L2 learners’ requirements to achieve successful writing in English language.

2.2.2 ACADEMIC WRITING AND ESL LEARNERS

Scholars have given different definitions of writing. In all these definitions, writing skill aims to obtain goals such as: effectiveness, comprehensibility, clarity, coherence, etc. Lewis (2012) described writing as a skill that enables an individual to write lucidly, coherently and grammatically, or to handwrite legibly with ease and speed. Brown (2001:336) sees writing from a different perspective focusing on the thinking process of the writer. He states that writing is a thinking process and that when a writer produces a final written product, he does
so based on his thinking process. Brown also quotes Elbow (1973:14) as saying, ‘writing should be thought of as an organic, developmental process […] not as a way to transmit a message but as a way to grow and cook a message’. Irrespective of the perspective writing is viewed from, writing involves the conscious use of words, signs or symbols in written form to communicate the writer’s intended message to the reader.

Writing involves composing, which involves the ability to either tell or retell a piece of information in the form of a narrative or description; or to transform information into a new text as is done in expository or argumentative writing. In the words of Myles (2002:1), ‘the ability to write well is not a naturally acquired skill; it is usually learned or culturally transmitted as a set of practices in formal instructional setting or other environments’. Writing is often referred to as a complex process because it requires a great deal of interaction between the writer’s knowledge/proficiency in the target language; experience and skills, their culture and identity, together with the norms and cognitive demands of the task at hand (Archibald, 2001:153; Matsuda et al., 2009:461). Hyland (2002a) believes the ability of writers to construct a credible representation of themselves and their work as well as align themselves with the socially shaped identities of their communities is central to pragmatic competence.

Writing requires the readers or the audience to understand and interpret what has been written. When writers write, irrespective of whether it is in the L1 or L2, they bring to the task their knowledge of the writing process and the strategies they will use in composing a text. Writers use their knowledge of the subject matter and plan for how a text can be ordered and structured for presentation. They also use their knowledge of the product of writing, the formal structure of language and discourse as well as the construction of texts. Writers make use of their knowledge of the situation within which the writing takes place in addition to its social and professional context. Furthermore, how the audience is affected by the text and the purpose thereof, its genre and how it relates to other texts in the field are also considered. Moreover, writers use their experience concerning the expectations of the reader within the discourse community and of the forms, social contexts, genres and expectation of the reader’s background culture (Archibald, 2001:154).
The highly demanding process of writing requires a number of skills and conventions like organisation in the development of ideas and information, a high degree of accuracy in choosing the right words so that there is no ambiguity of meaning, and also the right use of complex grammatical devices to focus and emphasise ideas. This multidimensional skill can create problems for students, especially when writing in an academic context (Matsuda et al., 2009:461). According to Hyland (2009:vii), communication is crucial to the work of academic communities; from both the scientific progress’ and the individual academic’s or student’s point of view, who either seek to make a name or pass a course. Countless students and researchers must gain fluency in the conventions of academic discourse to understand their disciplines, establish their careers and to successfully navigate their learning. In the case of students, the literacy demands of the academy and the characteristic and changing forms of disciplinary-specific communication have to be met. These criteria are attainable by learning to use language in new ways (Hyland, 2009: ix). For most second language writers, coming to terms with these literacy demands of academic writing might be more complex than for their L1 counterparts.

Academic writing continues to evolve as a central topic in applied linguistics and continues to remain an area of lively intellectual research and debate. Its complex, multifaceted nature seems to constantly evade adequate description and explanation. Many forms of enquiry have been summoned to help clarify how writing works and how it should best be taught (Hyland, 2002c:1). In the second language context, research into the academic writing of students at various academic levels, which began as far back as the 1980s, continues to receive ample attention by scholars worldwide. At the undergraduate level, which is the interest area of this research project, a lot of research has been done to help understand, explain and improve the proficiency level of this advanced group of L2 student writers. Leki et al. (2008:28) observed that the bulk of research on L2 writing has explored the undergraduate context in North America and worldwide. Most curricular decisions and innovations, examination of texts, exploration of writing strategies and difficulties have been directed towards this population.

academic writing. The insights from these studies have helped to promote the understanding of the pedagogical needs of L2 students’ writing. Academic writing is often distinguished by its absence of explicit appraisal and attitude; it is, nevertheless, clearly structured to evoke affinity and engagement. Researchers have revealed that academic writers use language to acknowledge, construct and negotiate social relations. The ability of writers to offer a credible representation of themselves and their work, by claiming solidarity with readers, evaluating their material and acknowledging alternative views, is a defining feature of successful academic writing (Hyland 2004:5-6). The most important characteristics of academic writing as identified by Hinkel (2003:13) include the learners’ ability to do the following:

- Organise writing to convey major and supporting ideas.
- Use relevant reasons and examples to support a position.
- Demonstrate a command of standard written English, including grammar, phrasing, effective sentence structure, spelling, and punctuation.
- Demonstrate facility with a range of vocabulary appropriate to the topic.
- Show awareness of audience needs and write to a particular audience or reader.

The learners’ achievement of the above-mentioned skills, or lack thereof, determines the level of successful writing especially in the academic community. Starfield (2004:79) believes successful students seem to be those who can negotiate the complex inter-textuality of academic texts in addition to managing the pedagogic demands. However, meeting the aforementioned demands could be a difficult task for learner writers, especially for those in the second language situation. It has also been observed that limited knowledge of vocabulary, language structure and content can inhibit L2 writers’ performance. Besides that, teachers too face a great challenge to teach these skills and conventions as students may at times find them confusing and difficult to understand. It is therefore central to writing instruction that the knowledge and skills that make students better writers are taught and that novice writers make progress as a direct result of the instruction they receive. Instruction in writing should be aimed specifically at improving students’ proficiency level. However, as observed by Leki et al. (2008: 80), there have been surprisingly few research-based descriptions of L2 writing classroom instruction.
Writing instruction, especially in the ESL classroom situation, has been identified as a viable tool in achieving the standard proficiency level in writing. Studies by Connor and Farmer (1990), Cumming (1992), Yeh (1998) and others have pointed toward the value of instructors combining regular writing practice with explicit instruction on text forms and composing processes and individualised responses to written drafts. Instruction in writing should affect students’ accuracy in their use of the target language and should also affect the range of choice of structure and vocabulary available to them for use in writing. Writing instruction should afford students the opportunity to participate in transactions with their own texts and the texts of others. By guiding students towards a conscious awareness of how the audience will interpret their work, students learn to write with reader sensitivity (Grabe & Kaplan, 1996). Hyland (2002c:80) also opined that successful writing instruction requires an awareness of the importance of cognitive and motivational factors, which means teachers should provide relevant topics, encourage cooperation with peers in planning and writing tasks, and incorporate group research activities of various kinds.

Available literature suggests several instructional practices that may help L2 learners of English attain the competencies of academic writing. Different theoretical orientations tend to focus on different aspects of L2 writing competencies and emphasise the importance of learning and teaching L2s in different ways (Cumming, 2001; Hyland, 2002c). Three instructional practice orientations, among many others, have been established: text-focused instruction; process-focused instruction; and sociocultural instruction. Text-oriented instruction practice sees L2 writing development in terms of the features of the texts that L2 learners produce. The theory holds that in order for L2 learner writers to be able to write effectively, they need to learn the orthography, morphology, lexicon, syntax, as well as the discourse and rhetorical conventions of the L2 (Buckwalter & Lo, 2002; Grant & Ginther, 2000).

Process-focused instruction theory believes L2 teachers can help students become more competent L2 writers by describing and modelling for them the processes and strategies that underlie effective writing (e.g., generating ideas, planning, drafting, and revising) and providing them with feedback on their performance until they are able to apply these processes and strategies independently and flexibly in relation to their goals and task
The sociocultural instructional theory sees writing development as the learning of the genres, values, and practices of the target community. This research emphasises the role of context and audience in learning L2 writing. According to sociocultural instructional theory, proficient L2 writers are those who can ‘act effectively in new cultural settings’ (Hyland, 2002c:60). Such writers go through a socialisation process in which they learn the values (i.e., how to see, value, and do things), expectations, knowledge, and genres (i.e., what, how, and why to write) of their target communities, whether it is professional or academic (Parks & Maguire, 1999; Spack, 1997). However, it has been argued by scholars that text-oriented instruction and process-focused instructions are more effective when combined (Ferris & Hedgcock, 1998; Hyland, 2002c; Myles, 2002; Yeh, 1998).

Instruction in the processes of composition should also have an effect on the students’ ability to reflect on their writing and to produce more effective and appropriate texts in the target language. The potency of this notion is confirmed by the studies of Connor and Farmer (1990), they indicate that teaching second language writers’ topical structure analysis as a revision strategy had a positive effect on the clarity of focus in their final texts. Akyel and Kamisli (1997) also point to the effects of EFL writing instruction on composing in both first and second language. They express that students use similar composing strategies in both their L1 and L2 and that writing instruction in the L2 had a positive effect on both their writing process and on their attitudes to writing in the two languages. Sengupta (2000) also described the effect of giving instructions in revision strategies to writers of English as a second language. She opined that explicit teaching of the strategies had a measurable effect on the students’ final draft. Instruction should also provide students with language input, writing and feedback on their previous writing.

Louw (2006:9) established the important role feedback plays as one of the most common ways a teacher/lecturer can provide input. When students’ errors are not corrected and necessary feedback is not given, a long/short term negative impact on their writing could be experienced. Without significant feedback on errors, improvement in writing may not take place. Hyland (2003:218) also stated that feedback on errors can improve students’ writing in
the short term. Researchers have found that feedback is important in supporting learners at all learning levels. Feedback, among other things, assists learners to improve their thinking and rewriting process. Hyland (1998, 2000) also pointed out the valuable effects and responses to feedback in L2 students writing. Sze (2002) also observed that written feedback corresponded with more revision and perpetuated to high-level revisions when students practise writing independently. Students should also be encouraged to analyse and evaluate feedback themselves for effectiveness. Williams, J.G. (2003:1) postulated that teachers need to develop more systematic and consistent forms of feedback that take advantage of the process approach and make it clear to students what the feedback means and what they are to do with it. Teachers need to familiarise and train students in how to effectively use the feedback in order to make gains in their proficiency and competence as English writers.

Myles (2002:13) opined that the effectiveness of feedback may depend on the level of students’ motivation, their current language level, their cognitive style, the clarity of the feedback given, the way the feedback is used, and the attitudes of the students toward their teacher and the class. Ferris and Helt (2000) argued that it is important for error feedback to be used together with grammar instruction and strategy training so that students will learn to edit their own writing independently. Teachers also need to consider how and when to provide feedback. It is of great importance for writing teachers to provide feedback on work in progress to help students understand how they can perform the writing task (Hyland & Hyland, 2001; Williams, J.G. 2003). This feedback should neither be so detailed that it overwhelms L2 writers and discourages substantive revision, nor so sketchy that it leads to surface text modifications only (Myles, 2002). Studies pointing at the usefulness of feedback in writing classroom include Fathman and Whalley (1990), Ferris (1995, 1997), Ferris and Helt (2000), Lalande (1982), Lee (2003) and Polio et al. (1998). However, there are also researchers like Cohen (1987) and Truscott (1996, 1999) who question its benefits.

Revision is another very important factor in the writing process. It is a demanding task that students often try to avoid. It involves the definition, evaluation, strategy selection and modification of text in the writing plan and the ability of students to analyse and evaluate the feedback they receive on their writing. Kobayashi and Rinnert (2001) observed that explicit instruction played an active role in students’ essay writing revisions and their use of correction strategies. Revision can be carried out at different stages of students’ writing and it
has a positive effect on their proficiency level as observed by Kobayashi and Rinnert (2001), Sze (2002), Takagaki (2003), Yasuda (2004) and Zamel (1982, 1983). Chenoweth and Hayes (2001), for instance, found that fluency in writing increased as the writer’s experience with the language increased. As a result, they argued that in addition to guiding students to practice effective writing strategies, teachers need to give students many opportunities to practice L2 writing, so that processes such as lexical retrieval can become more automatic (e.g., see Myles, 2002). Williams, J.D. (2003) also suggested that writing teachers should attempt supporting and encouraging students to write frequently using writing workshops, where students are actively involved in researching, talking, and writing about texts.

Interaction and input also play important roles in the L2 writing process. Students’ writing ability may improve if they are exposed to a variety of genres of writing, such as articles, magazines, books, flyers, etc. By interacting with a number of different written texts, students may be enlightened with regard to the way words are structured. It can also help them become aware of different types of textual organisations, which can affect L2 students’ compositions positively. Studies by Cummings (1992), Riazi et al. (1996), and Yeh (1998) have documented the value of interactions in L2 writing classrooms and observed that it helps improve students’ writing proficiency level. Integrating reading with writing and encouraging students to read and write extensively in and outside the classroom can provide opportunities for practice, help raise students’ awareness about the conventions of L2 texts, and compensate for the often limited instruction time (Ferris & Hedgcock, 1998). The reading and writing tasks along with the activities writing teachers expose the learners to must be meaningful, relevant, and varied in terms of content and genre.

Also of great importance in L2 academic writing is the issue of students’ awareness about target audience expectations. L2 writing teachers need to consciously raise their learners’ awareness to the intended audience’s needs and expectations. Hyland (2002b:83), maintained that ‘effective writing instruction involves guiding students to an awareness of their readers, and the interactional strategies, background understandings and rhetorical conventions these readers are likely to expect’. Johns (1996:137) also emphasised the importance of raising students’ awareness about L2-speakers’ expectations of topic organisation and development so that students can produce coherent ‘reader-considerate’ texts. In the same line, Beach and Liebman-Kleine (1986) opined that teachers should encourage their students to think as,
rather than about, readers when writing and help them master L2 conventions concerning how to use others’ ideas and texts in one’s own writing, and develop schemata about readers and how readers read. This includes also raising students’ awareness and how these conventions differ across cultures (Casanave, 2004; Hyland & Hyland, 2001).

To assist students to understand and anticipate L2 readers’ needs and expectations, teachers can talk the students through the expectations of L2 audiences and how these expectations differ from those of readers in other languages such as those of the students. They can also ask students to research real audiences and to write for different audiences. L2 writing teachers need to support their learners by providing them with models, clear and specific learning goals, meaningful contexts to practice writing, carefully structured activities, clear presentation of materials, useful feedback, encouragement, and high standards of teaching and learning (Barkaoui, 2007; Dornyei, 2001; Hyland & Hyland, 2001; Williams, J.D. 2003). Notable success in the above mentioned support strategies in L2 writing classroom cannot be achieved without teachers’ positive attitudes and high but reasonable expectations for and from their students’ written texts.

The significance of good writing instruction practice, revision, feedback, practical interaction and input and target audience awareness to successful L2 writing has been established in the review above. These findings are clearly valuable to the focus of this study, as they are instrumental drawing the attention of L2 teachers and learner writers to the potential benefits of the use of the various cohesive devices in their writing. This knowledge can effectively reduce the gap between native and non-native speakers’ writing. In conclusion, the primary motivation for my research into cohesion and coherence of undergraduate writers relates to their impact on the overall academic success of L2 learners at the university. All the above-mentioned writing practices will enhance the quality teaching and learning of cohesion and coherence at the various levels of education.
2.2.3 ESL WRITING PROBLEMS

Different researchers have extensively documented the experienced problems of L2 learner writers, which has contributed to the understanding of such difficulties. After conducting research on EFL students, Leki (1992) found that though students could write grammar-based guided compositions, and even though they had a good knowledge of grammar, they still produced peculiar, non-English sounding sentences when asked to do any creative writing. Researchers have traced the L2 writing problems by taking into consideration the influence of L1, comparing skilled and less skilled writers’ writing, and analysing their composing processes and written text features.

Although strategically, rhetorically and linguistically, L2 writing is different from L1 writing (Silva, 1993), most of the L2 writing research has been closely dependent on L1 research. Making a comparative study of skilled and less-skilled writers of L1 and L2, Raimes (1985) and Cumming (1989) found that the writing behaviours of L2 writers were similar to their L1 counterparts concerning the matter of planning less as well as revising more at the word and phrase level. Emphasising the similarity between L1 and L2, Baroudy (2008) said that it is often found that expert L1 writers are more likely to have expertise in L2. The implication is that L2 writers’ writing skill is strongly influenced by their L1 writing skill.

By comparing skilled and less skilled writers, researchers comment that the reason for differences between skilled and less-skilled writers lies in their use of strategies and their composing process (Alam, 2007; Cumming, 1989; Hayes & Flower, 1980; Raimes, 1985; Bereiter & Scardamalia, 1987; Silva, 1993). According to these researchers, the L2 writers fail to attain success in writing because they do not use strategies and the major problems lie in their general writing processes.

Furthermore, Silva (1993) focused on the distinct nature of L2 writing. In order to understand the true nature of L2 writing, the composing processes and written text features of L1 and L2 writers were compared. He found that unskilled L2 writers did less planning (both at the global and local text levels), faced difficulty in generating material, often became unsuccessful as more time was spent on it and less useful material was generated. Furthermore, L2 writers had hardly set goals and found difficulties in organising materials.
Besides these issues, they frequently consulted the dictionary, showed more concern and difficulty with vocabulary, spent more time on writing but produced fewer words of written text. They rarely review, reread and reflect on their written texts. Even if they revised, they focused more on grammar than on the mechanics of writing. Consequently, L2 written texts were less fluent, shorter, exhibited more errors, seldom addressed the audience or reader, and were less effective. These written texts were marked with unnecessary or irrelevant detail and repetition of ideas. The L2 writers used more compound constructions and less complex sentence constructions in their written texts. They used shorter and vaguer words and their texts lacked lexical control, variety and sophistication.

Scholars like Cumming (1989), Raimes (1985), Victori (1999) and Zamel (1982) also compared successful and less successful writers. Victori used his think-aloud protocol study to compare skilled and less skilled L2 writers’ writing knowledge. He identified three main areas in which the students might find difficulty: person knowledge (i.e., motivation, self-concept and writing problems), task knowledge (i.e., text knowledge, concern for purpose; concern for audience), and strategy knowledge (i.e., planning ideas, organising ideas, evaluating and resourcing). Victori (1999:549) summed up that successful writers have, on the one hand, ‘a broader and complex view of their knowledge about writing problems (person knowledge), the nature and requirements of the writing task (task knowledge) and their own approach to writing (strategy knowledge)’. On the other hand, less successful writers’ knowledge about their L2 writing is simple, controlled and often inappropriate. He believes the problems of the L2 writers lie in their approach to writing. They lack metacognitive knowledge, i.e. lack awareness of the requirements and processes involved in successful writing and they also lack specific knowledge about L2 writing (Victori, 1999).

In the above-mentioned studies, one thing becomes clear, which is that successful writers differ from unsuccessful writers in their approach to L2 writing with reference to their use of strategies and their general writing processes. Overall, the identified ESL writing problems comprise difficulty in organising materials, difficulty in vocabulary, fewer worded texts, lack of revision, unnecessary details and repetition, lack of lexical control, variety and sophistication and lack of awareness of the requirements and processes involved in successful L2 writing. The focus of my study on the use of cohesive device to enhance cohesion will help to identify and explain some of the L2 learners’ writing problems in the areas of
avoidable lexical repetition, lack of lexical variety and sophistication. It will also help raise awareness of the necessary requirements for successful writing in the target language, which may be of use to writing instructors in guiding learners in their development.

2.2.4 ACADEMIC WRITERS’ IDENTITY AND ROLES IN DISCOURSE

Academic writing requires the writer to take a stance; students are expected to replicate dominant discourses as theirs, and individual students will find existing identity positions confirmed, challenged, reinforced or excluded as they partake in literacy conventions (Ivanič, 1998; Tapp, 2014). Hyland (2002a) refers to academic writing as an act of identity, which represents the writer and conveys disciplinary content. A writer’s identity in any text is created by and revealed through a combination of his or her many discoursal choices, which include textual and linguistic elements as well as stance and engagement elements, which are also referred to as interactional metadiscourse (Hyland, 2005a).

The capacity to develop and communicate a clear stance on a topic and to directly engage the reader in the text has been discussed extensively by scholars like Aull and Lancaster (2014), Hyland (2005b) and Wingate (2012). Through the considerate use of such interpersonal resources, a writer is able to explicitly convey his or her affective position toward the content and the reader, establish writer-reader rapport, and ultimately construct a text that is regarded as effectively persuasive. According to Hyland (2005a), these non-propositional features of texts are just as essential as the propositional content in constructing a cohesive, coherent, and compelling argument. Elsewhere, Hyland (1994:240) indicates, ‘Rather than being factual and impersonal, effective academic writing actually depends on interactional elements which supplement propositional information in the text and alert readers to the writer’s opinion.’

The context of academic writing allows for specific ways of making meaning which limits what language participants can bring from their past knowledge and experiences. The conventions can also be seen as an inventory of options which enable writers to actively attain an identity through discourse choices. Hence, the similarities and differences are intertwined in each other, and are both socially established in language. Writers invest in distinct standpoint and strive to validate the stance they have chosen (Wortham, 2001 cited in
When students write for academic purposes in their academic institutions, it is important to understand the conceptual terms of academic discourse community, academic writing, and academic writer identity. Generally, a community emphasises what is shared. The academic discourse community brings a set of beliefs and actions that assist members to shape a certain identity. Many scholars from the discipline of English have discussed the notion of academic discourse (Bartholomae, 1986; Elbow, 1991; Zamel, 1993). Their works point to the fact that the views expressed in academic discourse are expected to be objective and rational, as well as ideological, neutral, and impersonal. Hence, for learner writers to belong to the academic discourse community, they have to conform to norms of the community.

Academic writing is a collective social practice in the academic discourse community. When writing papers, academics are expected to produce knowledge, make claims, and reveal epistemic beliefs and institutional structures in ways recognised by the discourse community (Burke 2010). In academic writing, writers do not simply report findings or express ideas in some neutral, context-free way; rather, they employ the rhetorical resources accepted for the purpose of sharing meanings in a particular genre and social community. Writers have to select their words so that readers are drawn in, influenced and persuaded. The use of these resources, and the choices writers make from the available alternatives, signal who they are. The ways that writers represent themselves, and find themselves represented, by their rhetorical choices has been extensively discussed by Brooke (1999), Hyland (2002a, 2002b, 2005c) Ivanič (1994, 1995, 1998), Ivanič and Weldon (1999) and Tang and John (1999).

Hyland (2004a:12) explained that academic writers engage in the following writing practices while constructing knowledge:

- establishing the novelty of one’s position;
- making a suitable level of claim;
- acknowledging prior work and situating claims in a disciplinary contest;
- offering warrants for one’s view based on community-specific arguments and procedures; and
- demonstrating an appropriate disciplinary ethos and willingness to negotiate with peers.
Studies relevant to ESL writers’ identities and their experiences have been growing (Abasi et al., 2006; Canagarajah, 2003; Casanave, 2002; Fox, 1994; Hirvela & Belcher, 2001; Ivanič & Camps, 2001; Jarratt et al., 2006; Kramsch & Lam, 1999; Lu, 1987; Shen, 1989; Starfield, 2002). Several factors influence the construction of writer identity and the development of writing. The main concern among ESL writers is language proficiency, including grammar and vocabulary (Yang, 2006). In adopting the practices and discourses of an academic community, ESL learners have to adopt its perspectives and interpretations, view the world in the same ways and take on an identity as a member of that academic community. In sum, their discoursal choices align them with certain values and beliefs that support particular identities. The connection between cultural identity and writer identity has been said to be very strong. The previous literacy practices of ESL students, which are based on their native culture, may deter them from imagining an authoritative writer identity. Even though they are equipped with rhetorical conventions in their disciplines, they are not confident enough to be authoritative in their writing (Hyland, 2002b).

From the review above it is evidently clear that the role of the writer in academic discourse is very crucial to the success of academic writing. The writer’s position is that of the meaning maker who carefully constructs and communicates a specific message to the reader. He or she carefully considers ideas, chooses words and sentence structures to present and clarify meaning, use his/her knowledge of text organisation, arrangement and spacing in order to effectively construct text. The writer also carefully chooses structures and text form according to the audience and purpose for writing. He or she uses a variety of planning skills and thinking processes to write and represent ideas and thinks critically and creatively while experimenting with finding his/her author’s voice. The writer represents points of view, beliefs, values, perspectives, and interests and is required to respond thoughtfully to personally relevant issues or concerns, sometimes suggesting alternatives, taking action and critiquing or challenging messages of others. He or she also edits writing with attention to the effectiveness and/or persuasiveness of the message. Hence, the role of the writer in academic discourse is indisputably vital to both the reader and to the successful achievement of the communication goal of the writer.

Also of great importance to the success of academic writing is the issue of writer’s stance/author’s positioning. Writers can position themselves very close to their work by using the
exclusive personal pronoun *I* or distance themselves from their work by using third person personal pronouns (Maroko, 2013). It has been argued that the stance a writer assumes, reflects the ideology and epistemology of the discipline they come from (Stapleton, 2002; Tang & John, 1999). This assumption developed from the view that written academic discourse makes a rhetorical appeal to the reader, seeking to persuade them to accept the writer’s viewpoint rather than simply stating neutral facts (Gilbert & Mulkay, 1984; Latour, 1987; Myers, 1990). Yet, as observed by scholars, this area is still under-researched (Biber et al., 1999; Charles, 2006; Matsuda & Tardy, 2007; Tang & John, 1999). In fact, Hyland (2005a) also testified that the issue of writer stance is new in writing research.

According to Maroko (2013), ‘Writer stance is intertwined with the notions of averral and attribution’. With respect to averral, in academic writing, it is expected of writers to assume ownership or declare propositions in the text and thus take responsibility for their veracity, unless they are attributed elsewhere (Hunston, 2000). However, when an attribution is made, a proposition is credited to a source other than the writer, and responsibility is assigned to that person or entity (Hunston, 2000). It is the writer who chooses whether or not, when and to which sources to attribute propositions. But are such choices possible when the writers, arguably, lack adequate exposure to writer stance marking strategies? It is apparent that this issue of writer stance in academic writing remains a poorly understood field (Maroko 2013). It is not clear how learner academic writers should incorporate their own personal feelings, attitudes, value judgements, or assessments in the texts that they produce. Yet, the process of writing involves creating a text that is assumed to be recognised and expected by the reader, and the process of reading involves drawing on assumptions about what the writer is trying to do (Hyland, 2013). In fact, Hoey (2001) likens this to dancers following each other’s steps, each building sense from a text by anticipating what the other is likely to do.

Expatiating Cherry’s (1988) differentiation of ethos and persona in self-representation in written discourse, Tang and John (1999) suggested three main discourse roles people perform in communication. These roles assume a societal role (identities inherent to a person), discourse role (identities a person acquires by participating in a particular discourse community) and genre role (specific to a particular genre within the discourse community). According to Tang and John (1999) identities that encompass all three roles can be linguistically created in writing. For instance, when referring to the writer’s role in the genre
of academic writing, the writer performs the role of a guide who navigates the reader through
an essay, or acts as the architect, opinion holder, persuader etc., in academic essays. The role
of the writer consequently reflects in their choice of textual, linguistic and interactional
elements.

The review above gives an exposition to the significant relationship between writers’
identity/role in academic writing and the linguistic choice made to convey them. These have
considerable impact on L2 learner writers’ choice of words in their attempt to represent
themselves and to convey the intended message in their writing. The influence of their
discoursal choices is pertinent to them achieving the set goals and achieving cohesion and
coherence in their texts, which is the focus of my study. Hence, their use or non-use of some
linguistic elements is essential to constructing a cohesive, coherent, and also very importantly
presenting a compelling argument.

This sub-section has examined academic writing in the ESL context and issues prominent to
the development of good writing skills of L2 learners as identified by scholars in the field,
which are central to the background understanding of this study. It has also examined ESL
writing problems as well as the identity and roles academic writers acquire and play in
discourse. The next sub-section examines the ESL situation in West Africa in general and
then narrows down to the Nigerian context to examine its language situation and the position
of the English language in the education of its citizens. It further investigates why a good
level of proficiency attainment in the English language is continuously advocated for by
educationists in the country. Finally, it then discusses the undergraduate students’ writing
situation, reviews previous insights as well as the problems experienced by the learners in
writing as identified by previous scholars.

2.3 THE ENGLISH LANGUAGE IN WEST AFRICA/NGERIA

This section attempts to give an exposition on the language situation in most West African
countries, including the introduction, establishment and nurture of the English language. It
then looks at the position and role that the English language plays in the multi-lingual
situations of the West African countries as well as its role as the language of education. This
will help to understand the prominent position the English language occupies and the reasons
for the clamour for a standard proficiency level in the language. It then narrows down to
Nigeria, which is the focus area of this study, to trace the inception of the English language in
Nigeria. The role that the English language plays within Nigeria’s complex language
situation in general and specifically in the education system is then discussed.

2.3.1 ENGLISH LANGUAGE IN WEST AFRICA

British contacts with the West African Region date back from the 16th century through the
coastal areas of the West African countries. These countries, which are former British
colonies, include: Cameroon, Gambia, Ghana, Nigeria, Sierra Leone and Liberia (the country
where freed American slaves settled). Since then, the English language in West Africa has
undergone several changes that can be traced to the contact of English with native African
languages. This language contact accounts for the West African varieties of English (WAE)
spoken in these countries. Since the inception of the English language in the region, through a
mixture of forces such as the work of Christian missionaries before and during colonialism
and the colonial educational schemes of the British, it has undergone a process of
indigenisation, which is visible not only in the amount of native background language words
in WAE but also in speakers’ creative strategies within the English language itself. An
outstanding aspect of the linguistic atmosphere is the interesting interplay of languages, each
with a range of functions, serving the same population but in specific and sometimes
overlapping contexts (Anchimbe, 2006; McArthur, 2003).

The Multilingual situation in the countries impacts on their language policies and education.
The language of education in multilingual societies has always been a matter of concern. As
are very complex in Africa because of the multi-ethnic and multi-lingual situation’. The
situation is even more severe when the official language of the nation is different from any of
the indigenous languages. Most of these societies often find themselves facing serious
language problems. With these language situations, there is always a problem of the national
language choice and, as observed in the above countries and many others, the language of the
former colonial masters is then used as the lingua franca. In most African countries, the
English language comes handy in helping to solve this language problem.
The examination of the language situation in some West African countries shows the justification of the triumph of the English language. For example, Nigeria is a former British colony with an estimated population of over 160 million people and over 400 indigenous languages. Ghana is another former British colony with an estimated population of about 23 million people and they speak over 80 indigenous languages. Cameroon is also a former British and French colony with about 20 million people and over 250 indigenous languages. The common factor in these countries is that no indigenous language is dominant enough to emerge as the only official language. The complex multiplicity of ethnic groups and native languages in Africa is often reflected in the English language classroom. The English language classroom is a melting pot for the many ethnic languages and their speakers, who must now interact using a common but neutral language, English (Owu-Ewie 2006).

Thus the English language exists as the main official language or co-exists with other foreign or indigenous languages to operate as the lingua franca in these West African countries. The English language plays prominent roles in these countries’ day to day activities. It is the official language of government, administration, education, media, commerce, etc. The role that the English language plays in the education of these countries cannot be over emphasised. The language in education policy of most of these countries allow for the use of indigenous languages as the medium of instruction for the first three years of a child’s education, and the English language as the medium of instruction from primary four (grade four) to the tertiary level of education. However, over time there have been various debates on the appropriateness of these language policies in these countries as complaints of students being unable to speak and write ‘good’ English sentences by the time they complete the Senior Secondary School (High school). These reasons account for the prime place the English language continues to enjoy as the language of instruction in the education of these countries. However, conscious efforts are being made towards the achievement of the appropriate level of competence in the language at the various levels of education (Babatunde, 2001; Owu-Ewie, 2006).

Now that I have reviewed the language situation in West Africa to give a broader understanding of the role the English language plays in the countries, the review will now narrow down to Nigeria, which is the focus country of my study to enable the proper
contextualization of the roles and functions of the English language in the country and to help facilitate a better comprehension of the factors that motivated this research.

2.3.2. ENGLISH LANGUAGE IN NIGERIA

This subsection provides a detailed discussion of the factors that led to the introduction of the English language to Nigeria, its survival and nurture in the multilingual setting of the country, its eventual dominance over all the other existing indigenous languages in country as well as its impact on the nation’ development among many other factors and its establishment as the language of and language in education. Moreover, this subsection offers contextualisation of the study and enhances a deeper understanding of the underlying issues that necessitated this research.

The introduction of the English language to Nigeria is dated back to the 16th century with the arrival of missionaries and the return of freed slaves from Sierra Leone. Tomori (1981) cited in Babatunde (2000:105) gives an account of how English was introduced by the missionaries in 1842 in Badagry. Tomori (1981), nonetheless, acknowledges the settlement of English-speaking freed slaves and the ‘sporadic incursions of English slave traders’ along the West Africa Coastal Regions before then. The repugnant history of the English language due to its link to colonialism greatly explains the pessimistic attitude some Nigerians have towards its survival regardless of the pragmatic factors that make its survival and nurture expedient (Babatunde 2001).

The literature concerning the English language in Nigeria is extremely rich. Several scholars like Adegbija (1994), Alabi (1994), Akere (2004), Awonusi (2004), Babatunde (2001), Bamgbose (1971), Jowitt (1991), Ogunsanya (2009) and Ubahakwe (1979) have examined the introduction of the English language, its survival and nurture in Nigeria. The summary of their studies all agreed on the remarkable role the language plays in the complex Nigerian language situation. According to Babatunde (2001:106-107), when the English language was introduced to what is now called Nigeria, the colonial might and the Christian missionary activities enforced its supremacy, thereby enhancing its survival. The Christian settlers’ presence was felt everywhere they occupied and their interaction with the indigenous population was done largely through the English language. This, coupled with the presence of
liberated slaves (Saros) from the Fourah Bay College who functioned in the administration, commerce and clergy, enhanced the survival of the English language in Nigeria. The Saros’ impact was felt more because they were fluent black speakers of the English language who had no colour barrier in mixing freely with natives. They thus became the examples the indigenous people would desire to emulate. The ascendancy of the English language has been gradual and its propagation was enhanced in 1882 when it became a vehicle for training the much needed manpower.

In Nigeria today, the English language occupies an extremely important position as the nation’s official language. It is the language of education, government, communication (within and outside the country), mass media, business and commerce, religion, etc. Consequently, the government places a high premium on English in education (National policy on Education, Federal Republic of Nigeria, 2007). Thus, English seems to have come to stay in Nigeria (Adeyanju, 2009; Ogunsanya, 2009). It may even be safe to assume that it already is a Nigerian language as there is a growing demand for the acknowledgment of the Nigerian version of the English language referred to as ‘Nigerian English’. In the words of Babatunde (2001: IV), ‘The language is caught between maintaining its native structure, texture and components and surrendering to the nature of the terrain on which it is moving’. In the permanent contact existing between English and its host, the Nigerian environment, the language offers unique experiences. The situation can hardly be different as the entire world waxes into a global village owing to technological advancement. Ayodabo and Acheoah (2013) submit that with the increasing level of literacy in Nigeria, education remains a vital tool for measuring proficiency in English in the ESL context as Nigerian English represents Nigeria’s contribution to the continuous growth of World Englishes.

Education is believed to be the major key to creating, applying and improving ideas and technologies. It is important for sustaining the growth, development and productivity of any nation. The entrenchment of the English language in Nigeria, a factor of its history, the sociolinguistic terrain in Nigeria and the political expediency, make the question of the extent of its development to be of concern beyond the achievement of educational goals and objectives. English is recognised, predominantly, as a second language in Nigeria. The English language plays a prominent role in the Nigerian educational system. It is learned as a second language and it is used extensively in addition to the mother tongues. According to
Olajide (2010:195), how developed, integrated and focused a nation has been, is partly a function of her level of literacy. Hence, every nation desires full literacy that involves the two skills of reading and writing. Both skills are as evasive as they are rewarding, especially if they have to be acquired from a second language position, such as occupied by English in Nigeria.

For instance, Section 10, sub-section 5 of the Education Ordinance of 1882 cited in Babatunde (2001:107) states, ‘that the subjects of teaching shall be the reading and writing of English language, Arithmetic, and in the case of females plain Needlework. The Grammar of the English Language, English History and Geography, especially of the British Empire, may also be taught or not at the option of the teacher, provided that if taught, they shall be taught as class subjects’. These, among other factors, provided the essential nourishment for the growth and maintenance of the English language in Nigeria. Over time, a fairly good command of the English language became a measure of an individual’s advancement, especially when it became apparent that a western certificate was the principal access to all forms of prosperity. Other factors exerting their influence on the survival of the English language in Nigeria are the indigenous languages situation. The English language is operating in an extremely multilingual context; as such, the language serves as a useful tool for effective cross-cultural interaction in Nigeria. It is even on record that right from the establishment of provincial and regional schools, the language could not but flourish because of the situation of ‘languages in contact’ in these schools (Babatunde, 2001:109).

As Adeyanju (2009), Babatunde (2001) and Ogunsanya (2009) pointed out, the English language plays a dominant transactional role in in the country’s education. It is the sole medium of instruction in schools, in the second part of primary, secondary and tertiary. At the tertiary level, English is the medium of instruction for all awarded degrees with the exception of degrees in the indigenous languages such as Yoruba, Igbo, Hausa, etc. Within the school system, to enhance social interaction and coexistence among the students from the various language backgrounds across the country, the English language operates as an indispensable tool for communication even outside the classroom. The situation has not changed much today with over 400 indigenous languages co-existing in the country. It is also important to note the significant roles of the British Council, Nigeria, in ensuring the survival and
dissemination of the English language in Nigeria. These factors among many others have surely facilitated the survival and nurture of the English language in Nigeria.

Afolayan (1991:8) encapsulates the dominant nature of the English language in Nigeria in its functions as ‘an instrument of the total system of education, an instrument of individual and overall societal development’. The English language has been firmly and intensely incorporated into the national life of Nigeria. Its usefulness as ‘the primary instrument of Nigerian development’ has been long and generally recognised. Equally, it has been recognised that for proper intra-and international development to take place, Nigeria and Nigerians need education (the agent of development) and the English language (the instrument of development). It follows, therefore, that the failure of the English language within the Nigerian education system is a measure of the failure of Nigerians’ development and the causes of that basic failure deserve not only clear identification but also an effective solution (Afolayan 1995:115 cited in Babatunde 2001).

The above discussions has evidently shown that English language enjoys a pride of place in the Nigerian education system and the need for advanced learners to achieve a good level of communicative competence cannot be over-emphasised. This includes linguistic, grammatical and pragmatic competence in order for them to be able to use expressions to achieve desired communicative effect. There is therefore the need for the learners to have a conscious mastery of the mechanics of English language usage as much as possible in order for them to be fluent as well as accurate in their use of the language. Their output also needs to be presented in a cohesive and coherent way. This necessitated the need for this study to investigate how Nigerian advanced learners achieve cohesion in written texts and how cohesion related to coherence in their texts. The study also examines areas the learners show underdevelopment in their usage of cohesive devices compared to the standard norms. The outcome of this study can aid language teachers in the pedagogy of ESL writing and contribute to successful writing of L2 advanced learners’ writing.
2.4 CORPUS-BASED RESEARCH ON NIGERIAN ENGLISH

Nigerian English usage has long been subjected to inquiry from diverse perspectives. A number of these studies have been documented in various sections earlier in chapter 1 and in this chapter. Although some of the earlier studies were based on anecdotal evidence, latter studies have been more data driven, using different data analysing tools and methods. In the last five years or so, the use of corpus linguistics theory and method in analysing Nigerian English has been gaining momentum.

The compilation of ICE-Nigeria component of the International Corpus of English (ICE) began in 2007, however, the application of corpus linguistic theory and methods to Nigerian English usage began to appear in publications around the year 2012. The previous corpus studies on Nigerian English are presented in the table below in chronological order, including details of the author(s), year of publication, title, focus area and the corpus used for the studies. The summary helps to contextualize my study within the broad context of studies into the Nigerian English usage. Table 2.1 provides a summary of corpus-based investigation into Nigerian English usage.

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Focus</th>
<th>Corpus used</th>
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<tbody>
<tr>
<td>Esimaje, A.U. (2012)</td>
<td>A corpus-based lexical study of sermons in Nigeria.</td>
<td>Investigates those lexical items which are characteristic of sermons, in terms of types, frequency or usage.</td>
<td>A 4,816 words corpus of Nigerian sermons in English and 15,000 words corpora of sermons from the UK and America.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title</td>
<td>Summary</td>
<td>Corpus/Database</td>
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<tr>
<td>Daramola, A.</td>
<td>A lexicogrammatical study of the uses of ‘like’ in Nigerian English.</td>
<td>Demonstrates the observable increase in the use of ‘like’ and a corresponding decrease in ‘as’ by many Nigerian users of English.</td>
<td>ULCNE (University of Lagos Corpora on Nigerian English). Data produced by educated Nigerians of various disciplines and professions.</td>
</tr>
<tr>
<td>Jauro, et al.</td>
<td>The use of clause relations in Nigerian Television Broadcast media.</td>
<td>Investigates the use of clause relations in Nigerian Television Broadcast media.</td>
<td>The corpus consists of eight bulletins from 2 Nigerian television stations.</td>
</tr>
<tr>
<td>Esimaje, A.U.</td>
<td>Patterns of lexical collocations in sermonic texts.</td>
<td>Investigates lexical words association in sermons to establish types, patterns and behaviours</td>
<td>Nigerian Sermon Corpus (NSC) and British National Corpus Sampler (BNCS).</td>
</tr>
<tr>
<td>Fuchs, R. et al.</td>
<td>‘We just don’t even know’: The usage of the pragmatic focus particles even and still in Nigerian English</td>
<td>Investigates the usage of the pragmatic focus particles even and still in Nigerian English. A comparison of ICE-Nigeria and ICE-GB</td>
<td>The ICE-Nig. and ICE-GB component of the International Corpus of English (ICE).</td>
</tr>
<tr>
<td>Gut, U. &amp; Fuchs, R.</td>
<td>Progressive aspect in Nigerian English.</td>
<td>Explores the system of progressive aspect marking in educated adult speakers of Nigerian English, which has been claimed to differ distinctly from that of other varieties of English.</td>
<td>The ICE-Nig. and ICE-GB component of the International Corpus of English (ICE).</td>
</tr>
<tr>
<td>Authors</td>
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<tr>
<td>Adagbonyin et al. (2016)</td>
<td>A corpus-based approach to the linguistic features in Nigerian and American</td>
<td></td>
<td></td>
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</table>

Focuses on the stylistic analysis of the syntactic features and cohesive devices in the columnists’ use of language in Nigerian newspapers. Investigates the lexical features of the language used by various columnists in Nigerian newspapers. Investigates the use of discourse markers to relay information to readers in Nigerian newspapers. Investigates into the spoken English in Nigerian’s multilingual environment, and hybridized (acculturated) variants emerging among speakers. Explores the use of the progressive in Nigerian English in apparent time and investigates the influence of variables of age, gender, ethnic group and text category on its rate of use. Compares native and non-native variety, to help identify and understand the latter’s emerging and distinctive features. Demonstrates the viability of a corpus-based approach to the analysis of political. The corpus consists of five texts selected from different Nigerian newspapers. The corpus consists of five texts selected from different Nigerian newspapers. The corpus consists of four selected Nigerian newspapers. The corpus contains a 75-worded paragraph recorded reading by respondents. The ICE-GB and ICE-Nig. component of the International Corpus of English (ICE). The corpus consists of twenty downloaded election speeches. |
It is clear from the table that a number of studies have investigated Nigerian English usage using diverse corpora, however, none of the studies have focused on Nigerian students’ writing. Available literature indicates that several investigation into student writing by various scholars have been documented (see sections 1.1, 1.2.2, 1.2.3 and 2.5), however, the corpus investigation into Nigerian student writing has not taken place. Hence, the hoped that my research will offer a more accurate analysis of Nigerian students’ writing than those currently available, as well as bridge the present gap with regards to corpus analysis of Nigerian student writing.

This sub-section, together with the previous one, has examined the ESL situation in West Africa in general and the Nigerian context in particular. It has also examined the role that the English language plays in the education of the country, and why a good level of proficiency attainment in the language is important. Lastly, a summary of corpus-based investigation into Nigerian English usage was done. This is to enhance a good understanding of factors that motivated my study. The next sub-section focuses on the discussion of student writing, reviewing previous insights as well as the problems experienced by the learners in writing as identified by previous scholars.

2.5. STUDENT WRITING IN NIGERIA

Given the role that the English language plays in Nigeria, especially in educating the citizens of the country, it is understandable why a high level of proficiency is needed in the language. This section attempts to survey previous insights from research that has been conducted by

<table>
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<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Study Description</th>
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s oferee the insights of these scholars on students’ writing in Nigeria. These insights will focus on undergraduate students’ writing, the problems experienced in their writing and the factors responsible for these problems as identified by these scholars.

Over the years in Nigeria, learners’ performance in English language has been a source of worry to the school system and other stakeholders. At the tertiary level of education, which is this study’s focus, Adegbija and Ofuya (1998) lamented about the poor reading and writing skills among students at university level, which hinders their academic performance. Olajide (1991) found that, whatever their specialisations, Nigerian university undergraduates showed difficulty with reading and writing. He believes this is a problem that needs a radical approach in order to achieve significant improvement. Along the same line, Alebiosu (1997) asserted that most of the students in Nigerian tertiary institutions could not write well, which reflects in their overall academic performance and eventual career success.

Studies of Adesida et al. (2011), Ayankogbe (2015), Babatunde (2001), Bodunde and Sotiloye (2013), Mohammed (2015) and Olajide (2010) all pointed to the fact that learners’ essays, even at the tertiary level, show they still encounter problems such as poor writing ability and grammatical incompetence. Tinuoye (1991) complained that university students had problems with the correct use of articles and prepositions in their writing. Jowitt (2008) observed that considerable instability in writing remains during undergraduate years though it is less conspicuous than it was at secondary school. Yet, as observed by Adegbija and Ofuya (1998), Olajide (1991, 1999) and Rose (1991) reading and writing are fundamental to intellectual and national development.

Olajide (2010:197) postulated that the English language can be an extremely useful tool for enhancing the re-orientation and re-construction efforts of the country on the condition that it is properly taught at all levels of education in Nigeria. Current national problems like poverty, scientific and technological backwardness, revenue derivation and sharing, corruption, drug abuse, religious intolerance, pollution, and illiteracy can be tackled through reading and writing-related classroom activities in English, particularly at the advanced level of learning. These activities might influence the learners’ views on such problems and mobilise them for appropriate action. Moreover, the ability to read intelligently and write
clearly, correctly and coherently is the foundation upon which all the rest of learners’ academic education is undisputedly laid.

Several reasons have been given for the low level of performance being observed in the country’s learners’ use of the English language. Poor foundation of the English language has been cited as one of the reasons for the low level of literacy performance in Nigeria by Ajayi (2004), Ajila (2003), Ajayi (2004), Ajila (2003) and Idogo (2005). They also traced the sources of most of these problems to the primary school where the foundation for learning English as a means to inculcate permanent literacy and numeracy for effective communicative skill is weak. Idogo (2005) analysed the Nigerian Universal Basic Education Project (2003) and she asserts that Nigerian’s educational system has not met the objectives of primary education. Her submissions indicated that majority of schools are deficient in the teaching of the core skills as contained in the curriculum. The foundational skills enable students to write better and read well later in their education, if the foundation is well laid. Idogo (2005) further highlighted the goals of primary education from the Western Government Primary School Syllabus of 1955 to the published National Policy on Education (FGN, 2004), which declared that it is expected of primary school products to have a sufficient command of everyday English so as to enable them to read and write simple, sensible, well-constructed and clear grammatical English.

Another reason is the challenge that is inherent in the learning of a second language, such as the problem of mother tongue interference. Mother tongue interference in the Nigerian learners’ writing has been documented by Fema (2003), Oluwole (2008) and Sa’ad and Usman (2014). Most Nigerian learners come from environments where English is not the medium of communication in their homes and other social environments. Thus, their contact with the English language is isolated within the school environment. This greatly contributes to the poor learning of the English language right from the primary school stage. Fema (2003) was of the view that the major cause of English errors made by Nigerian learners can be attributed to the interference of the mother tongue on the English language. As Oluwole (2008) posited, mother tongue interference is at the heart of the problems hindering the acquisition and learning of English as the second language of Nigerian learners and this is evident in their writing. His investigation revealed semantic mistakes by learners which he linked to mother tongue interference. Sa’ad and Usman (2014) also indicated that mother
tongue interference is one of the major cause of poor performance in English language usage among Nigerian students.

Home environment factors have also been identified as affecting language learning in Nigeria by Ajayi (2004), Ayedun (2014), Olajide (2010) and Udida et al. (2012). The number of adults and siblings present in the home, how frequently and how well they use the English language in conversations, the interest and affection shown by the surrounding adults, and the communication facilities present in the home have implications for learner performance in the language. The learner that enjoys access to the radio, television, telephone, magazines, newspapers, and a family library is likely to speak, listen, read and write better than the one who does not. The latter would only rely on the limited opportunities given in the school environment to learn the skills (Olajide, 2010:197). In the same light, Ajayi (2004) submits that the home factor is a correlate of proficiency in English language. Udida et al. (2012) found that home related factors like socio-economic factors are strong predictors of the academic achievement of students in Nigeria. Ayedun (2014) also asserted that socio-economic status is a reliable yardstick that influences the achievement in reading comprehension of Nigerian students.

Aliyu (2001), Mohammed (2015) and Rasheed (2007) identify inadequate infrastructural facilities as another cause of poor performance in the acquisition of English in Nigeria. The particular challenges of infrastructural facilities to the education system includes: large and overcrowded class sizes, the non-existence of language laboratories, lack of chairs and tables in classroom. The lack of these facilities cannot allow for the proper learning of English language, which results in poor performance. Mohammed (2015) attributed these problems to the Nigerian learners’ inability to reach the essential level of proficiency in the English language. Rasheed (2007) also linked the problem to under-performance in the English language by Nigerian learners. Sa’ad (2007) is of the opinion that teaching and learning take place effectively when classes are moderate in size and the necessary teaching and learning materials are provided.

On the other hand, Adegbile (1999) identifies teachers’ choice of instruction method as one of the main factors responsible for the poor performance in students’ achievement in the English language. Iroegbu (1998) expressed the significant role that teaching methods play in
the teaching and learning of the writing process. Different scholars have viewed the issue of the teaching methods in teaching the English language in Nigeria. Aboderin (1990) cited in Komolafe and Iyara, (2010) and Iyagba (1983) are of the opinion that there is a need to improve on the methods of teaching English language in Nigerian schools. Furthermore, Adegbile (1996), Obemeata (1995) and Richards and Rodgers (1986) opined that the methods of instruction are probable causes, among others, of poor performance and achievement in English language usage. Among the solutions proffered by them are the need to have improved modern methods of teaching, the need to help students to improve their writing skills in English, and the need to teach grammatical structures better (Kolawole, 1997 cited in Komolafe & Iyara, 2010). In practice, scholars have commented on the fact that no single method can be viewed as the most appropriate method of teaching essay writing. However, applicable methods combination when and where necessary is believed to be the key to better performance.

The lack of qualified teachers (especially in the rural areas) to teach English properly, especially at the foundation phase of language acquisition, has also been identified by Mohammed (2015) as a big source of writing problems. Sa’ad and Usman (2014) pointed out that in some schools in Nigeria, other subject teachers are forced to teach English because the schools lack teachers who specialise in the English language. In this kind of situation, these teachers can never effectively teach, hence the poor performance. Adedokun, (2011) observed that poorly trained or untrained English teachers were employed to teach and prepare secondary school students for the school certificate examinations in English. This situation contributed immensely to the poor performance in English among secondary school students. Therefore, it is clear that inadequate qualified teachers in schools lead to poor performance in English.

Language teachers’ insensitiveness to issues of the Nigerian social and economic environment is another serious obstacle that has been identified which affects the English language learning in Nigeria as observed by Iyagba, (1983) and Komolafe and Yara (2010). Most teachers probably feel that social and economic problems, which are issues pertinent to learners’ educational achievement, should be left for the social scientists to address. However, it is evidently true that these factors play prominent roles in the performance of learners within and outside the classroom environment. It is believed that if language teachers
become mindful of the socio-economic situation of their learners and link classroom activities with national and international issues, the language learners’ performance in the English language might improve. Furthermore, language teachers could also employ a reward system for good learner performance.

Other scholars like Digha (2007) and Komolafe and Iyara (2010) believe grammar-related factors such as ineffective application of grammatical rules and concepts in writing (this includes ignorance of acceptable sentence patterns, inability to use adequate and innovative logical connectors and not writing coherently) are responsible for the deficiency observed in the writing of Nigerian students in English at the various levels of education. Komolafe and Iyara (2010) propagated that there is the need to teach sentence combining strategies in the schools as a means of developing appropriate writing skills among learners. The essence of the strategy is to enable learners to improve their writing skills. This, they believe, can positively affect learners’ performance in written expression (composition).

Furthermore, Adesida et al. (2011), Akere (1995) and Ogunsiji (2004) attribute the poor performance of students’ writing to poor levels of communicative competence in English as a second language. According to Adesida et al. (2011), the poor performance level is an indicator of students’ poor linguistic competence. This accounts for the students’ lack of adequate knowledge of grammar and vocabulary of the English language. Akere (1995) expressed the need for a more sustained support for programmes in English communicative skill enhancement among learners and teachers. Ogunsiji (2004) also suggested that communicative competence can be developed in ESL learners through situational and functional English language teaching. In order to improve students’ communicative competence in English language, there is the need to redesign the curriculum so as to intensify teaching and to be flexible in teaching the various linguistic components.

Another important cause of poor performance in writing is the negative attitude of students toward the learning of the English language. Students of tertiary institutions should strive towards achieving native-like competence in all aspects English. There is no doubt that General English Studies (labelled differently in different tertiary institutions in Nigeria, e.g. GNS, GES, GS) have helped students of tertiary institutions in Nigeria to have appreciable competence in English. But a major setback, as pointed out by Ayankogbe (2015), is the poor
attitude of such students towards the programme. The issue of learners’ negative attitude has also been discussed by Mohammed (2002) and Sa’ad and Usman (2014). Students show negative attitudes to the learning of the English language because they consider it foreign. Mohammed (2002) viewed students’ negative attitude in learning and the use of English as making language teachers’ task a difficult one indeed.

The above review of existing literature indicates a long list of factors ascribed to the deficiency of student writing in Nigeria. Efforts are being made by educationists, language scholars and other relevant authorities to improve the teaching and learning environment, processes and materials in order to facilitate improved performance of the Nigerian learners. However, due to the complex socio-economic situation of the Nigerian nation, some of these identified problems and responsible factors continue to plague the Nigerian education system and effectively the Nigerian learners. It is evident that students’ writing deficiency in English is of paramount concern to the teachers and the facilitators of teaching and learning in the Nigerian education system. This has led to many research efforts, which have been directed towards the factors responsible for these conditions and what could be done to rectify them. In an endeavour to solve the problems, attempts have been made to proffer solutions to these nagging problems.

In the process of reviewing existing studies in students’ writing in Nigeria, it was observed that most research focused on language skills in the writing process and that none of the studies presented recommendations to solve the problem of connector usage and how coherence could be achieved in writing. It was also observed that cohesion and coherence, despite their significant position in learners’ writing, continues to receive little attention by teachers of English in Nigeria. It seems that the scholars believe the problem will be automatically solved with the teaching of basic grammar rules. The problem of inadequate logical connector use, which enhances cohesion and coherence in learners’ writing, continues to be a major problem as indicated by quality assessment reports of student writing even at the tertiary level of education, despite the continuous teaching of basic grammatical rules of the English language. Overall, it has been observed that few studies have focused on the development of written expression at various school levels. It is logical, therefore, to say that writing has not yet been given its deserving attention by language researchers.
This sub-section has examined the issues pertinent to undergraduate students’ writing, reviewed previous insights as well as the problems experienced by the learners in writing as identified by previous scholars. The next sub-section of this chapter attempts to discuss the concepts of cohesion and coherence and their importance and relevance to the research problem. These concepts, which are central to this research, will help present a theoretical framework for the research and will be used in the annotation of data and in the data analysis.

2.6 COHESION AND COHERENCE

2.6.1 COHESION

Since the publication of *Cohesion in English* by Halliday and Hasan (1976), many studies have been conducted on the cohesion and coherence in English texts. The concept of cohesion arose out of the attempt to go beyond the sentence level to the combination of sentences and paragraphs. In essence, cohesion refers to the relations of meanings generated by joining clauses and sentences within a discourse. Cohesion encompasses the relations among the components of a discourse. The relations are principally signalled by certain grammatical and lexical features reflecting textual structure on the semantic level. These features neither constitute cohesion by themselves nor do they convey any meaning, but rather tell which words and clauses are related across sentence boundaries and therefore foster textual connectivity. It is important to note that though cohesion is a necessary condition for the creation of a text, it is not a sufficient condition. What creates a text is the totality of the textual or text-forming components of the linguistic system of which cohesion is only one (Olowe, 1988:1).

Halliday and Hasan (1976:4) state that the concept of cohesion is a semantic one; it refers to the relations of meaning that exist within the text, and that defines it as a text. Cohesion occurs where the interpretation of some elements in the discourse is dependent on that of another. The one presupposes the other, in the sense that it cannot be effectively decoded except by the recourse to the other element within the discourse. When this happens, a relation of cohesion is established, and the two elements, the presupposing and the presupposed, are thereby potentially integrated into a text. Halliday and Hasan (1976:5) further explained that cohesion is part of the system of a language. The potential for cohesion
lies in the systematic resources of reference, conjunction, ellipsis, substitution and lexical cohesion, which are built into the language itself. They further explain that, the organisation of text (which they term *texture*) is made up, in large part, of relationships amongst items in the text (some semantic, some grammatical) which they refer to as cohesive ties.

Cohesion also refers to the range of grammatical and lexical possibilities that exist in order to link an element of language with what has gone before or what follows in a text. This linking is achieved through relations in meaning that exist within and across sentences. Cohesion is limited to the specific, micro-local level of organisation between and within individual clauses, thus creating connections between parts. Some scholars have also defined cohesion in line of implicit relationship within the text. Carstens cited in Henning (2006:48) defines cohesion as that element in a text that leads to text effectiveness and readability and that it enables the text to function as a meaningful whole. Patricio (1993:7) also defined cohesion as ‘sticking together’ and that cohesion, as a textual function, helps to create text.

Other scholars have defined cohesion in line with the overt connection of texts. Widdowson (1978:26) defined cohesion as the overt linking relationship between different propositions expressed in sentences. He further explained that cohesion is also a matter of the contextual appropriateness of linguistic forms, sentences and parts of sentences. De Beaugrande and Dressler (1981:3) stated that cohesion has to do with the ways in which the components of the surface text are mutually connected within a sequence. Stubbs (1983:126) also posited that cohesion has to do with relations between surface meanings. Aziz (1988:148) described cohesion as that which involves the methods by which utterances are neatly tied up to form a united text. Hoey (1991:3) defined cohesion as the way in which certain words or grammatical features of a sentence can connect a sentence to its predecessors (and successors) in a text. Mey (2001:153) also defines cohesion as the way in which words are formally hung together in sentences.

The definitions show the two views concerning the definition and function of cohesion as having overt versus implicit or underlying effects in texts. Cohesion is about meaning relations that are manifested in a text. It also helps connect the bits and pieces of a text thus enhancing logical expression and understanding of the text. Cohesion operates within the sentence and across sentence boundaries. Cohesion therefore defines a text as text. Most
definitions of the concept seem to agree that cohesion expresses the continuity that is found between one part of a text and the other; it depicts the discourse point of contact with what precedes and what comes after. The continuity assists in creating a continuous thread of thought in the text and enables the unity of the text. Cohesion is, therefore, achieved when the relevant details are logically expressed.

2.6.2 STUDIES OF COHESION IN STUDENT WRITING

As previously stated, the concept of cohesion, first proposed by Halliday and Hasan (1976) and further elaborated by Halliday (1985), Halliday and Hasan (1989), plays a key role in the field of text analysis. According to Halliday and Hasan (1976), a text has texture, which makes a text a unity with respect to its context and distinguishes it from a set of disconnected sentences. There are two essential elements which serve to provide texture: structural and non-structural relations.

Applying Halliday and Hasan's (1976) framework, a great number of studies about cohesion and coherence in ESL/EFL even in L1 writers of different proficiency levels have been carried out. Among them are studies like Abusharkh (2012), Aljabr (2011), Crossley and McNamara (2010, 2011), Crossley et al. (2010b, 2010c), Crossley et al. (2016) Fazelimanie (2004), Hessamy and Hamedi (2013), Hinkel (2001), Jafarpur (1991), Liu and Braine (2005), Mohamed-Sayidina (2010), Mohamed and Omer (2000), Na (2011), Nga (2012), Song and Xia (2002), Yang and Sun (2012), Zhang (2000), and many others. Although some researchers came to similar findings, the findings of these studies, in some cases, have been somewhat contradictory. These contradictions could be attributed to different research foci and approaches.

The use and effects of cohesive devices in student writing has been of interest for some time. A number of studies have shown that cohesive devices are important indicators of text comprehensibility since an increase in text cohesion generally leads to the better comprehension of a text (Crossley & McNamara, 2010; Crossley et al., 2014; Gernsbacher, 1990; Zhang, 2010). Others claimed cohesion does not necessarily represent an element of writing quality (Castro 2004b; Todd et al., 2007; Zhang, 2000). There has also been an interest in investigating the longitudinal development of cohesive devices for both L1
learners (Bereiter & Scardamalia, 1987; Berninger et al., 1996; Hayes & Flower, 1980; Myhill, 2008) and L2 learners (Crossley et al., 2010a, 2010b, 2010c; Yang & Sun, 2012). It is, nonetheless, important to note that although much has been done to survey the use of cohesive items in ESL/EFL writing, most of the studies have provided mixed results.

As rightly observed by Yang and Sun (2012), all these mixed results of empirical studies, observed collectively, indicate that the existing research findings with reference to cohesive agents in writing are inconsistent and hardly conclusive, thus demanding more relevant research, with appropriate methodological controls, to resolve these disputes. The mixed results also point to the need for researchers to constantly update their research approaches and methods so as to enhance the teaching of the concept of cohesion and to assist learners in overcoming the identified difficulties. All embracing, research indicates that L1 learners begin to depend less on local cohesion cues in their writing as they develop with age and academic level. The few studies examining L2 learners indicate that local, global, and text cohesion features may increase as a function of proficiency although available longitudinal research is limited to spoken data. A better understanding of these differences could help researchers develop more vigorous theories of second language acquisition and L2 writing and could also assist writing instructors in constructing more accurate expectations of L2 learner’s growth in the language classroom.

2.6.3 CLASSIFICATION OF COHESIVES DEVICES

Beginning with Halliday and Hasan (1976), many researchers, among them De Beaugrande and Dressler (1981), and Markels (1983), have classified cohesion devices or contributed to the list. The classification to be used in this study includes: reference, substitution, ellipsis, conjunction, and lexical cohesion. The classification choice is guided by Halliday and Hasan’s (1976) classification, also bearing in mind the contributions of Brown and Yule (1983), Cook (1989), Halliday (1985), Halliday and Hasan (1989) and Renkema (1993). They are discussed in detail below as they form the base for this research.
2.6.3.1 Reference

Reference is a grammatical cohesion device in a text that can only be interpreted with reference either to something else or some other parts of the text. Reference items can either be exophoric (situational) or endophoric (textual). Endophoric items can be anaphoric, i.e. preceding the item of reference or cataphoric, i.e. come after the item and referring back to it. There are three types of reference: personal, demonstrative, and comparative.

Personal reference

Personal reference is reference by means of function in the speech situation, through the category of person. Personal reference is dependent on the use of personal pronouns (I, me, you, he, him, she, her, it, they, them, we, us,) possessive pronouns / determiners (his, her, my, your, our, its, their, hers, mine, yours, ours, theirs).

Personal Pronouns

The use and importance of personal pronouns for reference cohesion in discourse has been richly documented by scholars like Harwood (2005a, 2005c), Hyland (2001, 2002a), Kuo (1999) and Tang and John (1999). Various academic disciplines have conventions for using (or not using) pronouns. Womack (2015) indicates that scientists avoid ‘I’, instead of using the passive voice to take focus away from the writer. In this way, they shift focus from the individual experimenter and onto the scientific process. O’Hair et al. (2004) observed that academic writing in business contexts recommends avoiding directness (i.e., second person pronouns) when the purpose of the text is to inform rather than to persuade. Thonney (2013) observed that in mathematics, the first person plural is preferred, even in single-authored texts. Casan-Pitarch (2016) stated that the most common pronouns used by banks in their communication is the first person plural and the neutral third person singular cases. Harwood (2005a) found that published articles in Business and Management, Computing Science, Economics and Physics use first person pronouns. He noted that writers used ‘I’ and ‘we’ to help them convey the value of their work, to express opinions, to describe research procedures, to announce the structure of the text, and to establish their relationship with
readers. Harwood (2007) also revealed that political scientists use first person pronouns extensively and its use ensures that their work is maximally persuasive.

The choice and use of personal pronouns is central to interaction. Personal pronouns usually define or reveal interpersonal relationships between or among the individuals involved in interaction. Hyland (1994:240) indicated that, ‘rather than being factual and impersonal, effective academic writing actually depends on interactional elements which supplement propositional information in the text and alert readers to the writer’s opinion’. Hence, Kuo’s (1999) proposition that the choice of a certain personal pronoun for a given context, or even the presence or non-presence of a personal pronoun in texts, can often reveal how writers view themselves, their relationship with readers, and their relationship with the discourse community they belong to.

Personal pronouns have proven to be indispensable tools of registering and maintaining authorial voice and self-mention. The presence of the authorial voice in written texts helps the reader manage the text. Hyland (2001) maintained that students should be encouraged to strategically employ personal pronouns in their texts to make themselves visible as authors, to convey an appropriate degree of confidence and authority while, at the same time, remain connected to the conventions of the genre and their audience. Self-mentions perform a number of functions when used by the academic writers. They include: signifying the writer as the creator of text, organising the text, presenting facts as well as guiding, engaging with and persuading the reader.

The reasons for using first-person personal pronouns in clinical case studies and scientific writing in general proposed by Atkinson (1990) are as follows:

- It invites the reader into the room and makes him/her feel more engaged in the process.
- It emphasises agency (who is doing what). It is used when the writer needs to point out how valuable his/her text/project is to an academic discipline or to claim a unique perspective or argument.
- It is used for clarity.
- It reflects the writer’s world-views, beliefs and values.
- It positions the writer in the text. In some cases, one needs to explain how research builds on or departs from the work of others (Atkinson, 1990:102).

Although Atkinson (1990) presented the reasons to support the use of first person personal pronouns in clinical case studies and scientific writing in general, I believe the reasons are true to all academic writing contexts.

Cross-disciplinary studies on the use of personal pronouns to indicate self-mention and authorial identity in academic texts have also been undertaken in recent years (e.g. Hyland, 2001, 2002a, 2002b; Hood, 2004, 2010; Kuo, 1999; Millán, 2010; Tang & John, 1999; Wu & Zhu, 2014). For example, Hyland (2001, 2002a, 2002b) examined exclusive first person pronouns across eight disciplines, and proposed that forms of self-mention help research article writers to adopt a certain ‘persona’ in their writing and thus assume a dynamic relationship with their potential readers. Hood (2004, 2010) takes the construction of an evaluative stance as a way of self-presentation in research article writing. She studied how writers bring together a range of linguistic resources to develop their positions in the flow of discourse by drawing on the appraisal theory. Wu and Zhu (2014) examined self-mention and authorial identity construction in English and Chinese research articles. They proposed that researchers’ authorial identity can be considered in three aspects according to the self-mention devices they employ: the detached self (third person personal pronouns), the individual self (first person singular personal pronouns) and the collective self (first person plural personal pronouns).

It is evident that readers are able to make inferences about text writers based on the identity they construct as a result of their lexical choices. Personal pronouns play an extremely important role in revealing how writers perceive both themselves and their relationship with readers. The choice and use of personal pronouns enhances clarity of the writer’s intention and message. It is vital for learners to be aware of the different ways in which personal pronouns can be used in academic writing. Their understanding of the choices available to them and the dimension of use can contribute to the success of their written texts. Personal pronouns enhance anaphoric cohesion and they contribute significantly to text cohesion and coherence.
Possessive pronouns / determiners

Possessive pronouns attribute ownership to someone or something. In other words, they demonstrate ownership in communication. Possessive pronouns substitute noun phrases and can prevent repetition. Possessive determiners constitute a sub-class of determiners which modify a noun by attributing possession (or other sense of belonging) to someone or something. They are also known as possessive adjectives, although the latter term is sometimes used with a wider meaning. Possessive pronouns and determiners operate with personal pronouns to achieve personal reference in texts. According to Halliday and Hassan (1976:54) possessive determiners and pronouns may refer without restriction to a referent having the function of head noun or any other syntactic function that is open to nominals. They are anaphoric by reference to the possessor in discourse.

Demonstrative Reference

Demonstrative reference is the reference by means of location, time, on the scale of proximity consisting of nominative demonstrative namely; this, that, these and those. Demonstrative reference is dependent on the use of determiners (this, these, that, those) and adjuncts (here, now, then, there). The demonstrative determiner is usually attended by a noun or noun phrase, especially when occurring in an initial position. Demonstratives have been traditionally referred to as ‘pointing words’ whose primary function is to indicate relative spatial or temporal distance of a referent from speech participants. Recent research argues that the meaning of demonstratives is not limited to spatial distance and has given alternative accounts for the use of demonstratives that focus on other cognitive and pragmatic meanings (e.g., Botley & McEnery, 2001; Enfield, 2003; Gundel et al., 1993; Oh, 2001). Zaki (2011) explained that demonstratives play a crucial role to instruct the interlocutor to maintain or create attention to the intended referent. Therefore, demonstratives are often termed as demonstrative references because they are actually referring expressions. Demonstratives act as parts of cohesive devices to build cohesive and coherent discourse.

The two main distinctions of demonstratives are exophoric and endophoric. The term ‘exophoric’ refers to demonstratives used to pick out something in the situational context, while ‘endophoric’ is used as a general term for reference within the text. Diessel (2006)
further classified the endophoric use of demonstratives into anaphoric, discourse deictic, and recognitional. Anaphoric and discourse deictic demonstratives refer to elements of the ongoing discourse. Anaphoric demonstratives are used as tracking devices in the discourse to refer back to previously mentioned entities. They are also used to shift the focus of attention to a new topic. Discourse deictic demonstratives refer to aspects of meaning expressed by a piece of discourse such as a clause, a sentence, or a series of sentences. Recognitional demonstratives have two characteristics that distinguish them from all other uses. Firstly, recognitional demonstratives are used only with a noun, and secondly, they do not refer to something in the discourse or the situational context. They are used to activate specific shared knowledge (Khalfaoui, 2009). Diessel (2006) also included other endophoric demonstratives, which do not refer to entities in the discourse or in the situational context and mark specific indefinite information, such as the unstressed (indefinite) this in English. He noted that what differentiates recognitional demonstratives from the indefinite this is that the latter refers to entities that do not represent shared knowledge.

Halliday and Hasan (1976) argued that in English, ‘demonstrative reference is essentially a form of verbal pointing. The speaker identifies the referent by locating it on a scale of proximity’. They listed the nominal demonstratives this and that, the adjuncts here and there and now and then in terms of a proximity scale of near and far (or not near) respectively. Halliday and Hasan (1976) extended the proximity distinction to demonstrative use within the text. For example, they argued that the tendency to use this to refer to utterances made by the speaker him/herself, and that to refer to utterances made by this interlocutor is clearly related to that of near (the speaker), versus not near.

Other scholars have discussed the use of demonstratives in writing. Gundel et al. (1993) opined that the choice among demonstratives, like the choice among other determiners and pronouns, is determined by cognitive status, the assumed memory and the attention status of a speaker’s intended referent in the mind of the addressee. Oh (2001) explained that the most critical factor guiding the writer’s/speaker’s choice of a demonstrative is like, in a sense, calling the interlocutor’s attention to something for a particular purpose. His study showed that the most critical factor that determines the speaker's choice among demonstratives such as it, this, and that in the genre of written advertisements, is focus and not proximity. Strauss (2002) argued that demonstratives’ usage and functions in texts are based on degree of focus.
She states that *it* is low focus, *that* is medium focus, and *this* is high focus where the degree of focus correlates with the relative newness and importance of the referent. Diessel (2006) stated that demonstratives constitute a special class of linguistic expressions. They serve one of the most basic functions in language, i.e. they establish/manipulate joint attention, which is not only important to coordinate the interlocutors’ communicative interactions, but they also play a key role in the internal organisation of discourse and the diachronic evolution of grammar.

From the available literature, it is evident that demonstrative references function extensively for anaphoric cohesion, they point readers to referent items and are indispensable tools for building cohesive and coherent discourse. The presence of demonstratives in texts helps to enhance the reader’s understanding of discourse. They are also crucial to the coordination of textual reference. Hence, their use or non-use can contribute to or detract from the overall logicality of discourse.

**Comparative Reference**

A comparative reference is an indirect reference by means of identity or similarity. Comparative references use comparative adjectives and adverbs. Often times in writing, a noun is compared to another noun. In order to do that, a special form of adjective, called comparative adjective such as: *same, other, better (identical)* and comparative adverbs such as; *less and so on*, are used to forge links with previously mentioned entities (*identically, similarly)*.

Comparative reference shows comparison between two entities signifying likeness and unlikeness. Halliday and Hassan (1976:77-87) discussed comparative reference under general comparison and particular comparison. General comparison indicates likeness between two things. It may take the form of identity or similarity. As Halliday and Hassan (1976:78) pointed out, likeness is a referential property. A thing cannot just be *like*; it must be *like something*. Thus the comparison is a form of reference.

For example:

(1) It is the *same* design as the one we mentioned last week.
Particular comparison indicates the comparability between two things in relation to a particular property, with respect to quantity or quality. Particular comparison is also referential, since there must be a standard of reference by which a thing is said to be superior, equal, or inferior in quality or quantity (Halliday & Hassan, 1976:81).

For example:

(2) We demand a better living wage.

Due to the essence of comparative relationships in discourse, the comparative and its referent are located at the same semantic level within the text. The interpretation of the comparatives is dependent on the compared reference items within sentences. Hence, the reference item relates to the referent in discourse, thereby enhancing cohesion of text.

2.6.3.2 Ellipsis

Ellipsis occurs when elements that are structurally necessary are left unsaid or unwritten but are understood by the listener/reader. Biesenbach-Lucas and Weasenforth (2001) observed that the use of ellipsis compacts the surface structure without disrupting clarity. According to them, ellipsis is known to typically occur as responses in spontaneous conversations but is seldom used in formal writing. Biesenbach-Lucas (1994) found ellipsis to occur infrequently in formal academic texts. Ellipsis takes place in similar grammatical environments to substitution. Thus, there are three types of ellipsis: nominal, verbal and clausal ellipsis.

Nominal ellipsis permits the omission of head nouns in a nominal group as in the example:

(3) Investors buy fuel at lower price from the country and sell it in another __ at a higher price.

Verbal ellipsis permits the omission of verbs in a verbal group as in the example;

(4) Examinations do not show students’ true knowledge, only __ their ability to memorise.

Clausal ellipsis is common in all short-form answers and responses as in the example:

(5) A: Are you coming to the party?
    B: No __.
2.6.3.3 Substitution

Substitution is used when a speaker or writer wishes to avoid the repetition of a lexical item and is able to draw on one of the grammatical resources of the language to replace the item. Substitution is defined by Halliday and Hassan (1976) as the replacement of one item by another. According to them, substitution is a relation between linguistic items, such as words or phrases and a relation on the lexico-grammatical level, the level of grammar and vocabulary. McCarthy (1991) stated that substitution is a speaker/writer choice and not a compulsory feature especially in written discourse. Substitution may function as noun, verb or clause in the sentence. Thus three types of substitution exist, namely: nominal, verbal and clausal substitution.

Nominal substitution:
(6) Government should engage graduates who are willing and able to do the job but do not have one.

Verbal substitution:
(7) Kate asked us to visit her friend and we did.

Clausal substitution:
(8) Lecturers race through the syllabus regardless of whether students understand or not.

2.6.3.4 Conjunctions

Conjunction is used to describe the cohesive tie between clauses or sections of text in such a way so as to demonstrate a meaningful relationship between them. They function as connectors between two independent clauses or sentences in a text. Halliday and Hasan (1976:227) explained that cohesive elements are cohesive not in themselves but indirectly, by virtue of their specific meanings; they are not primary devices for reaching out into the preceding text, but they express certain meanings which presuppose the presence of other components in the discourse. Conjunctions are used by writers to mark the semantic relationships between the sentences. They conjoin linguistic units, such as sentences,
paragraphs and even large parts of a text (Quirk et al., 1985). Conjunctions signal logical relations in a text and help the reader to connect different units and paragraphs to make sense of the text (Heino, 2010); hence, they are very important cohesive devices. Conjunctions are one-word items or fixed-word combinations, which contribute to the clarity and comprehensibility of a text.

The role of conjunctions is to signal logical relations in written text and they increase the readability of texts (Geva, 1992). Ting (2003) indicated that conjunctions are important elements for creating coherent texts; their presence should cause coherence and contribute to the quality of the text. Schleppegrell (1996) asserted that conjunctions are grammatical resource for indicating links within text. Zamel (1983) stated that it would be difficult, without conjunctions, to make sense of ideas, since these conjunctions prepare the readers to anticipate the ideas which follow. Hence, the appropriate use of conjunctions is an essential skill to acquire when students learn to write. This notion has been asserted by researchers on discourse and the writing pedagogy (see Cook, 1989; McCarthy, 1991). In spite of the important role of conjunctions, their application to academic writing has been found to be challenging for second/foreign language learners of English (Hamed, 2014). It is extremely important that language learners are able to apply a variety of conjunctive devices to bridge the previous and following sentence(s) in order to make their writing clearer, orderly, and logical. Their usage also contribute to making their writing semantically, pragmatically and grammatically well-formed.

conjunctions are called, they all perform the same function of enhancing semantic relations in texts.

Following Halliday and Hasan’s (1976) framework, the term conjunction is used throughout this study. Conjunctions are discussed under four main categories: additive, adversative, causal and temporal. Additive conjunctions serve to further the discourse topic. It differs from the paratactic relation of coordination by introducing the new clause as an extra piece of information, perhaps reinforcing what has already been said. For example: and, or, furthermore, besides, for instance, similarly, thus, in other words, likewise, etc. (in other words, by the way).

For example:

(9) The project used a small sample and was strongly criticised for this reason. Furthermore, the initial premise of the research was considered questionable in the light of previous evidence.

In the example above, and and furthermore function as additive conjunctions used to introduce or add new information. Their use contributes to the logical progression and development of the text. The new or added information is presented in a way which does not disrupt the flow of the preceding information.

Adversative conjunctions introduce items of information which are contrary to expectation. The expectation may be derived from the content of what is being said, or from the communication process and the speaker-hearer situation. For example: yet, though, but, however, in fact, at the same time, nevertheless, instead, at least, in any case, etc. (on the contrary, at any rate).

For example:

(10) It cost a fortune to renovate our house; nevertheless, it was worth it.

Nevertheless is used in the second clause to express contrasting information to the first clause and it indicates a relationship between the two parts of the sentence.
Causal conjunctions mark the relationships of reason, consequence and purposes. For example: so, then, for, because, as a result, to this end, in that case, otherwise, etc. (hence, consequently, in this respect, aside from this).

For example:

(11) Many people were left homeless as a result of the earthquake.

The example above shows the use of as a result as a causal conjunction indicating reason and consequence.

Temporal conjunctions specify the time sequence relationship which exists between sentences. For example: meanwhile, finally, at last, soon, next, in conclusion, from now on, etc. (and then, at once, previously, until then, at this moment, at this point, to sum up, in short).

For example:

(12) The president announced proposed amnesty for some political prisoners, meanwhile the parliament debated the legality of his decisions.

The temporal conjunction meanwhile is used to express relations in time. It expresses simultaneity of the action carried out by the president in the first part of the sentence and the action of the parliament in the second part of the sentence.

The logical relationships between ideas are indicated by the use of appropriate conjunctions so that the reader can easily understand the relationship between the parts of a text. The four categories mentioned above reflect the semantic relations between sentences in text. It is thus important for learners to understand the role of conjunctions in organising written text (Hamed 2014). Several studies (e.g. Altenberg & Tapper, 1998; Bolton et al., 2002; Carrió-Pastor, 2013; Martinez, 2004; Meisuo 2000; Mo, 2015; Narita et al., 2004; Ong, 2011; Tanko, 2004; Zhao, 2003) have indicated the underuse, overuse and misuse of conjunctions by ESL and EFL students. These studies have also found that learners sometimes have problems in the application of conjunctions in texts. Altenberg and Tapper (1998) studied the use of advanced connectors in Swedish university students’ written essays. The study, which
was quantitative in nature showed advanced Swedish learners in comparison to other EFL learners of other language backgrounds, tend to underuse conjunctions.

Narita et al. (2004) investigated the use of logical connectors in advanced Japanese university students’ essay and LOCNESS. They found that Japanese learners significantly underuse contrastive connectors such as yet and instead. Henning (2006) also examined the use of linking adverbials in Tswana learners (South Africa) with the LOCNESS and Dutch student writing. Her study revealed underuse of adveratives by Tswana learners. Mo (2015) conducted a contrastive study of the use of causal connectives by Chinese EFL learners’ writing and English native speakers’ writing. The analyses revealed that Chinese learners overuse causal connectives. Zhao (2003) did a contrastive analysis of the use of logical connectors by Chinese EFL learners. He found that the learners overuse causal conjunctions. Tanco (2004) studied the use of adverbial connectors in high-rated argumentative essays written by Hungarian advanced learners of English. He observed the underuse, overuse and misuse of some adverbial connectors.

2.6.3.5 Lexical cohesion

The concept of lexical cohesion is broad and as Halliday and Hasan (1976:292) stated: ‘The concept of the lexical item … is not totally clear-cut’. This is because of the numerous ways word meanings can be related to one another and can co-occur. Lexical cohesion can be defined as cohesion that is created via the use of vocabulary. This refers to a combination of terms between sentences that form lexical component or choice. It is the central device to make a text experientially hang together, which defines what the text is about. Lexical cohesion is created by repetitions of the same words, co-references, and the use of sets of semantically related words (Halliday & Hasan, 1976).

The crucial role of lexical cohesive devices has found its fair share in the numerous studies in written discourse. According to Halliday and Hasan, lexical cohesion is achieved through reiteration and collocation. Reiteration is a phenomenon in which one lexical item refers back to another to which it is related by having a common referent, i.e., a common source for interpreting the two items. Reiteration consists of four categories: repetition of the same word, use of a synonym, use of a superordinate, and use of general word. Collocation is the
habitual juxtaposition of a particular word with another word or words with a frequency greater than chance. Collocation will be discussed in detail later after discussing the four types of reiteration.

**Repetition**

Repetition is the process of repeating one or more linguistic segments following an early occurrence. It is a process aimed at achieving cohesion through the repetition of lexical item(s) that have already been said or written, aiding clearer understanding by the listener or reader. Lexical repetition contributes to the better understanding of the relationships existing between words in discourse (Miller, 2011). Repetition, if used well, can be a viable tool in writing. It naturally embeds what is repeated into the readers’ minds, such that repeated content will grab readers’ attention and stick with them long after it is read. Through strategic and consistent placement of words or phrases in a text, the writer can ensure that a certain idea is driven into the readers’ mind, or that a set of ideas are clearly tied together. It can also add emphasis to what the writer is trying to say and strengthen points or the topic of discourse. Repetition also draws attention to the word, the person or object that is being repeated (Fanning, 2012). Lexical repetition is considered a major device for text connectedness in many studies of cohesion in writing.

Hoey (1991) also defined lexical repetition as a form of lexical cohesion, whereby words are repeated across the sentences of the text in a way which reminds the reader of the thread of the argument. He asserted that lexical repetition has structural and semantic effects in texts. At the structural level, it creates the sense that the ideas introduced in different sentences are related to each other, and consequently, builds levels of cohesion within the text. At the semantic level, the repetition of key words clarifies the content of the text. As Hoey (1991) explained, lexical repetition is a means of explicitly marking cohesion in a text. It also demonstrates the important communicative function of cohesive markers. Furthermore, lexical repetition is considered an indicator of the rhetorical structure of a text, in other words, how the writer organises, connects, and develops ideas in the text. Hoey (2001) and Zhu *et al.* (2001) postulated that a variety of repetitive forms should be used between sentences in order to achieve cohesion.
Miller (2011) identified many types of useful repetitions. Among them are, isocolon and anaphora. Isocolon involves the repetition of the same grammatical structure in two or more phrases or clauses. This means that the grammatical structures are parallel forms, typically with the same number of words. Isocolon is a structural repetition technique, which offers momentum, rhythm, and emphasis to academic and business writing as well as to literature and speech. It is mainly used for rhetorical effect. A popular example of isocolon is presented below:

(13) ‘Ask not what your country can do for you; ask what you can do for your country’ (John F. Kennedy).

Anaphora is the repetition of a word or phrase at the beginning of successive phrases, clauses, or sentences. Most often writers use this form of repetition for its dramatic effect in speech or writing. The rhetorical use of anaphora can effectively enhance the communication of the writer’s or speaker’s argument. The opening lines of Charles Dickens’ A Tale of Two cities are presented below as an example of anaphora repetition.

(14) It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of hope, it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair… (Dickens, 1859:1)

Anaphora’s effectiveness may depend on its delivery in a speaking situation, however, it is important to remember that speeches are drafted in writing (Miller, 2011). What the different types of repetition have in common is that they emphasise meaning through repetition in such a way that the emotional power of the sentence is much stronger. Anaphora repetition is different from anaphoric reference, although they both help to achieve cohesion in discourse. Anaphoric reference is the use of a word referring back to a word used earlier in a text or conversation, to avoid repetition, for example the use of pronouns such as he, she, it, and they, while anaphora repetition is the actual repetition of a word or phrase at the beginning of successive clauses. It usually helps to create rhetorical effect.
Previous research on the use of lexical repetition by ESL learner writers includes Abusharkh (2012) Aljabr (2011), Castro (2004a), Connor (1984), Duterte-Angeles (2005), El-gazzar, (2006), Khalil (1989), Liu (2000), Liu and Braine (2005), Mohamed-Sayidina (2010) and Mojica (2006). Most of these studies have reported that ESL learners overuse lexical repetition and sometimes the overuse results in redundancy. Although redundant repetition is not a serious impediment to the meaning of the delivered message, it sometimes hinders the flow of ideas and renders expressions dull and boring. As Martin (1989) pointed out, the main cause of redundancy seems to be limited L2 vocabulary, which prevents L2 learners from employing a wide range of vocabulary items such as synonyms. Another factor that contributes to redundancy, according to Fakuade and Vargs (1992), is related to the fact that L2 students seem to be unaware that one of the most important features of academic writing is to avoid redundant words and expressions.

**Synonyms**

Synonymy refers to the relationship between semantically equivalent words, which are interchangeable in linguistic contexts. They are words or phrases that mean nearly the same as another in the same language. Salkie (1995:9) affirmed that mastering synonymy is essential for writing quality because it avoids redundancy. This is one reason why synonyms are used instead and that using synonyms adds variety. The use of synonyms extends lexical choice and provides opportunities to ‘avoid the repetition of words and add colour and variety to the language’ (Colonna & Gilbert, 2006:49). The importance of using synonyms as tools for avoiding text monotony has been highlighted by Tuttle (2009). Synonymy as a lexical cohesive device is different from substitution, where a linguistic item is omitted, but is substituted with another, more general word.

In addition to adding variety, synonyms can also perform a number of semantic roles in a piece of writing. Two or more synonyms (or sometimes semantically related words) can be employed to emphasise the degree or intensity of the quality/action being described. Synonyms can be used to convey the right level of formality. When it comes to academic writing, style is of paramount importance. Writers can better express their attitude by choosing the word which best suits their intended effect (generally based on purpose and audience). The expression of positive and negative attitudes can be facilitated by the
employment of synonyms (near-synonyms) with either positive or negative connotations. Lexical synonymy can be used by writers to make a piece of writing more cohesive. Synonyms can also be employed by writers to add variety to their piece of writing, thus avoiding inappropriate repetition of the same word (Danglli & Abazaj, 2014).

Moreover, sets of synonyms give writers the possibility to choose the word which best suits the tone and intended audience. Accuracy can also be improved by using the word which most suits the context. Nevertheless, if synonymy, while both interesting and useful, is not used properly, may produce the opposite effect, that of distorting meaning or the tone of writing. As a result, whenever the replacement of a word with a synonym (near-synonym) is considered, a writer should not just pick one from the numerous words in a thesaurus, but test its appropriateness in the context he/she intends to use it. If the search for an appropriate synonym is unsuccessful and the use of a similar word would spoil accuracy, then it is better not to use it. Since it has been established that repetition is not necessarily negative; if used with mastery, it can function as a figure of speech in texts (Crowley & Hawee, 1994:202).

Studies on lexical cohesion continue to reveal that L2 writers face problems in using synonyms effectively when writing. This lack of or non-use of synonyms by L2 writers has been linked to poor vocabulary development (e.g. Connor, 1984; Danglli & Abazaj, 2014; Kafes, 2012; Khalil, 1989; Khany, 2012; Mojica, 2006; Stotsky, 1983; Wilawan, 2006). Ting (2003) also pointed out that this problem is probably due to students’ weak ability to differentiate synonyms in meaning and appropriate usage.

**Superordinate words/ General items**

Halliday and Hasan (1976) explained superordinates as lexical items which refer to preceding terms, ideas, or actions, or to whole stretches of discourse, by naming a more inclusive category or class within which the antecedent is included. Superordinate lexical items refer to the items whose meanings include that of an earlier mentioned lexical item operating within a system of classification. In other words, a superordinate denotes a general class under which a set of subcategories is subsumed. General words refer to words that have generalised reference within the major noun classes. The use of general words in discourse usually exhibits anaphoric relation within the text and plays a role in making the text hang
together. A superordinate term acts as an umbrella term that includes within it the meaning of other words. For example:

(15) He likes fruits: orange, apple, pear, banana, plum and pineapple are his favourite.

‘Orange, apple, pear, banana, plum, pineapple’ belong to the class ‘fruit’. The sense of relation is expressed by saying that ‘fruit’ is a superordinate and that ‘orange, apple, pear, banana, plum, pineapple’ are the hyponyms of ‘fruit’.

McAnsh et al. (2004) stated that superordinate terms play an important role in promoting cohesion by providing writers with a more explicit means than would be possible using only pronouns (it, they, this, these, those) for linking their ideas either back to earlier pieces of text, or forward to upcoming information. Superordinate terms tell the reader what to expect before an idea. In this function, superordinate terms serve as the class in definitions, and describe the items and examples presented in lists. Superordinate terms link either forward or backward to the items in the list and describe the class of things to which they belong in the text. Brandt (2009) indicated that superordinates and hyponyms can also provide variety in writing.

Liebner (1981) opined that the interrelationships between superordinates and more specific terms, or hyponyms, in written texts, provide patterns of meaning between and within sentences. They can serve as triggers for eliciting focus and the development of a topic. In this process, instruction would be given on use of abstract terms, more specific terms, and the contexts in which each is appropriate. The use of superordinates in written text contributes to text interdependency and connectivity. They are instrumental for enhancing anaphoric or cataphoric relations in texts. Their usage helps to create a cohesive link with the preceding more specific item, the item expressing ‘part’ or ‘member’ builds a cohesive link with the first item expressing ‘whole’.
Collocation

According to Halliday and Hasan (1976), collocation is the second major way in which lexical cohesion can be achieved. It refers to the lexical cohesion that is achieved through the association of lexical items that co-occur. Collocates are words that occur near a given word (the node word), and they provide useful insight into the meaning and usage of the words near to where they occur. When the vocabulary in large sets of words such as essays are analysed, sets of words that show up together are found. The propensity of finding one word with the other word in similar settings is very high. These sets of co-occurring words can be anticipated by the appearance of the other in similar discourse contexts. These habitually juxtaposed words are referred to by linguists as collocations (Nesselhauf, 2005), lexical clusters (Lau, 2004), phraseology (Howarth, 1996) or lexical bundles (Paquot, 2010).

To use a word appropriately, it is not enough to know just the meaning of a word; there is the need to pay attention to the immediate context in which it is used. Both lexical and grammatical patterns are important to ensure that this happens. Collocation enables second language learners to know more about language chunks used by native speakers and improve their skills in speech and writing (Hatami, 2015). To reach native-like fluency, L2 language learners need to know that the ability to understand and produce collocations as unanalysed chunks is a significant part of language acquisition (Farrokh, 2012). Collocation competence is important for language production, and enables language users to make idiomatic choices and come across as native-like, to process language fluently in real-time situations and to make the meaning of polysemous words unambiguous; for instance, the meaning of the verb commit becomes clear in these combinations: commit a crime, commit to memory, commit oneself (Ellis et al., 2008).

Due to the crucial role of collocation to English as second/ foreign language learners’ (ESL/ EFL) attaining native-like fluency in English language usage, many researchers have tried to investigate learners’ collocation competence in ESL/ EFL. Studies into lexical relations in L2 writers indicate that the acquisition of collocations is an important part of learning a language and plays an important role in facilitating the native-like fluency that helps language learners choose correct language combinations. Researchers such as Cowie (1981), Howarth (1996, 1998a) and Lewis (1997) have emphasised the value and significance of collocations for the
development of second language word combinations and communicative competence. They all recommended teaching these ready-made chunks of the language to learners in order to improve their performance. Woolard (2000) posited that an effective way to raise awareness of collocations is to help language learners pay more attention to the mis-collocations in their production of the English language. In that way, learners gradually realise that learning more vocabulary is not just learning new words, but being familiar with word combinations.

Research into L2 collocational knowledge differs in a number of methodological ways. Some have focused on L2 written production, while others analysed L2 speech. Many compared L2 learners of the same mother tongue against an L1 reference corpus, whereas others compared L2 learners of two or even three different L1 backgrounds. In addition, researchers have focused on a variety of multi-word expressions: Premodifier P+N collocations (Durrant & Schmitt, 2009; Siyanova & Schmitt, 2008), V+N collocations (Altenberg & Granger, 2001; Cross & Papp, 2008), Intensifier Adj+N collocations (Granger, 1998), lexical bundles (Chen & Baker, 2010; Crossley & Salsbury, 2011), phrasal verbs (Alejo Gonzalez, 2010; Waibel, 2008), lexical verbs (Granger & Paquot, 2009), and conventional sequences (Bartning et al., 2009; Forsberg, 2010), among others.

Learner corpus studies in collocations, however, also differ vastly in the way in which the corpus data were extracted and analysed. For example, some have used statistical measures, such as frequency, t-score and mutual information to identify and compare collocations in L2 and L1 corpora (Durrant & Schmitt, 2009; Granger & Bestgen, 2014; Groom, 2009; Lorenz, 1999; Siyanova & Schmitt, 2008); others have employed an automated frequency-driven approach (Chen & Baker, 2010), or a frequency index (Crossley & Salsbury, 2011). A different approach altogether has been to use L1 judgements and collocation dictionaries to evaluate the formulaicity, appropriateness, and correctness of L2 collocation (Bartning et al., 2009; Forsberg, 2010; Foster, 2001; Howarth, 1996, 1998a, 1998b; Laufer & Waldman, 2011; Nesselhauf, 2005).

As pointed out by Paquot and Granger (2012), the studies into collocational knowledge in learner corpora have yielded a wealth of interesting findings. However, methodological and conceptual differences, such as different types of corpora used and definitions of collocation adopted, various approaches to data extraction and analysis, a wide range of collocations and

Chen and Baker’s (2010) comparative study revealed the fundamental differences and similarities between native and learner academic writing. Through structural and functional comparisons, it was found that the use of lexical bundles in non-native and native student essays is similar. On the one hand, their texts both contain many more VP-based bundles and discourse organisers than native expert writing does, which appears to be a sign of immature writing. On the other hand, native professional writers exhibit a wider range of NP-based bundles and referential markers. A further qualitative examination revealed, however, that native student writing actually shares a few features distinctive in academic writing, such as the control of cautious language in native professional writing. Non-native writing, however, demonstrates a tendency that seems to be exclusive to L2 writing (e.g., over-generalising and favouring certain idiomatic expressions and connectors).

González and Ramos (2013) did a comparative study of collocations in a native corpus and Spanish learners’ corpus. They established four parameters: density, variety, sophistication and number of errors to measure the collocational richness of the learners’ texts. The results show that Spanish learners do, in fact, use collocations, but their choices lack the variety, sophistication exhibited by native speakers. At the micro-level, Laufer and Waldman (2011) investigated the use of English verb-noun collocations in the writing of native speakers of Hebrew at three proficiency levels. The learners were compared with native speakers on the frequency of collocation use and learners were compared with other learners of different second-language proficiencies on the frequency and correctness of collocations. The study revealed that learners at all three proficiency levels produced far fewer collocations than native speakers and that the number of collocations increased only at the advanced level.
The ability of L2 learners to use co-occurring lexical items effectively in their text can help them attain native-like fluency in the English language. This study attempts to discover the areas where Nigerian learners, who are ESL learners, show underdevelopment in their usage of cohesive devices compared to the standard norms and areas where they need improvement. Collocation forms part of lexical cohesion, hence the lexical bundles/collocation patterns that exist in Nigerian data in comparison to the LOCNESS will be examined in order to identify patterns, frequency and quality of usage.

2.6.4 COHERENCE

Coherence is another concept in academic writing that has received a lot of attention from scholars. It is the quality of a text when it makes sense or is pleasing because all the parts or steps fit. In the words of Kaplan (1966:14), coherence is the quality attributed to the presentation of material in a sequence which is intelligible to its readers. De Beaugrande and Dressler (1981:13) stated that coherence describes the connectivity of underlying content of a text. Brown and Yule (1983:224) also described coherence as those principle connecting linguistic strings in a text that readers rely on which leads to the interpretation of a text.

In the words of Halliday and Hasan (1989:48), coherence is achieved when a text hangs together. They further explained that coherence can be created by cohesive markers that are appropriately used to link one part of a text to another. Renkema (1993:35) also explained coherence as the connection that is established partly through cohesion and partly through something outside the text that is usually the knowledge which a listener or reader is assumed to possess. Mey (2001:153) stated that coherence recaptures the content-based connections between words that make them produce sense. Coherence is achieved by the blending together of the various units in a text. Its establishment in a text is by the mutual interaction of the writer and reader to make sense of the text based on their shared background knowledge. Thus, coherence depends on a number of factors including cohesion cues and non-linguistic factors such as prior knowledge and reading skill (McNamara et al., 1996; O’Reilly & McNamara, 2007).

From the definitions, it can, therefore, be said that coherence is the quality of the text being logical and consistent in the presentation of ideas that leads to the text forming a unified
whole. Coherence is instrumental to ideas in a text coming together. It functions as the logical glue that allows readers to move easily and clearly from one idea to the next in a text. It refers to the rhetorical aspects of writing, which include developing and supporting arguments, synthesising and integrating ideas, organising and clarifying ideas, and ensuring sentences and paragraphs flow smoothly into each other to form a unified text. Cohesion establishes relations between syntactic items while coherence establishes the logical relations (meaning) existing in the text. It is a very important characteristic of writing. The ideas and meaning of expressions in a text can be difficult for the reader to follow if the writing lacks coherence. It is therefore a significant factor in academic writing, as it enhances the logicality and readability of text, thereby contributing to the success of texts.

The relationship between cohesion and coherence in text has been long debated. Extensive studies are available that offer theoretical discussions of cohesion and coherence (see Bae 1997, 2000; Bamberg, 1984; Brown & Yule, 1983; Connor & Johns, 1990; Cook, 1989; Halliday, 1985; Halliday & Hasan, 1976, 1989; Koshik, 1999; McCarthy, 1991; Oller & Jonz, 1994; Renkema, 1993). Their studies point to the fact that cohesion and coherence are very important aspects of academic writing. They play significant roles in the connection of ideas at the micro- and macro-levels of discourse. It could be said that no meaningful discourse can take place without cohesion and coherence. The lack of cohesion and coherence in learner’s writing causes problems in effective communication. This important aspect of communication, which is also significant in writing, has been observed to receive little attention by teachers of the English language.

Fahnestock (1983:415) posited that ‘helping students understand coherence in terms of lexical ties and semantic relations possible between clauses and sentences will give some structure to an area of composition instruction that has been somewhat haphazard before’. Also, Bamberg (1984:305-6) affirmed that ‘a better understanding of linguistic features and rhetorical structures that create coherence as well as a greater insight into the problem students experience in trying to use them will serve as a systemic approach to teaching academic writing’. However, some scholars do not agree with the idea of cohesion being a determining factor of coherence. Coherence is one of the influential features in judging the quality of writing, and has been considered to be a subjective and hazy concept which is hard to teach and learn (Crewe, 1990; Lee, 2002). Despite the fact that cohesion and coherence are
so intertwined and not easily distinguished and defined as separate entities, Lee (2002), a writing teacher and researcher, observed that the concept of coherence was not definite resulting in difficulties in teaching and assessing students’ writing.

To shed light on the construct of coherence and the relationship between cohesion and coherence, empirical studies that investigated the correlation of the use of cohesive devices and the overall coherence/quality of writing have been reviewed and it was found that the studies contained conflicting results. On the one hand, some studies proved a positive correlation between the numbers of cohesive devices and good writing (see Ferris, 1994; Field & Oi, 1992; Fitzgerald & Spiegel, 1986; Hubbard, 1989; Jin, 2001; Liu & Braine, 2005; Pretorius, 1993; Witte & Faigley, 1981). Concerning the relationship between cohesion and coherence in learners’ writing, many studies have been conducted on the cohesiveness of students writing and the overall quality of its coherence. For example, Witte and Faigley (1981) conducted research on the relationship between coherence and cohesion in college students’ writing, and discovered that there is a relationship between coherence and cohesion in their texts. In a related vein, Fitzgerald and Spiegel (1986) examined the relationship between coherence and cohesion in third and sixth grade students’ writing. The result shows a relationship between coherence and cohesion, which is dependent on text content.

Hubbard (1989) also looked into the relationship between reference cohesion, conjunctive cohesion and relational coherence in students’ academic writing. He used a holistic rating method to investigate the effects of cohesive density and functional relations density on the writing quality of student composition. He also examined relational coherence and writing quality using Relational Coherence Quotient (RCQ). He found a positive relationship between reference and conjunctional cohesion density, relational coherence and writing quality as a significant difference in high-rated and low-rated student essays. Pretorius’s (1993) work on cohesion and coherence in student writing is also very illuminating. She found a strong positive link between the level of coherence of the student text and academic achievement. She also found that cohesion and coherence play a major role in the readability and ease of understanding of a text, and that students at the tertiary level are not sufficiently equipped to use cohesive and coherent devices to improve these factors (Pretorius, 1993:238-268).
In contrast, other studies have not shown a significant link between the number and use of cohesive devices and coherence and the quality of writing (Carell, 1982; Castro 2004b; Connor 2004; Jafarpur, 1991; Neuner, 1987; Zhang, 2000). Carrell (1982:486) pointed out that a text may be cohesive but not coherent and that cohesion is just one of the many components contributing to coherence. Connor (1984) carried out a study of cohesion and coherence in English as a second language students’ writing and in her opinion, cohesion may not be an adequate factor to describe writing quality, and that ‘while cohesion and coherence interact somewhat, yet a text need not be cohesive to be coherent’. Neuner (1987) also compared good and poor essays written by first year college students and he concluded that cohesive ties are not the distinguishing feature of good and poor writing. The differences in the results on the relationship between cohesion and coherence in texts can be as a result of different methods of analyses, populations or other significant factors.

This research agrees with the notion that cohesion forms an important base for coherence in a text and intends to find out if cohesion is indeed a measure of coherence in the learners’ text. As observed from the above review, I believe paying adequate and consistent attention to the teaching of cohesion and coherence in class at all levels of education will benefit the learners extensively. In agreement with Lee’s (2002: 135) findings that at the end of the explicit teaching of cohesive devices (linking adverbials), students improved the coherence of their writing and directed their attention to the discourse level of texts while revising. I believe extensive teaching of these salient elements of writing will have a positive effect on learners’ academic writing. Learners will get to have a better and clearer understanding of what cohesive and coherent texts are, and will also learn to write more cohesive and coherent texts. This, will help lay a solid foundation for good academic writing. The next section discusses contrastive rhetoric, which forms part of the interpretative framework of this research.

### 2.7 CONTRASTIVE RHETORIC

Robert Kaplan’s 1966 article laid a foundation for contrastive rhetoric and since then, it has continued to generate a lot of interest and discussion in the contextualisation of L2 writers’ literacy development worldwide. Under the influence of the Sapir-Whorf hypothesis of relativity which suggests that different languages affect perception and thought in different ways, Kaplan (1966) proposed that a writing pattern reflects a thinking pattern which, in turn,
is affected by the language that one speaks as their mother tongue. This pattern further reflects in the second language usage especially when writing. According to Connor (2002:493) contrastive rhetoric examines the differences and similarities in ESL and EFL writing across languages and cultures. It considers texts as functional parts of ever-changing cultural contexts. She further observed that it has had appreciable impact on the understanding of cultural differences in writing and will continue to have an effect on the teaching of ESL and EFL writing.

Two approaches to the study of rhetoric have emerged since Kaplan’s 1966 article: the ‘global’ approach and the ‘linguistic’ approach (Purves, 1988). In the global approach, rhetoric is investigated in terms of the global semantic structure of written texts, particularly the ways in which propositions are developed (Kaplan, 1966; Clyne, 1987; Kachru, 1988; Hinds, 1990). In the linguistic approach, written texts are investigated with reference to observable language forms, based on the assumption that differences in the use of these forms reflect differences at the underlying rhetorical level of text organisation (Holes, 1984; Johnstone, 1987; Mohamed, 1993, 1997, 2000; Mohamed and Omer, 1999, 2000; Mohamed-Sayidina 2010; Tsao, 1983).

Studies in contrastive rhetoric have identified the possible causes of the apparently different organisational patterns in ESL texts as either linguistic or cultural. It has provided teachers and learners with the understanding of the link between culture and writing and how the former reflects in the written product of language users. It has helped in the interpretation of the differences observed in L2 learners’ writing. It has been established that writers in different languages and cultures make distinguished literacy practices and preferences in writing. The need to discover and describe the causes for the preferences found in other cultures is based on the notion that people in different cultures not only write in contrastive styles but that they develop these ways because of the different ways of thinking, that is, viewing the world. Thus it has been established that there are differences in rhetorical patterns across time, disciplines, cultural groups and even sub-cultural groups (Anon, 2012:3).

Contrastive rhetoric holds that stylistic preferences of writing are culturally embedded and that second language learners may carry over those preferred rhetorical patterns of their
native languages in their second language writing. Matsuda et al. (2009:462) also explained that research on contrastive rhetoric has suggested that there are salient differences between the ways second language writers develop and approach writing tasks and the ways first language writers do. They further observed that the norms and genres of writing are often culturally determined, and second language writers may encounter some challenges in trying to meet the expectations of new genres and new reader expectations. Hence, if different discourse communities use different rhetoric, and if there is the transfer of skills and strategies from L1 to L2, then contrastive rhetoric might help to identify and understand the different rhetorical skills and strategies of writers from different cultures.

Contrastive rhetoric research has also provided evidence that rhetorical conventions and patterns are somewhat related to the cultural backgrounds of the writer. These researchers have also pointed out the presence of some culture specific rhetoric patterns like paragraph organisation (Kaplan, 1966), reader-versus-writer responsibility (Hinds, 1987), linear organisation structure (Connor, 1987), coordinating conjunctions (Soter, 1988), indirectness devices (Hinkel, 1997, 2002), and rhetorical appeals and reasoning strategies (Kamimura & Oi, 1998; Uysal, 2008). Researchers have continued to propose various techniques for helping students enhance their awareness of English rhetorical conventions, and develop their skills to use them appropriately when needed. They recommend making rhetoric differences explicit, raise student awareness of such differences, and acculturating students through regular language exercises with concrete models that meet audience expectation (Kubota & Lehner, 2004:13). Noor (2001:267) in agreement with Kachru’s (1982) observation, stated that contrastive rhetoric studies can help analyse the linguistic and cultural transfers that change cohesive and other characteristics of discourse.

It has been established that academic writers select and use linguistic features which they believe will facilitate their communication with the anticipated audience. It is believed that their choice and use of these discourse elements in writing does not only depend on the writer’s personal choice and his/her individual style, but that this choice is conditioned by the writing habits favoured in the writing culture to which the writer belongs. Sizeable research in linguistics supports this position, showing that like rhetorical preferences, logical schemas, and patterns of analysis, meanings and uses of cohesive devices vary across languages and cultures. As stipulated, cohesive relationships may be indicated or implicated in different
ways depending on a host of factors including background knowledge, culture, register, genre, educational history, professional training, and distinct features of a language itself. Because of this complexity, mastering the meanings and expected uses of English cohesive devices is notoriously difficult for NNS writers. It requires much more than a command of English grammar and vocabulary or a literal translation from one language to another (Baldwin, 2014; Dubin & Olshtain, 1980; Hinkel, 2011; Lui & Braine, 2005; Zamel, 1983).

This study, aims to further explore the relationship between culture and writing in L1 and L2. Leki (2008:35) posited that contrastive rhetoric is one of the few elements of L2 literacy that penetrated L1 writing research with any success, as a cross-cultural, and so palatable if often facile, explanation of L2 writer differences. The study intends to understand possible links between rhetorical patterns and culture. It furthermore intends to use the features previous literature had linked to cultural influence and writing patterns to form a framework for the analysis. It has been expressed that connecting ideas in a deductive and linear way or vice versa might be a culture-specific pattern (Uysal, 2008:188).

To this end, the important writing features like the use of transitional/cohesive markers, pronoun choice and usage, repetition and overall coherence of texts, identified by previous studies to influence L2 writing from L1 will be analysed. Transitional/cohesive marker usage will be examined, looking at the frequent use or the lack of usage of transitional devices in text and their contribution to the overall cohesion of learners’ text. It has been suggested that writers from different cultural backgrounds might differ in terms of providing explicit transitional signalling (Hinds, 1983, 1997; Fulwiler & Hayakawa, 1997).

Pronouns choice and usage is deemed important to signify authorial presence and involvement, which is expressed through the use of 1st, 2nd and 3rd personal pronouns. Although involvement, and therefore the use of personal pronouns, is prototypical of face-to-face conversations (Tannen, 1985), when writing, learners use pronouns to emphasise their presence and manage writer-reader relationships (Chung & Pennebaker, 2007; Harwood, 2005c; Hyland, K., 2002a, 2002b, 2004; Kuo, 1999; Tang & John, 1999). Repetition is important for rhetorical effects in writing. It is an instrument to reinforce ideas and for explicitness in discourse (Jobe & Stevens, 2009). Lastly, coherence will be examined at both paragraph and the whole text levels. It will analyse text segments and the overall structure to
ascertain the ‘aboutness’ and relevance to the discourse topic. i.e., the essays are interpretable as being about and relevant to the topic of the essay. It has been suggested that writers from different cultures might show different degrees of tolerance for digression (Clyne, 1987; Giora, 1983 in Uysal, 2008:188; Kaplan, 1966).

2.8 CONCLUDING REMARKS

The chapter began with the section on the discussion of literature on English as second language learners and issues relating to academic writing. The literature was examined in three sub-sections examining academic writing in ESL classroom and the pertinent issues at the heart of successful teaching and learning of the processes required for L2 learners in academic writing. ESL writing problems were then explored by looking at the various areas of writing problems of L2 learners as identified by existing research. The last sub-section focused on academic writers’ identity and role in discourse.

The next section gave an exposition on the language situation in most West African countries. It discussed the introduction, establishment and nurture of the English language in West Africa, looking at the position and role the English language plays in the multi-lingual situations of the West African countries as well as its role as the language of education. It then narrowed down to Nigeria, which is the focus country of this study, tracing the inception of the English language in Nigeria. The role that the English language plays within Nigeria’s complex language situation in general and specifically in the education system was then discussed.

Student writing in Nigeria was then examined, looking at previous studies into student writing in the country. The various factors causing low level or poor performance of students in English language in general and specifically in writing identified by scholars was then discussed. The review revealed a gap in the teaching of cohesion and coherence in Nigeria at the various levels of education. It was observed that cohesion and coherence, despite their significant position in learners’ writing, continues to receive little or no attention in English language textbooks and by teachers of English in Nigeria.
The next section focused on discussing the concepts of cohesion and coherence. This section was divided into four sub-sections. The first sub-section examined cohesion, looking at the various definitions and positions on how cohesion contributes to the success of written texts. The next sub-section focused on previous studies of cohesion in students’ writing and some of their findings. This was followed by the sub-section on the classification of cohesive devices and previous studies by scholars on their usage in learners’ writing. The last sub-section focused on coherence, discussing the various definitions of coherence and its importance and relevance to the success of L2 learners’ academic writing.

The final section looked at contrastive rhetoric, which is part of the interpretative framework of this research. Previous studies on contrastive rhetoric starting from the article of Robert Kaplan (1966) and their contributions to the understanding of the influence of the rhetorical patterns of L1 on L2 writing were examined. The possible links between rhetorical patterns and culture identified by scholars were also discussed.

The review creates the platform to investigate the use of cohesion in Nigerian learners’ texts. It has helped to establish the basic theoretical framework for this research. The chapter has defined the various concepts and terms prominent in this research as well as the interpretative framework. This theoretical framework is used as the basis for the data analysis and its interpretation in the subsequent chapters.
CHAPTER 3
METHODOLOGY

3.1 INTRODUCTION

This chapter focuses on the methodology of the research. The purpose of this study is to examine cohesion in written English essays of Nigerian tertiary learners. The cohesive devices of reference, conjunction, lexical cohesion, ellipsis and substitution will be examined in relation to coherence in their writing. The study has used the theory of contrastive rhetoric as a framework to interpret potential alternative composition styles appropriately and to offer implications to inform the future teaching of cohesion and coherence.

To achieve the research objectives, the study adopted a corpus linguistic approach. The corpus-based approach enables the researcher to carry out a quantitative description of language use which in turn enhances the qualitative interpretation in the analysis. This research intends to complement the quantitative result it gets from the analyses with a qualitative interpretation. The methodology will be presented under the following sections:

Section 3.2 presents the research design, giving the general overview of the research methodology and application. Section 3.3 examines the research instruments, the data extraction tools, and statistical methods. Section 3.4 discusses the research data, the data collection guidelines and process for the Nigerian learner English corpus (NLEC), description of collected data and the description of LOCNESS. Section 3.5 presents the statistical analysis of reference and conjunctive cohesion. Section 3.6 discusses the use of contrastive rhetoric as part of the interpretative framework of the analysis. Section 3.7 presents the sample analysis of ellipsis, substitution and lexical cohesion. Section 3.8 offers the concluding remarks.
3.2 RESEARCH DESIGN

3.2.1 GENERAL APPROACH

This study adopted a corpus linguistics approach. Corpus linguistics is based on the use of machine-readable collections of spoken and written texts that are produced in a natural communicative setting. The collection of texts is compiled with the intention (1) to be representative and balanced with respect to a particular linguistic variety of register or genre (2) to be analysed linguistically (Granger, 2002:4; Gries, 2009:7). Corpus linguistics involves the use of electronic collections of naturally occurring texts or corpora, and is held to be of immense advantage to researchers. Corpus data is more objective and can easily be verified and shared by other researchers. It also provides the possibility of total accountability of linguistic features (the analyst is able to count entry words/linguistic features not just selected ones) and can serve as a theoretical resource for researchers (Svartvik, 1992:8-10; Lindquist, 2009:9).

This study specifically adopted a learner corpus based approach to the study of learners’ language use. Researchers from different universities all over the world collect corpora containing spoken and written language produced by their learners. These are referred to as learner corpus data. One of the most popular projects of learner corpus data is the International Corpus of Learner English (ICLE). According to Lindquist (2009) the corpus makes it possible to compare the interlanguage (i.e. the version of English that the learners have internalised and use in their writing) of learners with different native languages, and to identify differences in usage due to interference from their first language and to educational backgrounds. In addition, similarities across different types of learners are made comparable too (Lindquist, 2009:19). The research into learner corpora, which comprises of texts spoken or written by novices rather than experts, brings about exciting pedagogical perspectives in a wide range of areas of English language teaching (ELT), materials design, curriculum design, language testing and classroom methodology. It helps to provide improved description of learner language which can be used for a wide range of purposes in foreign/second language acquisition research and also to improve foreign language teaching (Granger, 2002: 5, 22).
The corpus-based approach enabled the researcher to carry out a quantitative description of language use which in turn enhanced the qualitative interpretation in the analysis. To achieve this, the study involved frequency counting, comparing frequencies distribution in the corpus, using percentages and normalising as well as ensuring the relative representativity of the corpus. This research also complemented the quantitative result from the analyses with a qualitative interpretation. A comparative analysis was carried out using the learners’ corpora to examine if and how learners achieve cohesion in texts. Furthermore, the relationship between cohesion and coherence in learners’ texts was examined in addition to identifying areas where learners show underdevelopment, and where they can improve, in their use of cohesive devices compared to the standard norms.

The theory of contrastive rhetoric (see Chapter 2, section 2.6) was also used as part of the interpretation framework of the analyses to help understand the differences in the choice and usage of cohesive devices by the learners in their writing, which may not necessarily be as a result of deficiency or underdevelopment but are rather due to cultural differences. The result of these analyses enabled a better understanding of this phenomenon in general and allowed the researcher to present recommendations for teaching. Thus, the corpora were instrumental in achieving the objective of this research. The review of existing literature, which was undertaken and presented in Chapter 2, was used to develop operational definitions and to create a synthesis that enhances a deeper understanding of the underlying issues that necessitated this research. It was also used to develop the theoretical framework for the study. This was used in the annotation of data and its analysis.

3.2.1.1 CORPUS LINGUISTICS

Corpus linguistics is a field linked with the development of computer science and technology. In the words of Kennedy (1998:7-8), ‘corpus linguistics is based on bodies of text as the domain of study and the source of evidence for linguistic description and argumentation. Like other linguistics fields, corpus linguistics is primarily concerned with the description and explanation of the nature, structure and use of language and languages with particular focus on matters such as language acquisition, variation and change’. A corpus over the years has come to be regarded as a body of text made available in computer-readable form for purposes
of linguistic analysis. Even though linguists use corpora for very different purposes, they share a common belief that it is important to base one’s analysis of language on real data—actual instances of speech or writing—rather than on data that are contrived or ‘made-up’ (Meyer, 2004). Corpus linguistics continues to advance and more linguists are now open to the idea of using linguistic corpora for both descriptive and theoretical studies of language.

The corpus can be described as a means to an end. It has presented itself as a formidable research tool. On its own, the corpus does not provide direct information. However, when the correct software is applied for analysis, linguists are able to observe language in action (Hunston, 2002; Anthony, 2009; McCarthy & O’keeffe, 2010). A corpus can function as a useful tool for discovering many aspects of language use that otherwise may go unnoticed. Over time, it has proven itself essential when exploring issues related to language use. Some of the language use related issues such as how constellations of linguistic features work together in discourse and how language use varies by situation and environment, or over time can be explored through the lens of corpus linguistics (Reppen, 2010: 31).

The aim of corpus linguistics is the analysis and description of language use, as realised in texts. It provides a means for the empirical analysis of language and in so doing adds to its definition and description. This has led to the refinement of our description of lexis, leading to immensely enhanced coverage in dictionaries, and a proliferation of empirical studies about aspects of grammar (often in fine detail), as well as corpus-based reference grammars such as Biber et al. (1999) and Carter and McCarthy (2006) have surfaced. As Adolphs and Knight (2010:38) rightly observed, a noticeable focus on analysing written language with the development of corpus linguistics; and with written corpora now exceeding the one-billion-word mark, the possibilities for generating new insights into the way in which language is structured and used are both exciting and unprecedented.

The use of corpora for linguistic research enables the researcher to observe and identify linguistic features with the help of software like concordancers which enhances the proper interpretation and explanation of language use and function in texts (Sinclair, 2004:189). The use of concordance lines also help reveal typical patterns in language, which are difficult to detect when single instances of language use are examined. The presence of the patterns has
proved valuable in forming the basis of theories of language description such as Sinclair (1991, 1996) and Hoey (2007). Sinclair (1991, 1996) proposed the notion and description of word co-occurrence i.e. the correlations between patterns and meaning. He opined that most everyday words do not have independent meaning or meanings but are components of a rich repertoire of multi-word patterns that make up a text. Hoey (2007) suggested the notion of lexical priming which is a theory of language based on how words are used in the real word. It draws data and statistical evidence from language corpora. He believes that words are not confined to the definitions given in the dictionaries but rather believes that words interact with other words in common patterns. Corpus linguistics also enables linguistics to test theories of language description to determine their validity and identify areas of amendment and/or improvement. It is increasingly being used in areas such as language teaching and learning, discourse analysis, literary stylistics, forensic linguistics, pragmatics, speech technology, sociolinguistics and health communication (McCarthy & O’keeffe 2010: 6, 7).

Corpus-based contrastive analysis has experienced rapid development since the 1990s. The structure and use of languages has been explored with greater accuracy, detail and empirical strength in recent years due to the combination of computer corpus linguistics and contrastive analysis theory. The application of the combined approaches has provided increased validity and reliability to the systematic comparison of two or more languages (language use), with the aim of describing their similarities and differences as well as providing better descriptions and better teaching materials for language learners. Corpus-based studies highlight similarities and differences in the use, semantics and functions of the compared items, as well as the emergence of new meanings and language change. The emphasis varies from purely linguistic studies to those focusing on practical applications (Aijimer & Altenberg, 1996; Johnson, 2008; Gast, 2012).

3.2.1.2 APPLICATION OF CORPUS LINGUISTICS

The application of corpus linguistics to numerous fields of linguistic studies has brought new and useful insights to the understanding and interpretation of language in use and continues to be relevant in many linguistic areas of study. In the area of language teaching and learning, corpus linguistics has proven to be a useful tool in different areas. In the development of
learner corpora and its many benefits, the pioneering works of Granger (1996, 1998) and many others, continue to advocate the usefulness of corpus-based descriptions of language which provide facts that constitute a basis for improved language teaching.

Corpus linguistics has also lead to data-driven learning (DDL) and its effects on the correction and remediation of student writing as well as follow-up student corpus investigation. The work of researchers like Aijmer (2002), Altenberg (2002), Aston (1997), Bernardini (2000), Biber and Reppen (1998), Granger (1998), Meunier (2002), Reppen (2009), Ringbom (1998), Seidlhofer (2000), (2002), Sinclair (2004), and others provides ample evidence of the positive contribution of corpus linguistics in this field. The insights from corpus linguistics serve as reference work from which language teachers draw valuable resources. These insights help them to decide how to arrange syllabus content, inform them on the selection of specific grammatical features to teach and in what order to teach them. Teachers are able to use the information from corpus linguistics research to help shape the features and structures of language that are taught to students in class. Furthermore, the many articles on English for specific purposes (ESP) and English for academic purpose (EAP) in professional journals also provide very rich resources for teacher preparing students for particular contexts of English usage (Reppen, 2009:207).

Corpus linguistics has also contributed to language teaching materials and testing. Corpus informed-language teaching materials such as ELT dictionaries, CALL and even web-based teaching programmes such as TeleNex, reveal the value of corpus linguistics. Publishers such as Cambridge University Press, Oxford University Press, Pearson, Longman, Collins-COBUILD and Macmillan all make use of multi-million-word corpora and continue to launch new materials that are corpus informed (Granger, 2002:24-26; McCarthy & O’keeffe, 2010:9). The positive impact of corpora on dictionaries is extensively discussed by Hanks (2009: 214-236). In the area of language testing, a number of corpus-based studies of language testing have been carried out. Alderson (1996), cited in McEnery and Xiao (2010:10), proposed the following possible uses of corpora in this area: test construction, compilation and selection, test presentation, response capture, test scoring, and calculation and delivery of results.
Coniam (1997) demonstrated how to use word frequency data extracted from corpora to generate cloze tests automatically. Corpora are also used for the purpose of speaking assessment (Ball & Wilson, 2002; Taylor, 2003) and to develop domain-specific (e.g. business English) wordlists for use in test materials (Ball, 2002; Horner & Strutt, 2004). Kaszubski and Wojnowska (2003) presented a corpus-driven computer program, TestBuilder, for building sentence-based ELT exercises. Corpora have recently been used by major providers of test services for a number of purposes:

- as an archive of examination scripts;
- to develop test materials;
- to optimise test procedures;
- to improve the quality of test marking;
- to validate and standardise tests; and
- to support stakeholders (McEnery & Xiao 2010:11, Barker, 2010:1).

The studies of above-mentioned linguists and others reveal the positive contribution of corpus linguistics to language testing.

In the area of language teacher education, corpus linguistics has led to the development of specialised corpora for professional introspection and development (Farr, 2010:27). These corpora serve as invaluable resources for teachers in developing pedagogic and linguistic awareness. They help to reveal patterns of usage: overuse, underuse (avoidance), errors (lexical, collocations, and syntactic) as well as correct usage. These insights help the teachers to improve their own command of the English language and they can guide other teachers in making decisions concerning time allocation in teaching the various aspects of language use. Extensive studies in this area include: Allan, (2002), McCarthy (2008), and Farr (2005a, 2008a, 2010).

It has been well-established that corpus linguistics is useful to language teaching and learning. Language teaching benefits from the resources, methods, and insights provided by corpus linguistics. Insights from corpus linguistic studies, especially learner corpus studies, can also help language teachers with decisions about what to teach, when to teach it as well
as appropriate materials for teaching. Various corpora can also be accessed by teachers and learners in the language classroom, thereby assisting in the teaching process. As Granger (1998) and many others continue to point out, corpus-based descriptions of language teaching holds positive benefits for improved language teaching and learning.

### 3.3 RESEARCH INSTRUMENTS

The four research instruments used for this study were: the CLAWS part-of-speech tagger and WordSmith Tools 5.0, SAS software and log-likelihood and effect size calculator. They are discussed below.

#### 3.3.1 CLAWS PART-OF-SPEECH TAGGER

The Part-of-Speech (POS) tagger is a piece of software that assigns an appropriate grammatical tag to each word in a body of continuous text. It is the commonest form of corpus annotation. The POS tagging software, CLAWS (the Constituent Likelihood Automatic Word-tagging System), has been continuously developed since the early 1980s. The use of automatic tagging aids researchers in efficient and accurate corpus-based research; it assists in the analysis of data beyond the level of specific words. Several tag sets have been developed and used in CLAWS over the years. The CLAWS tag set starts from CLAWS1 tag set to CLAWS7 tag set. The CLAWS7 tag set was used to tag set the data for this study.

The choice of The CLAWS7 tag set was influenced by the study of Van Rooy and Schäfer (2003). They conducted an evaluation of three POS taggers to determine the most accurate for the tagging of the Tswana Learner English Corpus. They evaluated three POS taggers to determine which of those three offered the best results when tagging written second language English. The three evaluated taggers were: the Brill-tagger, TOSCA-ICLE and the CLAWS7 tag set. They used Van Halteren’s (1999) four criteria for the selection of taggers: (1) the tag set, (2) documentation, (3) the tagging process, and (4) performance. Their findings showed that The CLAWS7 tag set was the most accurate, at 96%, of the three evaluated POS taggers. CLAWS has been proven to be a reliable tool in corpus annotation. It has been used to tag
various corpora such as: the 100 million word British National Corpus, the Tswana Learner English Corpus, the East African English Corpus and more generally the tag set is presently used to tag corpora in the ICLE and ICE projects.

3.3.1.1 DATA TAGGING

The data for the study was tagged with the CLAWS7 Tag set. Below is an extract from an essay in the Nigerian Learner English Corpus and the table showing the list of the tags used in the extract. The complete list of tags is available on the Lancaster University website (http://ucrel.lancs.ac.uk/claws7tags.html).

Extract 1

Examination is a true measure of student's ability in the sense that after a whole semester, it is advisable for all lecturers to carry out a test of knowledge for the student in other to know their ability and capability.

In Nigeria today, most schools carry out examinations for student. There are many student in Nigeria who still do not know the means of going to school. Some think it is only for exams and tests and after they are promoted to the next class.

(NLEC-N051)
Table 3.1: Example of CLAWS7 tag set

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN1</td>
<td>singular common noun (e.g. book, girl)</td>
</tr>
<tr>
<td>VBZ</td>
<td>is</td>
</tr>
<tr>
<td>AT1</td>
<td>singular article (e.g. a, an. every)</td>
</tr>
<tr>
<td>JJ</td>
<td>general adjective</td>
</tr>
<tr>
<td>NN2</td>
<td>plural common noun (e.g. books, girls)</td>
</tr>
<tr>
<td>IO</td>
<td>of (as preposition)</td>
</tr>
<tr>
<td>ZZ1</td>
<td>singular letter of the alphabet (e.g. A, b)</td>
</tr>
<tr>
<td>II</td>
<td>general preposition</td>
</tr>
<tr>
<td>AT</td>
<td>article (e.g. the, no)</td>
</tr>
<tr>
<td>CST</td>
<td>that (as conjunction)</td>
</tr>
<tr>
<td>CS</td>
<td>subordinating conjunction (e.g. if, because, unless, so, for)</td>
</tr>
<tr>
<td>PPH1</td>
<td>3rd person sing. neuter personal pronoun (it)</td>
</tr>
<tr>
<td>IF</td>
<td>for (as preposition)</td>
</tr>
<tr>
<td>DB</td>
<td>determiner (capable of pronominal function) (e.g. any, some)</td>
</tr>
<tr>
<td>VVI</td>
<td>Infinitive (e.g. to give... It will work...)</td>
</tr>
<tr>
<td>RP</td>
<td>prep. adverb, particle (e.g. about, in)</td>
</tr>
<tr>
<td>APPGE</td>
<td>possessive pronoun, pre-nominal (e.g. my, your, our)</td>
</tr>
<tr>
<td>CC</td>
<td>coordinating conjunction (e.g. and, or)</td>
</tr>
<tr>
<td>NP1</td>
<td>singular proper noun (e.g. London, Jane)</td>
</tr>
<tr>
<td>RT</td>
<td>quasi-normal adverb of time (e.g. now, tomorrow)</td>
</tr>
<tr>
<td>DAT</td>
<td>superlative after-determiner e.g. (most, least, fewest)</td>
</tr>
<tr>
<td>NN2</td>
<td>plural common noun (e.g. books, girls)</td>
</tr>
<tr>
<td>VV0</td>
<td>base form lexical verb (e.g. give, work)</td>
</tr>
<tr>
<td>EX</td>
<td>existential there</td>
</tr>
<tr>
<td>VBR</td>
<td>are</td>
</tr>
<tr>
<td>DA2</td>
<td>plural after-determiner (few, several, many)</td>
</tr>
<tr>
<td>PNQS</td>
<td>subjective wh-pronoun (who)</td>
</tr>
<tr>
<td>RR</td>
<td>general adverb</td>
</tr>
<tr>
<td>VD0</td>
<td>do, base form (finite)</td>
</tr>
<tr>
<td>XX</td>
<td>not, n’t</td>
</tr>
<tr>
<td>NN</td>
<td>common noun, neutral for number (sheep, cod, headquarters)</td>
</tr>
</tbody>
</table>
3.3.2 WORDSMITH TOOLS

WordSmith Tools 5.0, a linguistic software programme was the major instrument used to extract and analyse the data for this study. The software was developed by Mike Scott in 1996 and the version 5.0 which was launched in 2010. The software helps to observe how words behave in texts, thus enabling the researcher to analyse words or phrases in context. It also enables the researcher to find keywords in a text and to sort files according to file names, their tags, or the numbers of words to the right or left. The tools have been used by language researchers to investigate language patterns in different languages in many countries worldwide (Scott, 2010:16).

3.3.3 SAS (STATISTICAL ANALYSIS SYSTEM)

According to SAS user guide (2004:17), SAS/STAT software provides comprehensive statistical tools for a wide range of statistical analyses, including analysis of variance, categorical data analysis, cluster analysis, multiple imputation, multivariate analysis, nonparametric analysis, power and sample size computations, psychometric analysis, regression, survey data analysis, and survival analysis. A few examples include nonlinear mixed models, generalized linear models, correspondence analysis, and robust regression. The software is constantly being updated to reflect new methodology. In addition to more than 80 procedures for statistical analysis, SAS/STAT software also includes the Power and Sample Size Application (PSS), an interface to power and sample size computations.
The software allows the computer programs to work together to store data values and retrieve them, modify data, compute simple and complex statistical analyses, and create reports. The SAS (Statistical Analysis System) software was used for the analysis of reference and conjunctive cohesion presented in Chapter 4. The software was used to perform the Chi-square tests using PROC FREQ. The PROC FREQ and MEANS have been part of SAS for over 30 years and it is the most used of the SAS analytical procedures. Proc FREQ does stratified analysis, computing statistics within, as well as across, strata. Frequencies can also be output to a SAS dataset (SAS/STAT User’s Guide, 1989).

The Alpha level or significance level was determined a priori, and was set at the 0.05 significance level. Thus, the Decision rule was:

If p-value is < 0.05 then reject the null hypothesis, and accept the alternate (There is a difference).

If p > 0.05 then accept the null hypothesis (There is no difference).

3.3.4 LOG-LIKELIHOOD AND EFFECT SIZE CALCULATOR

The study also used the log-likelihood calculator for corpus frequencies developed by Paul Rayson (UCREL University Centre for Computer Corpus Research on Language, Lancaster University, UK). The Web-based log-likelihood wizard is available at http://ucrel.lancs.ac.uk/llwizard.html. The calculator was adapted to pairwise statistical comparisons for the analyses of reference and conjunctive items in chapter 4. The calculator was instrumental for the interpretation of results and the selection of items discussed and analysed in details in the chapter. It was also used for the analysis of ellipsis, substitution and lexical cohesion using a sampled data of 20,000 words from LOCNESS and NLEC respectively presented in Chapter 5. The calculator was used to determine how significant the difference between two individual frequency scores is. It helps to identify potentially significant differences that require closer analysis (Rayson & Garside, 2000). The LL wizard shows a plus or minus symbol before the log-likelihood value to indicate overuse or underuse respectively in corpus 1 relative to corpus 2. The higher the log-likelihood (sometimes abbreviated to G2) value, the more significant the difference is between two frequency
scores. Rayson provides the scale on the bases of which significance of log-likelihood values can be interpreted:

- 95th percentile; 5% level; p < 0.05; critical value = 3.84
- 99th percentile; 1% level; p < 0.01; critical value = 6.63
- 99.9th percentile; 0.1% level; p < 0.001; critical value = 10.83
- 99.99th percentile; 0.01% level; p < 0.0001; critical value = 15.13

The chosen scale for the interpretation of the significance of the log-likelihood value for the analysis was set at the 99.9\textsuperscript{th} percentile; 0.1\% level; p < 0.001. Hence the critical value for interpretation is 10.83. This was done because multiple comparisons were undertaken, and hence a higher statistical threshold had to be set. The single table with the highest number of simultaneous comparisons contain 19 items, which means that if a Bonferroni correction is applied to the alpha level, the level should be set at p<0.0026. An alpha level of 0.001 is that a very safe level to avoid a Type I error by rejecting a null hypothesis incorrectly.

3.4 RESEARCH DATA

The data for this study was sourced from the Nigerian Learner English Corpus (NLEC) and LOCNESS which is a corpus of native British and American students’ essays.

3.4.1 THE NIGERIAN LEARNER ENGLISH CORPUS (NLEC)

The Nigerian learner corpus was not in existence at the onset of this study, thus steps were taken by the researcher to compile the corpus under the ICLE guidelines. The corpus was intended to consist of 200,000 words of learners’ writing on completion. The corpus contains students’ essays written in response to topics on argumentative and expository essays.
3.4.1.1 DATA COLLECTION

I set out to compile the Nigerian learner English corpus of written texts based on ICLE guidelines with a target size of 200,000 words. To achieve this, I used the guidelines for data collection for the Tswana Learner English Corpus project by Van Rooy (2009) to develop: (1) the guidelines for data collection; and (2) essay topics and the biographical questionnaire.

3.4.1.1.1 GUIDELINES FOR DATA COLLECTION - NIGERIAN LEARNER ENGLISH CORPUS PROJECT

The guidelines for data collection document were addressed to the lectures as guidelines to assist the students step by step in completing the biographical questionnaire. It consisted of the following: introduction and explanation of the research project; a step-by-step explanation on how to guide the students through the biographical questionnaire; and a request to lectures to supervise the students in the essay writing process. A copy of the guidelines for data collection is included as Appendix A.

3.4.1.1.2 ESSAY TOPICS AND BIOGRAPHICAL QUESTIONNAIRE

The document was addressed to the students and it consisted of a brief introduction and explanation of the research project. The students were then requested to complete the biographical questionnaire, sign the permission slip and write an essay of about two (2) to three (3) pages on a chosen topic from the six (6) essay topics given. Table 2 presents the six (6) essay topics given to the students. A copy of the essay topics provided to students and biographical questionnaire is presented as Appendix B.
### Table 3.2: Essay Topics

<table>
<thead>
<tr>
<th>Essay topics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Examinations are not true measures of students’ ability and should be abolished.</td>
</tr>
<tr>
<td>♦ Most university degrees are theoretical and do not prepare students for the real career world.</td>
</tr>
<tr>
<td>♦ Technology advancement is a curse rather than a blessing to our society.</td>
</tr>
<tr>
<td>♦ Gender equality has done more harm to the cause of women than good.</td>
</tr>
<tr>
<td>♦ The removal of fuel subsidy will help improve the nation’s economy.</td>
</tr>
<tr>
<td>♦ Advertising: information or manipulation?</td>
</tr>
</tbody>
</table>

### 3.4.1.2 DESCRIPTION OF COLLECTED DATA

Undergraduate students from three Nigerian universities participated in the essay writing process. The students were asked to choose one topic from the six argumentative and expository essays topics provided and write about two (2) to three (3) pages on their chosen topic. Overall, four hundred and sixty seven (467) essays were gathered with the total number of words amounting to 188,008 words. All the essays were handwritten and time-limited. All the essays, after having collected them, were typed into Word documents and were numbered accordingly.
3.4.2 LOUVAIN CORPUS OF NATIVE ENGLISH STUDENT ESSAY (LOCNESS)

The Louvain Corpus of Native English Student Essays (LOCNESS) is the native speaker component of the International Corpus of Learner English (ICLE). The LOCNESS is a corpus of native English essays written by native students. The version of LOCNESS that was available for use in this study contains British university students’ essays of 95,695 words and American university students’ essays totalling 168,400 words. This is widely used as a standard to compare with the non-native data in the learner corpus research community. This helps to analyse learners’ performance with the aim of improving language teaching.

3.5 ANALYSIS OF REFERENCE AND CONJUNCTIVE COHESION.

The analysis of reference and conjunctive cohesion is presented in Chapter 4. The quantitative analysis is presented first and the interpretation and discussion of findings is presented together with the qualitative analysis of the use of cohesive devices by learners from both corpora, thus the analysis is presented in tables. The frequency procedure table is presented first. The table consist of the normalised frequency, overall percentage, row percentage and column percentage. This is followed by the statistics table, then the bar graphs indicating the normalised frequency and the percentage of the number of texts by corpus. Guided by the statistical evaluation with the chi-square test, the log-likelihood test was performed on each individual item in the table, with an alpha level of \( p<0.001 \) and \( \text{LL}>10.83 \). An asterisk * indicates that a particular log-likelihood value meets the criterion level for statistical significance. The LL value served as a guide to determine overused and underused items. The interpretation and the discussion of the results are presented last in each sub-section.

3.5.1 EXTRACTING FEATURES FROM CORPUS

The extraction of reference and conjunctive cohesive devices as well as cluster patterns was done using the WordSmith Tools 5.0, developed by Scott (2010). The wordlist was used to extract all the reference and conjunctive cohesive device items (see Chapter 2, section 2.5.3.1 and 2.5.3.4) with the total frequency number and percentage as well as number of texts and percentage. The concordance was then used to disambiguate items that were ambiguous in
use. The following reference and conjunctive cohesive devices were extracted from the two corpora.

3.5.2 REFERENCE COHESION

Following Halliday and Hasan’s (1976) framework, the three types of reference cohesion extracted are personal reference, demonstrative reference, and comparative reference (see Chapter 2, section 2.5.3.1).

Personal reference was extracted from the two corpora under the categories of personal pronouns and possessive pronouns/ determiners.

The following personal pronouns were extracted: I, me, you, he, him, she, her, it, they, them, we, and us (Halliday & Hassan 1976:38). The personal pronoun her and the possessive pronoun her were disambiguated using the concordance.

The following possessive pronouns/ determiners were extracted: her, hers, his, its, mine, my, our, ours, their, theirs, your and yours (Halliday & Hassan, 1976:38). The possessive pronoun her was disambiguated using the concordance.

The following demonstrative determiners were extracted: this, these, that and those (Halliday & Hassan, 1976:38). The concordance was used to disambiguate the determiners from their other use e.g. as relative pronouns or adverbs.

The following adjuncts were extracted: here, now, then and there (Halliday & Hassan 1976:38). The concordance was used to disambiguate the use of there as an adverb, as exclamation and the existential there.

The following comparative adverbs were extracted: identically, similarly, less and so on (Halliday & Hassan, 1976:39).
3.5.3 CONJUNCTIVE COHESION

As discussed in Chapter 2, section 2.5.3.4. Halliday and Hasan’s (1976) framework was used as bases for this study. Conjunctions were extracted from the two corpora under four main categories: additive, causal, adversative and temporal.

The following additive conjunctions were extracted: also and, as well, besides, by the way, for example, for instance, furthermore, in addition, in other words, in the same way, likewise, moreover, not only, or and thus (Halliday & Hassan, 1976:242).

The following causal conjunctions were extracted: as a result, because, consequently, hence, in order to, in that case, in this respect, otherwise, since, so, so as, to this end, unless, and therefore (Halliday & Hassan, 1976:243). The concordance was used to disambiguate so as adverb of degree.

The following adversative conjunctions were extracted: although, at least, but, contrary to this, however, in any case, in fact, instead, nevertheless, on the contrary, on the other hand, still, though, whereas and yet (Halliday & Hassan, 1976:242).

The following temporal conjunctions were extracted: and then, at last, at the same time, at this moment, at this point, finally, in conclusion, in short, meanwhile, next, previously, soon, subsequently, to conclude, until then, after, before and while (Halliday & Hassan, 1976:243). The concordance was used to disambiguate the use of next as adjectives in noun phrases in the corpora.

3.5.4 STATISTICAL ANALYSIS

To examine the relationship or association in the use of each cohesive item between two categorical variables of LOCNESS and NLEC, a chi-square test of independence was used. Chi-square is a non-parametric statistical procedure used to test the relationship between frequencies in a display table (Oakes, 1998:24). It is used to examine the association between two categorical variables so as to verify the possible relationship between two categorical variables. There are many different types of chi-square tests; the two most often used as a starting point are a chi-square test of independence or a chi-square test of homogeneity which examine potential associations between categorical variables.
A chi-square test of independence is used to determine if two variables are related. A chi-square test of homogeneity is used to determine if the distribution of one categorical variable is similar or different across the levels of a second categorical variable. A frequency distribution table gives the frequency of occurrence at each level of the variable, the percentage of individuals at that level of the variable, the cumulative frequency of individuals at that level and below that level of the variable, and the cumulative percentage of individuals at that level and below that level of the variable.

To examine the relationship or association between the two categorical variables of LOCNESS and NLEC, the Chi-square tests were performed using PROC FREQ. According to Delwiche and Slaughter (1998), the most obvious reason for using PROC FREQ is to create tables showing the distribution of categorical data values. In fact, PROC FREQ is more than just a procedure for counting and cross tabulating. PROC FREQ is capable of producing test statistics and other statistical measures in order to analyze categorical data based on the cell frequencies in 2-way or higher tables. For the purpose of this study, the chi-square test of independence was used. In this test a two-way table is created and the observed counts are compared to the expected counts of the cells. The Chi-square result is presented together with the Likelihood Ratio Chi-square. According to Eyduran et al. (2006), Ozdemir (2006) and Ozdemir and Eyduran (2005), Chi-square and Likelihood Ratio Chi-square statistics have been widely used as criteria of independence and goodness of fit in contingency tables (row by column) as well as multivariate analysis such as logistic regression, and independence in contingency tables. The Likelihood Ratio Chi-square is used in the analysis as a double checking tool for testing the independence in contingency tables.

The results of each sub-category were presented using the frequency distribution tables (PROC FREQ). The tables provide the frequency of occurrence at each level of the variable. Each cell of the tables list four numbers: (1) the normalised frequency of the variable occurring in each cell; (2) the overall percentage of number of observations in that cell over the total sample size; (3) the row percentage of the number of observations in that cell over the total number in that particular row of the table; and (4) the column percentage of the number of observations in that cell over the total number in the column of the table. Log-
A likelihood test was performed on each individual item in the table. An asterisk * was used to indicate where value meets the criterion level for statistical significance. This served as a guide to determine overused and underused items. The frequency distribution tables are followed by the chi-square statistical analysis tables. The tables present the Chi-square and Likelihood Ratio Chi-square statistics to verify the association between the two variables being tested. The number of observations is indicated below the statistics tables.

3.6 CONTRASTIVE RHETORIC AS PART OF THE INTERPRETATIVE FRAMEWORK.

To help understand the differences in the choice and usage of cohesive devices by the NLEC learners in their writing, which may not necessarily be as a result of deficiency or underdevelopment, but due to cultural differences, the theory of contrastive rhetoric was used in the analyses to ensure that instances specific rhetorical preferences due to cultural rhetoric are picked up and clearly analysed and discussed. The cultural differences noticed between writers from different cultures are well attested to in the literature. Based on the various culture-specific rhetoric patterns pointed out by contrastive rhetoric research (see Chapter 2, section 2.7) the follow patterns are used for interpretation in this study:

- Repetition
- Overt expression
- Collectiveness vs individualism in discourse
- Overall use of connectors
- Overt expression of arguments
- Involved vs information production in texts

Instances where the above rhetorical pattern/ preference are observed are pointed out and discussed in detail.
3.7 SAMPLE ANALYSIS OF ELLIPSIS, SUBSTITUTION AND LEXICAL COHESION.

The analysis of ellipsis, substitution and lexical cohesion is presented in Chapter 5. The analysis of ellipsis, substitution and lexical cohesion was done using a data sample of 20,000 words from LOCNESS and NLEC respectively. The three cohesive devices could not be extracted using the WordSmith linguistic software because of their nature of use in texts, hence the need to do a manual extraction. Due to the large size of the data, it was not possible to manually extract the features from all the essays because of time constraints. I therefore chose to use a representative sample of approximately 10% from the two groups. The sample data was generated using Star Trek online Random Number Generator. The essays were read one after the other and the instances of ellipsis, substitution and lexical cohesion were manually identified and extracted. The process was repeated to ensure the accuracy of the extraction analysis. The extracted instances of each cohesive device are then presented followed by the statistics table and later the discussion of the findings.

3.7.1 SELECTION OF SAMPLES

The selection of the data sample for ellipsis, substitution and lexical cohesion analysis was done using the Star Trek online Random Number Generator. The target sample number of words from each corpus was 20,000 words, thus a random selection was done to the closest number of target words. For LOCNESS a total of 14 essays were selected to give a total of 20,268 words. For NLEC a total of 44 essays were selected to amount to a total of 20,213 words.

3.7.1.1 ELLIPSIS

The three types of ellipsis manually extracted from the sample data are nominal ellipsis, verbal ellipsis, and clausal ellipsis (Halliday & Hassan 1976:146). The classification and examples of each category of ellipsis are presented in Chapter 2, section 2.5.3.2. One example of each category of ellipsis extracted from each group was presented for qualitative analysis and is discussed in Chapter 5, section 5.2.1. The remnant extracted instances of ellipsis from the two groups are presented as Appendix C and D.
3.7.1.2 SUBSTITUTION

The three types of substitution manually extracted from the sample data are nominal substitution, verbal substitution, and clausal substitution (Halliday & Hassan 1976:91). The classification and examples of each category of substitution are presented in Chapter 2, section 2.5.3.3. One example of each category of substitution extracted from each group was presented for qualitative analysis and is discussed in Chapter 5, section 5.3.1. The remnant extracted instances of substitution from the two groups are presented as Appendix E and F.

3.7.1.3 MANUAL EXTRACTION OF LEXICAL REITERATION

The two major categories of lexical cohesion that were manually extracted are reiteration and collocation.

3.7.1.3.1 REITERATION

Lexical reiteration was extracted under the three categories of repetition, synonyms and superordinates (Halliday & Hassan, 1976:274-288). The extracted instances are then presented in tables for the two groups.

Repetition: Tables 5.3 (see Appendix G) and 5.4 (see Appendix H) present the extracted instances of repetition.

Synonyms: Tables 5.6 (see Appendix I) and 5.7 (see Appendix J) present the extracted instances of synonyms.

Superordinates: Tables 5.9 (see Appendix K) and 5.10 (see Appendix L) present the instances of superordinate words.

3.7.1.3.2 COLLOCATION

To extract the instances of collocating lexical items from the two samples, the recurrent word trigrams were adopted with the minimum frequency of five occurrences. The recurrent word trigrams were extracted using Wordsmith tools 5.0 (Scott 2010). The software was set to
retrieve the trigrams with the minimum of 5 occurrences from the data. Thirty-nine instances were extracted from LOCNESS and 144 from NLEC. The result lists were then filtered manually to eliminate topic-influenced clusters using content words from the list. Examples of deleted word trigrams that are influenced by essay topics are given below:

(1) ‘Most university degrees’ ‘and do not’ and ‘real career world’ from the essay topic ‘Most university degrees are theoretical and do not prepare students for the real career world’.

(2) ‘Examinations are not’ ‘are not true’, ‘and should be’ and ‘should be abolished’ from the essay topic ‘Examinations are not true measures of students’ ability and should be abolished’.

(3) ‘The removal of’, ‘of fuel subsidy’, ‘will help improve’, and ‘the nation’s economy’ from the essay topic ‘The removal of fuel subsidy will help improve the nation’s economy’.

(4) ‘Has done more’, more harm to’ ‘harm to the’ and ‘the cause of’ ‘Gender equality has done more harm to the cause of women than good’.

After the manual filtration process, a total of 28 recurrent collocating words in LOCNESS and 49 words in NLEC were found. The manual filtration shows the NLEC writers repeated fragments from the topic frequently in the first and the last paragraphs of their essays. The lexical collocating items in which topic influence was ruled out are presented in Table 5.13 for LOCNESS (see Appendix M) and Table 5.14 for NLEC (see Appendix N).

3.7.2 STATISTICAL ANALYSIS OF DATA SAMPLES

3.7.2.1 STATISTICAL ANALYSIS OF ELLIPSIS AND SUBSTITUTION

To examine the similarities and differences in the use of ellipsis and substitution between the two samples, the total number of frequency for each category of ellipsis was calculated, and the frequency numbers were then normalised to 100,000 words. The frequency in the data was too low to warrant the use of statistical tests.
3.7.2.2 STATISTICAL ANALYSIS OF LEXICAL REITERATION

To examine the similarities and differences in the use of lexical reiteration between the two sampled groups from LOCNESS and NLEC, the overall frequency, the normalised frequency of each sub-category and the log-likelihood value was calculated. The log-likelihood test for significant difference between the two groups for the use of repetition, synonyms and superordinate words were calculated using the Rayson’s log-likelihood and effect size calculator. The reason for the test was to establish the degree to which the differences between the two groups were significant and to have the bases for determining overuse and underuse for each type of lexical reiteration.

3.7.2.3 STATISTICAL ANALYSIS OF LEXICAL COLLOCATION

The structural classification of the extracted collocating lexical items was done using the structural taxonomy proposed by Biber et al. (1999, 2004) and the modification by Hyland (2008b). The adapted taxonomy used for the classification is presented below:

Table 3.3: STRUCTURAL CLASSIFICATION OF COLLOCATING PHRASES

<table>
<thead>
<tr>
<th>Verb-based</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verb phrase</td>
<td>Seems to be</td>
</tr>
<tr>
<td>Verb phrase + N</td>
<td>it is important</td>
</tr>
<tr>
<td>Verb phrase + preposition</td>
<td>To be in</td>
</tr>
<tr>
<td>Verb phrase + to</td>
<td>Will like to</td>
</tr>
<tr>
<td>Modal + verb</td>
<td>Will help improve</td>
</tr>
<tr>
<td>Anticipatory it + verb phrase</td>
<td>It is not</td>
</tr>
<tr>
<td><strong>Preposition-based</strong></td>
<td></td>
</tr>
<tr>
<td>Preposition phrase</td>
<td>In the society</td>
</tr>
</tbody>
</table>
The overall frequency of collocation clusters, the normalised frequency of each sub-category and the log-likelihood value was calculated. The log-likelihood test for significant difference between the two groups was calculated using the Rayson’s log-likelihood and effect size calculator. The test helped determine the degree of significance of the differences between the two groups use of collocation.

### 3.8 CONCLUDING REMARKS

As this study’s aim was to examine cohesion in the written English essays of Nigerian tertiary learners, the researcher examined the cohesive devices of reference, conjunction, ellipsis, substitution and lexical cohesion. The findings offer implications that could be useful to teachers for the teaching of cohesion and coherence. To achieve the research objectives, the study adopted a corpus linguistic approach. This approach allowed the
researcher to carry out a quantitative description of language use, which in turn enhanced the qualitative interpretation in the analysis. This research also complemented the quantitative results from the analyses with a qualitative discussion and interpretation.

This chapter gave a general overview of the research design, methodology and application. It began with the general introduction to the research methodology of corpus linguistics and its application. This was followed by a detailed description of the research instruments used for tag setting and extracting the data from the two corpora. The statistical tools SAS (statistical analysis system) software and log-likelihood and effect size calculator used for the data analyses were then presented and discussed. This was followed by the description of research data and the processes involved in the gathering of data for the Nigerian English Learner Corpus (NLEC). The process of extracting and statistically analysing reference and conjunctive cohesion were then discussed. This was followed by the description of the extraction of the sample and the analysis of ellipsis, substitution and lexical cohesion. The next two chapters present the results, interpretation and discussion of findings.
CHAPTER 4

ANALYSIS OF REFERENCE AND CONJUNCTIVE COHESION

4.1 INTRODUCTION

This research sets out to examine how Nigerian ESL learners achieve cohesion in written texts and how cohesion is related to coherence in their texts. It also seeks to identify areas where learners show underdevelopment in their usage of cohesive devices compared to the standard norms and to identify areas where learners can improve their writing. This chapter focuses on the analysis of reference and conjunctive cohesion. The extraction of reference and conjunctive cohesive devices was done using WordSmith Tools 5.0. The wordlist was used to extract all the reference and conjunctive cohesive device items together with the total frequency number and percentage as well as number and percentage of texts that contain particular cohesive items. The concordance function was then used to disambiguate items that were ambiguous in use manually.

To examine the most salient differences between Nigerian learners’ and LOCNESS learners’ use of reference and conjunctive cohesion in their writing, the chi-square test and likelihood ratio chi-square to determine the Alpha level or significance level were used. This was set at the 0.05 significance level. The chi-square tests were performed using SAS PROC FREQ (see Chapter 3, section 3.5.4). Paul Rayson’s log-likelihood and effect size calculator was used to perform the log-likelihood test on each individual item in the table. An asterisk * was used to indicate where value meets the criterion level for statistical significance. This served as a guide to determine overused and underused items. The interpretation and discussion of the results are then presented in each sub-section.

The results, interpretation and discussion of each sub-category of reference and conjunctive cohesion are presented in this chapter in a order. The quantitative analysis is done first and is presented in tables. First, the frequency procedure table, consisting of the normalised frequency, overall percentage, row percentage and column percentage is presented. This is followed by the statistics table, then the bar graphs indicating the normalised frequency and the percentage of the number of texts by corpus. The tables are carefully examined and the overused and underused items are identified. The interpretation and discussion of results are then presented together with the qualitative analysis.
Chapter 4 is structured as follows: section 4.1 gives the general introduction to the chapter, indicating the statistical method of analysis and procedures. Next, section 4.2 presents the analysis of reference cohesion; personal pronouns, possessive pronouns/determiners, demonstrative determiners, adjuncts and comparative adverbs. This is followed by section 4.3, which presents the summary of the findings on personal references as cohesive items in the two corpora. In section 4.4, the analysis of conjunctive cohesion with the sub-categories of additive, causal, adversative and temporal conjunctions are presented. Section 4.5 gives the summary of the findings on conjunctive items as used by learners in the two corpora. The last section, section 4.6, gives the concluding remarks for the chapter.

4.2 ANALYSIS OF REFERENCE COHESION

Cohesion encompasses the relations obtaining within/among the various components of a discourse. These relations, according to De Beaugrande and Dressler (1981); Halliday and Hasan (1976); Hoey (1991); and Olowe (1988), express the continuity observed between one part of a text and the other. It depicts the discourse point of contact with what precedes and what comes after. As indicated in the literature review, the potential for cohesion in writing lies in the systematic use of referencing items namely: personal, demonstrative, and comparative reference.

Personal reference is dependent on the use of personal pronouns and possessive pronouns/determiners. Demonstrative reference includes demonstrative determiners and adjuncts, while comparative reference includes comparative adjectives and adverbs. A more detailed discussion of reference cohesion is presented in Chapter 2, section 2.5.2.1. These referencing items and their contributions to cohesion in the learners’ essays are analysed, interpreted and discussed in this chapter.
4.2.2 ANALYSIS OF PERSONAL PRONOUNS

Personal pronouns represent specific people or things. Their use depends on number: singular (e.g., I) or plural (e.g., we); person: 1st person (e.g., I), 2nd person (e.g., you) or 3rd person (e.g., he); gender: male (e.g., he), female (e.g., she) or neuter (e.g., it); case: subject (e.g., we) or object (e.g., us). Personal pronouns help the writer organise the text thereby guiding the reader through the argument as well as state personal opinions and knowledge claims (Harwood, 2005). Pronouns are also powerful markers of affiliation (Chung & Pennebaker, 2007:353). They can help to reveal how academic writers construct their relationship with readers and with their discourse community (Kuo, 1999). They help create authorial presence (Tang & John, 1999). The use of personal pronouns as reference cohesive items in the two corpora is statistically analysed and interpreted below. The examples of usage are then extracted and discussed to indicate quality of use by writers in the two corpora.

4.2.2.1 STATISTICAL ANALYSIS AND TABLES

To examine the relationship or association in the use of personal pronouns between two categorical variables of LOCNESS and NLEC, a chi-square test was used. Table 4.1 is the normalised frequency distribution table. The frequency was normalised to 100,000 words. The table provides the frequency of occurrence at each level of the variable (in this instance, personal pronouns). Each cell of the table lists four numbers, the normalised frequency of personal pronouns occurring in each cell; the overall percentage of the number of observations in that cell over the total sample size; the row percentage of the number of observations in that cell over the total number in that particular row of the table; and the column percentage of the number of observations in that cell over the total number in that particular column of the table. Table 4.1 is followed by the chi-square statistical analysis table. In addition to the chi-square test on the entire table, a separate log-likelihood test was run on each individual item in the table, with an alpha level of p<0.001 and LL>|10.83. An asterisk * indicates that a particular log-likelihood value meets the criterion level for statistical significance. This presented in the last column of the table. Table 4.2 presents the chi-square and likelihood ratio chi-square statistical analysis. A total of 7664 instances of personal pronouns were extracted and analysed.
## TABLE 4.1: FREQUENCY PROCEDURE FOR PERSONAL PRONOUNS

<table>
<thead>
<tr>
<th>Normalised_Personal_Pronouns</th>
<th>CORPUS</th>
<th>LOG-LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STDLOCNESS</td>
<td>STD_NLEC</td>
</tr>
<tr>
<td>he</td>
<td>934</td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>12.19</td>
<td>1.74</td>
</tr>
<tr>
<td></td>
<td>87.54</td>
<td>12.46</td>
</tr>
<tr>
<td></td>
<td>24.01</td>
<td>3.52</td>
</tr>
<tr>
<td>her</td>
<td>102</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>1.33</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>63.35</td>
<td>36.65</td>
</tr>
<tr>
<td></td>
<td>2.62</td>
<td>1.56</td>
</tr>
<tr>
<td>him</td>
<td>172</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>2.24</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>83.90</td>
<td>16.10</td>
</tr>
<tr>
<td></td>
<td>4.42</td>
<td>0.87</td>
</tr>
<tr>
<td>I</td>
<td>235</td>
<td>457</td>
</tr>
<tr>
<td></td>
<td>3.07</td>
<td>5.91</td>
</tr>
<tr>
<td></td>
<td>33.96</td>
<td>66.04</td>
</tr>
<tr>
<td></td>
<td>6.04</td>
<td>12.11</td>
</tr>
<tr>
<td>it</td>
<td>902</td>
<td>1031</td>
</tr>
<tr>
<td></td>
<td>11.77</td>
<td>13.45</td>
</tr>
<tr>
<td></td>
<td>46.66</td>
<td>53.34</td>
</tr>
<tr>
<td></td>
<td>23.19</td>
<td>27.32</td>
</tr>
<tr>
<td>me</td>
<td>31</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>0.40</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>40.79</td>
<td>59.21</td>
</tr>
<tr>
<td></td>
<td>0.80</td>
<td>1.19</td>
</tr>
<tr>
<td>she</td>
<td>171</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>2.23</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>69.51</td>
<td>30.49</td>
</tr>
<tr>
<td></td>
<td>4.40</td>
<td>1.99</td>
</tr>
<tr>
<td>them</td>
<td>178</td>
<td>287</td>
</tr>
<tr>
<td></td>
<td>2.32</td>
<td>3.74</td>
</tr>
<tr>
<td></td>
<td>38.28</td>
<td>61.72</td>
</tr>
<tr>
<td></td>
<td>4.49</td>
<td>7.60</td>
</tr>
<tr>
<td>Normalised_Personal_Pronouns</td>
<td>CORPUS</td>
<td>LOG-LIKELIHOOD</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------</td>
<td>----------------</td>
</tr>
<tr>
<td>Frequency</td>
<td>Percent</td>
<td>Row Pet</td>
</tr>
<tr>
<td>us</td>
<td>62</td>
<td>0.81</td>
</tr>
<tr>
<td>we</td>
<td>267</td>
<td>3.48</td>
</tr>
<tr>
<td>you</td>
<td>187</td>
<td>2.14</td>
</tr>
<tr>
<td>Total</td>
<td>3890</td>
<td>50.76</td>
</tr>
</tbody>
</table>

**TABLE 4.2: STATISTICS TABLE FOR PERSONAL PRONOUNS**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>11</td>
<td>974.9422</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Likelihood Ratio Chi-Square</td>
<td>11</td>
<td>1063.8030</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

**4.2.2.2 PRESENTATION OF BAR GRAPHS**

Two double vertical bar graphs are presented below. This allows for more direct comparison on the same graph of the use of personal pronouns by learners in the two corpora. It also enables a more vivid recognition of the pattern or trend of usage. Figure 4.1 shows the
normalised frequency of personal pronouns in the two corpora. Figure 4.2 illustrates the percentage of texts that contain particular personal pronouns in the two corpora.

FIGURE 4.1: FREQUENCY OF PERSONAL PRONOUNS

![Frequency of Personal Pronouns](image)

FIGURE 4.2: PERCENTAGE OF TEXTS THAT CONTAIN PARTICULAR PERSONAL PRONOUNS

![Percentage of Texts Containing Personal Pronouns](image)
4.2.2.3 INTERPRETATION AND DISCUSSION

Based on the chi-square test presented in Table 4.2, a significant difference in two groups’ use of personal pronouns as reference items is observable at the p-value <0.0001 with the level of significance set at <0.05. In terms of percentages, Table 4.1 indicates the following 3rd person singular pronouns are underused: he at 1.70% in (NLEC) compared to 12.07% in (LOCNESS) with the LL value indicating significant underuse at -676.61; she at 0.96% (NLEC) compared to 2.21% (LOCNESS) with the LL value indicating significant underuse at -36.48; him 0.76% (NLEC) compared to 2.22% (LOCNESS) with the LL value indicating significant underuse at -103.26; and her at 0.77% (NLEC) compared to 1.33% (LOCNESS) with the LL value indicating significant underuse at -11.63. Table 4.1 also reveals the overuse of the following 1st person singular and plural pronouns: I at 5.91% (NLEC) compared to 3.04% (LOCNESS) with the LL value indicating significant overuse at +72.49; we at 5.89% (NLEC) compared to 3.04% (LOCNESS) with the LL value indicating significant overuse at +49.99 and us at 1.94% (NLEC) compared to 0.80% (LOCNESS) with the LL value indicating significant overuse at +37.66. All the differences are statistically significant based on the LL value.

The observed underuse of the 3rd person singular pronouns in the writings of NLEC learners could be attributed to a number of reasons. Firstly, it could be task-related as most of the analysed essays are argumentative essays and the students might have used the referent pronouns as a means to adapting to any of the three different roles, as distinguished by Tang and John (1999:26), adopted by a writer when producing a piece of writing. These roles are: societal role (identities inherent to a person); discourse role (identities a person acquires by participating in a particular discourse community); and genre role (specific to a particular genre within the discourse community). The underuse of 3rd person singular pronouns in NLEC may be a result of the learners’ essays being a response to topics that require a point of view to be argued with the aim of convincing the readers of the argument made.

Examples of such topics are as follows:

- Most university degrees are theoretical and do not prepare students for the real career world.

- Technology advancement is a curse rather than a blessing to our society.
- Examinations are not true measures of students’ ability and should be abolished.

- The removal of fuel subsidy will help improve the nation’s economy.

The response to the above topics requires little or non-use of 3rd person singular pronouns in order to achieve the writer’s aims and objectives. In contrast, the use of 3rd person singular pronouns is more pronounced in LOCNESS because most of the analysed essays are literary analyses as seen in the extract below:

**Extract 01**

Oreste therefore comes to realize his freedom and knows that the only way to free the people of Argos from their bad faith into a position of lucidity is to murder Egisthe and Clytemnestre. **He** thus makes a positive choice and in so doing realises his project. In so doing **he** is also a parody of Christ. Electre was waiting for **him** to come and save **her**. Being a blank-slate was a parody of being new born and then gaining experience through life. **He** then sacrifices another to save the people from the Gods and redeem them whereas Christ sacrifices himself to give **them** God’s grace and redemption. Oreste faces a final test. Jupiter tells **him** that being free is an intolerable burden and that it would be much better to submit himself to the Gods so you don't have to think or take any responsibility: <quote>. Jupiter says: <quote>. Sartre believes religion is a contradiction as you can't be free and submit yourself to the will of a God. Oreste, however, resists this test and takes his freedom: <quote>. **He** feels the anguish of being free and the exile, <quote>, but he also realises that at last **he**'s his own master. <ICLE-BR-SUR-0007>

The extract above indicates a high density of 3rd person singular pronouns. It is clear that the writers’ discourse role as analyst of the literary text requires extensive use of 3rd person pronouns in their writings. Thus, they are used as text-referential cohesive devices. The learners seem to make use of an impersonal style of writing in an attempt to assume non-involvement with the aim of making their essays look or meet the expected academic writing standard. This is different to the NLEC topics which require the learners to overtly state either their agreement or disagreement and then proceed to justify their point of view in an attempt to convince the readers of their stand. This requires much less extensive use of 3rd person pronouns for the purpose of the essays to be achieved. Rather, the discourse role they acquired in their essays required them to be more self-involved and sometimes displaying some emotional involvement. The writers appear to be more overtly persuasive. The use of
overt persuasive expressions in writing by L2 advanced learners has been analysed by Van Rooy (2008). He carried out a multidimensional analysis of student writing in Black South African English (Tswana Learner English Corpus) compared to LOCNESS. He used six dimension scores to analyse the two corpora. Overt persuasion is the 4th dimension score. The analysis reveals that the liberal use of the linguistic resources associated with overt expression of persuasion as identified by Biber (1988) are used for the purpose of convincing the reader of the particular position the learner writer advocates. These reflect in the choice and use of personal pronouns in their writing – for example:

**Extract 02**

Technology is scientific knowledge used in practical ways. Technology help us to developed and improve our economic activities in the society. It makes our work easily and faster in many ways. Therefore I am against this topic which says technology advancement is a curse rather than a blessing to our society. Technology is not a curse to our society but it is a blessing to our society because its developed and improve our economic activities and most especially by interacting with one another through phone or email. The most important things of which technology have done to our society are as follows: Firstly if you look around, technology is almost everywhere! Now, we can send email to our friends rather than the old fashioned letters which take so long to reach the receivers. Personally, technology helps out a lot in my life. Now, I can easily message to my parents after school to reassure them that I am alright or search for information needed for my school project…<NLEC - 471>

The above extract shows no use of 3rd person personal pronoun (male/ female) because of the topic the learner is responding to. The writer attempts to respond to the topic with the aim of arguing his/her point of view as correct and to persuade the reader(s) thereof. These reasons account for the constant use of I by the writer. The use of the 1st person plural pronoun we and us in the text gives the sense of writer-reader involvement. The evidence of writer-reader involvement in L2 texts has also been established by Van Rooy (2008). This can also be traced to the learners’ cultural background of communality and inclusiveness. The Nigerian culture places emphasis on interpersonal involvement in the society. This culture is usually carried over to day-to-day verbal interaction, ensuring the conscious inclusiveness in discourse. It is apparent from the extract that the writer’s choice of words alternates between lexical and pronominal cohesion. The learner repeated technology and, in fewer instances,
repeated it as anaphoric reference to the topic (Technology advancement is a curse rather than blessing to our society) of discourse. This points to a very explicit style of referencing and the repetition of the lexical item does not in any way detract from the overall cohesion of the text.

The overuse of 1st person singular and plural personal pronouns is also observed in NLEC. The extensive use of 1st person singular I and 1st person plural us and we in the learners’ text could be attributed to their topic of discourse. Learners’ responses require them to state a purpose and channel their arguments. Learners are required to use language rhetorically for persuasive intent. It is also an indication of the learners’ cultural background that values people and encourages a sense of community, inclusiveness and sometimes solidarity. Thus, the writer communicates in a manner that does not exclude particular individuals or groups. The following extracts are examples of the learners’ attempt at achieving their purpose.

Extract 03

We live in a technologically advanced world, where more and more electronic gadgets are going wireless. We have mobile phone, wireless computer and even mobile television. However is technological development more of a blessing or a curse to mankind? It is obvious to know how much technology has helped us in our daily lives… I personally felt that technology is more of a blessing than a curse. It gives us choices which we do not have before and improved human living condition. Technology may cause us harm but that should not deter us from improving it like we had become the king of all animal. <NLEC-012>

The extensive use of we and us in the above extract serves as an effective strategy by the writer to depict his/her involvement and the personal connection the writer has to issue being discussed. For example the writer says ‘we live’, ‘we have’, ‘technology has helped us’, ‘it give us choice which we’, ‘Technology may cause us… deter us… like we…’

The above extract is completely different from the extract below from LOCNESS in terms of the use of 1st person singular personal pronouns and 3rd person plural personal pronouns. In
the extract below, the writer writes from a neutral and non-involved position, thus, the writer functions as a narrator, distant from the context of the text. The choice of words used is totally devoid of the writer's presence.

Extract 04

When a reporter interviews someone for a story that will be published, whether it be in a newspaper, on a TV broadcast, or on the radio, the interviewee has to trust the reporter to be fair and honest. The interviewee must believe that the reporter will report the facts accurately, or the interviewee will not tell the whole story. If the interviewee does not want the public to know where the reporter got the story, the reporter must decide if he/she will keep the source secret. If the reporter decides to keep the source secret, he/she must do so, no matter who asks for the information. Keeping the sources secret, especially in a courtroom setting has always been a problem for many journalists. In some states, for example, if a reporter does not reveal his/her sources he/she can be put in jail for contempt of court. The trust bond between a reporter and his/her source can be compared to that of a doctor-patient relationship, and it should not be broken. <ICLE-US-SCU-0013.3>

The use of pronouns indicates that the writer is writing in a context and since the writer is also involved in the context of writing, there is the continuous use of personal references. They reveal the writers’ perspective and experience, which creates a sense of the writer’s involvement in the issue of discourse. The use of the pronouns helps to create and maintain a relationship between the writer and the reader(s) of the text. They create a form of interaction between the writer and readers. They are also used by the writer to secure corporation from and maybe solidarity with the readers. More importantly, they function as text-referential cohesive device in the essay.

It is equally important to examine the use of I and its role in the learners’ essays. I in the learners’ essays is used to announce the presence of the writer. It also draws the readers into critical thinking on the topic of discourse which could help to influence them and possibly persuade them. This is shown with the verbs that the writer combines with the pronoun I.

For example: ‘Less I forget’, ‘I believe’, ‘I implore’ and ‘I have’. This can be seen in the extract below:
And also, if government can make an account on how the money will be spent then we would all be in full support of the fuel subsidy. Less I forget, issue of the refinery machine, I believe the government are not ready to put an end to that due to the money that embezzled on it, and they believed if the refinery machine is being repaired they will not have the chance to do that again. To me I implore they should buy more refinery machine and repair the damages one and stop depending on white men, who believe we cannot succeed without them if all this corrections are being corrected, then corruption in Nigeria as a whole will decrease because I believe corruption in Nigeria cannot stop. So, I implore our government to find a solution to the problems we are facing in this country before bring the idea of fuel subsidy. This few points of mine, I believed I have convinced you to oppose the motion which says “the removal of fuel subsidy will help improve the nation’s economy”. <NLEC-081>

I shows confidence in the writer’s evaluation and commitment to the idea being discussed. It leaves the readers with no doubt on where the writer stands on the issue of discourse. This helps to facilitate proper interpretation of the writer’s intention (message). The findings corroborate Hyland’s (2002) assertion that the use of author pronouns (1st person pronouns referring to the writer) in L2 students’ writing are mainly to state a discoursal goal and explain a methodological approach. I is used by the learners in the essays to foreground the person who writes, organises, structures, and outlines the material, as in the following example:

Extract 06

I oppose the topic which says technology advancement is a curse due to the fact that: but before I proceed I will like to define technology which is the introduction of modern and new equipments, skills, knowledge and ways of progressing in a community in order to make an advancement in the society… With these few points of mine I will like to convince you and no to confuse you the reader that technology advancement is a blessing rather than a curse in our society and I think when more is introduced more will be known and the economic will grow to the peak. <NLEC-131>
Being the creator of the text, I is used to present the thesis statement; the writer also uses I to operate as a guide through the essay. He/she introduces the readers to the essay, guides the readers through the essay and navigates the readers to the point of conclusion. This is done with the intention of persuading the readers and, if possible, swaying their opinions to support the writer’s point of view. From the above extracts, an attempt by the learner to convince the readers of their intentions on the chosen topics is observable. Thus, I, we, and us play a very significant role in assisting the learner to signal his/her intentions as well as framing the arguments. Moreover, the use of these 1st person personal pronouns helps the learners take full responsibility for their claims and helps them create successful academic arguments. The use of I helps to enhance the learners’ authorial involvement in the texts as well as project a strong writer’s voice and identity (Harwood, 2005; Hyland, 2002). These pronouns are also used as politeness devices by learners in order to include their readers into their discussions. They influence the interaction between the writer, reader and text in relation to the genre of writing. It can give the writer/reader a sense of communality (Hyland, 2001; Quirk, et al., 1985).

Table 4.1 also points to a significant overuse of the 2nd person singular personal pronoun you in the NLEC learners’ essays. The pronoun you is used by the learners in their essays: (1) to refer to the reader directly; (2) as a semantic reference to the indefinite pronoun one; and (3) to refer to people in general. The overuse of you may be as a result of the learners’ attempt at creating a level of interpersonal discourse and direct involvement between the writer and the reader. Learners also used it as a text-referential cohesive device (Biber, 1988, 1995; Halliday & Hassan, 1976; Smoke, 1999). This is seen in the extract below:

Extract 07

Categorically, imagine a day without your phone or maybe your car. Then for 24 hours without your phone you are outside from the rest of the world, and you will also be on your foot for the day. Just imagine that stress and pain and information loss…Let’s examine one concrete reason why technology is the best thing human life has got. Regardless of where you are or where you have been you should have heard about a machine/device as it’s known called ‘computer’. Researchers and scientist have all gathered and concluded that it is the greatest invention known to mankind. Think about the usefulness of this machine what you yourself uses it for and then think about not having it or not even been invented… Technology nowadays is the baseline of every
you can’t hate it because when you are missing someone you pick up your phone to call or text that’s ‘technology’. you drink cold water from your freezer that’s ‘technology’ you listen to news either through your TV or radio know that’s it is ‘technology’. You travel via the fastest means of transportation that ‘technology’... A proverb says ‘if you can’t break them then join them’. So against all odds come join the winning team and enjoy technology cause its everything you do. Generations to come will remember you for taking part in the technology race. A noble prize winner once say don’t try to know it, don’t try to understand it just enjoy it cause its meant for ‘You’. <NLEC – 033>

From extract 07, the learner’s extensive use of you is evident. The writer attempts to address the reader as part of the discourse by using you. It is also evident from the extract that you is used by the writer as a means to connect with the intended audience. The writer creates a context involving him/herself conversing directly with the reader using the reader’s personal experience as a tool to enhance a clear understanding of the point the writer is trying to make. However, the repetitive use of the personal pronoun you is an indication that the writer’s style of writing remains at a basic communication stage, which in a way detracts from the overall quality of the text. Thus, there is need for improvement in order to present a more sophisticated essay while still achieving the set goals of creating interpersonal discourse and direct involvement with the reader.

In summary, the observed underuse of 3rd person singular pronouns in NLEC could be task-related and may be due to the learners’ essays responding to topics that require them to be more self-involved. The overuse of the 1st person singular I is also observed in NLEC. The extensive and frequent use of the 1st person singular I in the learners’ text is attributed to their topic of discourse. They are required to use language rhetorically to persuade the reader. The use of I helps to enhance their authorial involvement in the texts as well as projecting strong writer’s voice and identity. I is used by the learners in the essays to foreground the person who writes, organises, structures, and outlines the material.

The overuse of the 1st person plural pronouns we and us in the text gives the sense of writer-reader involvement. This can also be traced to the learners’ cultural background. The Nigerian culture places emphasis on interpersonal involvement in the society. This culture is
usually carried over to day-to-day verbal interaction, ensuring the conscious inclusiveness in discourse. It is also an indication of the learners’ cultural background that values people and encourages a sense of community, inclusiveness and sometimes solidarity (Esionwu 2016).

The strategic use of personal pronouns in NLEC essays is to manage readers’ awareness of the author’s role and viewpoint. They perform the discourse function of assuming shared knowledge and experience. They also help to shorten the distance between the writer and the readers. Furthermore, they serve as an important tool used by the writers to seek cooperation and stress solidarity with the expected readers. They also play a crucial role in the overall coherence of the texts. As seen in the extracted texts above, the choice and use of the personal pronouns assist the readers to make sense of ideas, theories and concepts of discourse in the texts. They help to create the reader’s mental frameworks for the organisation of information in the text. Thus, the differences in the use of personal pronouns as referential cohesive devices seen in the two corpora are not due to under development in their usage but due to factors like topic of discourse, context and discourse role acquired by the learners in their essays. These factors ultimately influence the stylistic and organisational properties of the texts and also make them coherent.

4.2.3 ANALYSIS OF POSSESSIVE PRONOUNS/DETERMINERS

Possessive pronouns attribute ownership to someone or something. In other words, they demonstrate ownership in communication. Like any other pronouns, they substitute noun phrases and can prevent repetition. Possessive pronouns are also known as possessive adjectives, although the latter term is sometimes used with a wider meaning. Possessive pronouns and determiners operate with personal pronouns to achieve personal reference in texts. Based on the similarities of the functions of the two possessive groups and for convenience in analysis and discussion, the possessive pronouns and determiners are subsequently combined and labelled possessive pronouns/determiners. The use of possessive pronouns/determiners as reference cohesive items in the two corpora is statistically analysed and interpreted below. The examples of usage are then extracted and discussed to indicate quality of use by writers in the two corpora.
4.2.3.1 STATISTICAL ANALYSIS AND TABLES

Table 4.3 presents the normalised frequency of occurrence of possessive pronouns and determiners at each level of the variable, together with the log-likelihood values of individual items, and an indication of statistical significance (LL>|10.83|, p<0.001). Table 4.4 presents the chi-square and likelihood ratio chi-square statistical analysis. A total of 3286 instances of possessive pronouns were extracted and analysed.

TABLE 4.3: FREQUENCY PROCEDURE FOR POSSESSIVE PRONOUNS/DETERMINERS

<table>
<thead>
<tr>
<th>Normalised_Possessive_Pronouns/ Determiners</th>
<th>CORPUS</th>
<th>LOG-LIKELIHOOD</th>
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</thead>
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<td>STD_LOCNESS</td>
<td>STD_NLEC</td>
</tr>
<tr>
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</tr>
<tr>
<td>Col Pct</td>
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<tr>
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</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.06</td>
</tr>
<tr>
<td>hers</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.06</td>
</tr>
<tr>
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TABLE 4.4: STATISTICS TABLE FOR PESSSESSIVE PRONOUNS/DETERMINERS

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<tr>
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<td>Likelihood Ratio Chi-Square</td>
<td>11</td>
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<td>&lt;.0001</td>
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</table>

4.2.2.3 PRESENTATION OF BAR GRAPHS

Figure 4.3 shows the normalised frequency of possessive pronouns/determiners in the two corpora. Figure 4.4 shows the percentage of texts that contain particular possessive pronouns/determiners in the two corpora.
FIGURE 4.3: FREQUENCY OF POSSESSIVE PRONOUNS/DETERMINERS

FIGURE 4.4: PERCENTAGE OF TEXTS THAT CONTAIN PARTICULAR POSSESSIVE PRONOUNS/DETERMINERS
4.2.2.2 INTERPRETATION AND DISCUSSION

The chi-square test in Table 4.4 indicates a significant difference between the two groups in their general use of possessive pronouns/determiners at the p-value <0.0001. Table 4.3 indicates an overuse of possessive pronoun/determiner my at 3.45% (NLEC) compared to 1.93% (LOCNESS) with the LL value indicating significant overuse at +14.90; our at 19.21% (NLEC) compared to 4.42% (LOCNESS) with the LL value indicating significant overuse at +341.75. The extracts below offer examples of the use of possessives in the two corpora.

EXTRACT 08

Although Europe is a much discussed topic, with talks about subsidies and a single European currency, the concept of a united Europe is still difficult for the average person to visualise. Perhaps because they are worried and uncertain as to their role and Britain's in this new state, they prefer to believe that it is simply not possible or even probable. Steps have already been taken, however, towards this goal. The 1972 European Communities Act and the Treaty of have as their aims the eventual unification of the nation states. Hence the fact that there is no clause in the Treaty detailing how a member may leave. The treaty bound Britain to certain measures which have already curtailed our sovereignty. For example, the European Commission (an unelected body) can issue resolutions which do not even need to be incorporated into the domestic law of each member state - they are directly applicable. How has this affected our sovereignty? Until 1986 each member had the power of veto so that no new law could be passed without full agreement. In a way this did not affect our sovereignty. The Single European Act of 1986, however, introduced majority voting. It is now possible, therefore, that the UK opposes proposed legislation but that is voted through by the other states and becomes law here without our consent. This is obviously an infringement of our sovereignty already. A unified Europe, though, could be expected to have a more representative legislative body, although there is no guarantee that we will not be in a minority then. Perhaps Europe will be organised on a federal system as a "United States of Europe", each state with limited legislative authority for its own affairs and one supreme house to co-ordinate foreign policy and the like. We have already begun to integrate our trade, and we have free movement of labour within the community. <ICLE-BR-SUR-0017.3>

EXTRACT 09

To my own view technology advancement is a curse rather than a blessing to our society because we live in a technologically advanced world where more and more electric gadgets are going wireless. We have mobile phones, wireless computers and even mobile television. However, is technological development more of a blessing or a curse to mankind? It is obvious to know how
much technology has helped us in our daily lives. People had to walk miles just to go to school or work. Thanks to the advancement of technology, people can either take bus or drive a car to reach their destination. It is now very convenient to move from places to places, if we look around, technology is almost everywhere. We can send email to our friends rather than the old fashioned letters which take so long to reach the receivers. Personally, technology helps out a lot in my life. Now I can easily message to my parents after school to reassure them that I am alright or search for information needed for my school project with just a click on the button… It’s a curse to our society, children and teenagers depend on computer more than an hour using facebook, twitter, etc. It spoils their eye site and they get addict to them as there is a lot of video games and lots of fun with friends…Technology advancement is a curse rather than a blessing to our society people don’t use their head, they use the internet… It is used cursing a big problem in the life of the teenagers now like the facebook. People browse it, it also takes most of our time, the time we should use to read to get some knowledge we use it for facebook and so on. It is not given us blessing at all in our society this days. In conclusion, I personally felt that technology advancement is a curse rather than a blessing to our society it has curse harm but that should not deter us from improving it. <NLEC - 088>

According to Hyland (2002a:1091), ‘a central element of pragmatic competence is the ability of writers to construct a credible representation of themselves and their work, aligning themselves with the socially shaped identities of their communities’. This is achieved through the choice of a range of rhetorical and linguistic resources in texts. Possessives in the texts are used as rhetorical and interactive features to address their readers and draw them into the discourse (Hyland, 2005a). As seen from extract 09, with repeated use of we, and our, the essay is presented in a personalised and dialogic way involving the intended audience and indicating inclusivity (we and our) of thoughts, ideas, experiences as well as the context of discourse. The occurrence of these possessives illustrates the writer’s ‘stylistic stance’ in responding to the topic (Biber, 2006). These stylistic features seem to also mirror most spoken registers (i.e., conversational focus). The NLEC writers used more of the features than LOCNESS writers did. The use of the features could also be traced to the cultural rhetorical background of communality, inclusiveness and solidarity of the Nigerian learners.

Table 4.3 also illustrates the underuse of her at 0.82% (NLEC) compared to 2.25% (LOCNESS) with the LL value indicating significant underuse at -22.74; her at 3.09%
(NLEC) compared to 19.29% (LOCNESS) with the LL value indicating significant underuse at -429.40. These findings are in line with the previous findings of the underuse of personal pronouns in the same corpus. It is earlier indicated that possessives work together with personal pronouns for effective cohesion and coherence of discourse. They operate to form part of the interpersonal and interactional metadiscoursal elements in the texts (Hyland, 2005a). Thus, the non-usage/ low use of 3rd person personal pronouns in the texts is linked to the underuse of the corresponding possessives in the corpus.

4.2.3 ANALYSIS OF DEMONSTRATIVE DETERMINERS

Demonstratives are words used to refer to some other entity associated with a notion of relative distance (proximal/distal). Grammatically, they can function as determiners or pronouns. The reference of a demonstrative is contextually motivated by the writer/ speaker and contextually inferred by the reader/ hearer. Pragmatically, demonstratives play an important role in the organisation of information flow in a text. They can reactivate the previously mentioned referents with or without new information, or they can introduce new referents in a text. They can refer to what the writer/ speaker is explicitly writing/ saying and to what a writer/ speaker is implicitly writing/ saying (Rustipa, 2015; Zaki, 2011).

Demonstratives are often termed demonstrative references because they are actually referring expressions. The writer locates this type of reference along a scale of proximity. This scale is defined in terms of the selective participation and circumstances that define the textual occasion (Halliday & Hasan, 1976:37). The use of demonstrative determiners in the text is to avoid obscurity of expression and to avoid unnecessary ambiguity. The basic distinction in the deployment of the demonstratives is in relation to the point of view of the writer of the text. The use of demonstrative determiners as reference cohesive items in the two corpora is statistically analysed and interpreted below. The examples of usage are then extracted and discussed to indicate quality of use by learners in the two corpora.
4.2.3.1 STATISTICAL ANALYSIS AND TABLES FOR DEMONSTRATIVE DETERMINERS

Table 4.5 gives the normalised frequency of occurrence of demonstrative determiners at each level of the variable, with a log-likelihood value for each individual item. Table 4.6 presents the chi-square and likelihood ratio chi-square statistical analysis. A total of 2183 instances of demonstrative determiners were extracted and analysed.

**TABLE 4.5: FREQUENCY PROCEDURE FOR DEMONSTRATIVE DETERMINERS**

<table>
<thead>
<tr>
<th>Table of Determiners by CORPUS</th>
<th>Normalised_Determiners</th>
<th>CORPUS</th>
<th>LOG-LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row Pct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Col Pct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row Pct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Col Pct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that</td>
<td>27</td>
<td>48</td>
<td>75</td>
</tr>
<tr>
<td>1.24</td>
<td>2.20</td>
<td>64.00</td>
<td></td>
</tr>
<tr>
<td>36.00</td>
<td>5.04</td>
<td>3.44</td>
<td></td>
</tr>
<tr>
<td>these</td>
<td>246</td>
<td>180</td>
<td>426</td>
</tr>
<tr>
<td>11.27</td>
<td>8.25</td>
<td>42.25</td>
<td></td>
</tr>
<tr>
<td>57.75</td>
<td>18.89</td>
<td>19.51</td>
<td></td>
</tr>
<tr>
<td>this</td>
<td>853</td>
<td>623</td>
<td>1476</td>
</tr>
<tr>
<td>39.07</td>
<td>28.54</td>
<td>67.61</td>
<td></td>
</tr>
<tr>
<td>57.79</td>
<td>42.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>69.35</td>
<td>65.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>those</td>
<td>104</td>
<td>102</td>
<td>206</td>
</tr>
<tr>
<td>4.76</td>
<td>4.67</td>
<td>9.44</td>
<td></td>
</tr>
<tr>
<td>50.49</td>
<td>49.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.46</td>
<td>10.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1230</td>
<td>953</td>
<td>2183</td>
</tr>
<tr>
<td>56.34</td>
<td>43.66</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 4.4: STATISTICS TABLE FOR DEMONSTRATIVE DETERMINERS**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>3</td>
<td>17.0917</td>
<td>0.0007</td>
</tr>
<tr>
<td>Likelihood Ratio Chi-Square</td>
<td>3</td>
<td>16.9886</td>
<td>0.0007</td>
</tr>
</tbody>
</table>
4.2.3.3 PRESENTATION OF BAR GRAPHS

Figure 4.5 shows the normalised frequency of demonstrative determiners in the two corpora. Figure 4.6 shows the percentage of texts that contain particular demonstrative determiners in the two corpora.

FIGURE 4.5: FREQUENCY OF DETERMINERS

![Frequency of Determiners](image)

FIGURE 4.6: PERCENTAGE OF TEXTS THAT CONTAIN PARTICULAR DETERMINERS

![Percentage of Texts](image)
4.2.3.3 INTERPRETATION AND DISCUSSION

The chi-square test in Table 4.6 indicates a significant difference between the two groups in their general use of demonstrative determiners at the p-value <0.0001. In terms of percentage, Table 4.5 shows the underuse of this at 28.54% (NLEC) compared to 39.01% (LOCNESS) with the LL value indicating significant underuse at -35.99 and these at 8.25% (NLEC) compared to 11.27% (LOCNESS) with the LL value indicating significant underuse at -10.97. The following extracts are examples of instances of how the learners used these determiners in their texts.

Extract 10

This new knowledge of genetics is leading to a much more profound discovery. Scientists are now attempting to map the human genome, which when done will unlock the mysteries of human genetics and will give doctors the ability not only to eliminate certain disease carrying genes, but also to manipulate others. This new genetic research has led to many controversies over the project to map the human genome and to many debates concerning the ethical consequences if the research continues. Arguments are framed for both sides of the issue from not only doctors and scientists, but also from the layman, as ethical issues are not considered to belong to only a group of experts, but everyone. To convince readers that genetic research and its application could be detrimental, one must present a very strong argument. This argument must contain a large amount of information as to cover all aspects of the subject and it must refute any counter arguments. One possible way of presenting the most effective argument opposing genetic research and its application is by doing three doings... This reference to the Nazis deals with Hitler's plan of genocide and the procreation of his master race. This obvious atrocity would be effective in an argument because virtually all people find this example horrifying and would be skeptical about continuing research into genetics, which already far surpasses the research Hitler had available to him... This short history would therefore make a very strong case against furthering genetic research by showing a consequence that may be similar to Hitler's experiments. <ICLE-US-MRQ-0040.1>

Extract 11

This issue of subsidy has been in existence since 1978 when former President Olusegun Obasango was a military president. He tried to remove it but the monsters of this country wouldn't allow him, up till now we are suffering from this same problem. The country or any other cannot survive alone in a globalised cashless economy in the new age of globalization. You
may subsidize agriculture but not fuel because it has far-reaching negative effect on stratification of society which is vital…Subsidy cannot benefits us in this country because the result of it is that money for subsidy goes into unproductive side of the economy encouraging the production of pure water billionaires who end up sponsoring all sorts of programs like Boko Haram, Shari's with their profits while the majority wallows below 2 dollars a day… Last year alone government paid about a quarter of the subsidies since 2006 and by this year was expected to double last year's cost, isn't that absurd? Minister of Finance Okonjo-Iwela was on air during the strike in Jan this year and said we have over 6000 abandoned projects in Nigeria just because we do not have sufficient funds to finance these projects. <NLEC - 270>

Demonstratives are referring expressions whose interpretations depend on the context and inference. They are crucial in creating and maintaining readers'/listeners’ attention to the intended referent (Zaki, 2011). The above extracts from the two corpora reveal an attempt by the learners to give a direct and clear indication of the referent items. Every sentence operates as part of a context. Each part of the text creates the context within which the next bit of the text is interpreted. The use of this in ‘This new knowledge’, This new genetic research’, ‘This argument’, ‘This reference to’ and ‘This obvious atrocity’ in extract 10; and this in ‘This issue’, ‘this country’, ‘this same problem’ and ‘this year’ in extract 11 helps to avoid ambiguity of reference items, contribute to clear and smooth reading and helps the readers to comprehend the texts. This is also a summary device that makes cohesive ties explicit. Although there is a difference in number/ percentage of usage in the two corpora in terms of quality of usage of these demonstratives, both groups of learners demonstrate a good command of usage.

Similarly, as shown in the extracts below, the use of the plural form these as demonstrative reference in the two corpora show a good quality of usage, despite the differences in quantity of usage.

Extract 12

What do Cindy Crawford, Kate Moss, Naomi Cambell, and Kristy Turlington have in common? All of these women are extremely beautiful, all are top notch models, but most importantly all are understood to be the "perfect and ideal" women… Because of the standards that society place on women, teenagers, and young girls, there are many disorders which alter these females’ state of mind, health, and body. Disorders so severe that there is such a strong dissatisfaction with one's
appearance that they interfere with living healthy. I believe that every woman is beautiful. True beauty comes from within - so why can't the media and society place higher standards on personality, education, and inner beauty. Once we realize that beauty isn't everything, we can begin to live healthy, both mentally and physically… what about our states of mind -- these drastic actions can only be detrimental to the ways in which we think. I think not. We don't have to let society coerce their opinions of beauty onto us, we don't have to let the media make us believe that we're not good enough, or pretty enough. . 

**Extract 13**

*These* questions are not of merely academic interest. They are social issues that affect our daily living and influence our way of life. The citizens of this country are on a daily basis exposed to arranged and manipulated information in form of adverts which could be injurious and misleading in the part of the decoder i.e. the target audience…Take for instance, the issue of power generation, adverts upon adverts have been made by the Government since the inception of this democratic regime, way back in 1999 promising the people of this greater country a benchmark of 6000 MW of electricity generation which have in turn gulp billions of dollars, but alas, the people's hopes on *these* adverts till date are dashed from the Government's inability not only to generate the 6000MW of electricity as promised.. *These* advertisements, if manipulated as is 90% of the case this day’s drive home claims on this consumables which are not really true. This of course have varying degree of multiplier effects on unsuspecting consumers of these products which could be injurious to their health as a result of this singular advert manipulated by the producers of such goods... This of course have varying degree of multiplier effects on unsuspecting consumers of *these* products which could be injurious to their health as a result of this singular advert manipulated by the producers of such good. <NLEC- 363>

The most critical factor guiding the writer’s/speaker’s choice of a demonstrative determiner is the sense of calling the reader’s/listener’s attention to something (someone) for a particular purpose (Zaki, 2011). Based on the above extracts, it is evident that the reasons for using demonstrative determiners by the learners are to guide the readers to find out the intended referent correctly; so that the intended referent is clear for the reader; to avoid ambiguity; to avoid misunderstanding; and to make the text easy to be comprehended by the readers. Thus, *this* and *these* are used because they clarify references unambiguously (Swales, 2005). Although the underuse of the demonstrative determiner *this* and its plural form *these* in the Nigerian learners’ texts is a reality, the extracts above indicate that they are correctly used as referential elements. The use of these determiners as referential elements contributes to the
creation of the relationship between context and text in order to achieve cohesion of the text. The anaphoric function of the demonstratives in the texts above, make the text semantically meaningful and accounts for easy interpretation and understanding of discourse. Hence, the use of demonstratives contributes meaningfully to the coherence of the texts.

4.2.4 ANALYSIS OF ADJUNCTS

Adjuncts are reference items which locate the text with respect to time and place. They function as the link in discourse to demonstrate the relationship between existing in time (now and then) and place (here and there). Now and then also perform textual functions beyond time as they are sometimes used as discourse markers in texts. The use of adjuncts as reference cohesive items in the two corpora is statistically analysed and interpreted below. Examples of usage are then presented and discussed to indicate the quality of use by learners in the two corpora.

4.2.4.1 STATISTICAL ANALYSIS AND TABLE

Table 4.7 gives the normalised frequency of occurrence of adjuncts at each level of the variable, together with a log-likelihood value for each adjunct, and an asterisk to mark significant differences. Table 4.8 presents the chi-square and likelihood ratio chi-square statistical analysis. A total of 764 instances of adjuncts was extracted and analysed.
TABLE 4.7: FREQUENCY PROCEDURE FOR ADJUNCTS.

<table>
<thead>
<tr>
<th>Frequency Procedure for Adjuncts by CORPUS</th>
<th>Normalised_Adjuncts</th>
<th>CORPUS</th>
<th>LOG-LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STD_LOCNESS</td>
<td>STD_NLEC</td>
<td>Total</td>
</tr>
<tr>
<td><strong>here</strong></td>
<td>40</td>
<td>38</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>5.24</td>
<td>4.97</td>
<td>10.21</td>
</tr>
<tr>
<td></td>
<td>51.28</td>
<td>48.72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.84</td>
<td>9.62</td>
<td></td>
</tr>
<tr>
<td><strong>now</strong></td>
<td>82</td>
<td>190</td>
<td>272</td>
</tr>
<tr>
<td></td>
<td>10.73</td>
<td>24.87</td>
<td>35.60</td>
</tr>
<tr>
<td></td>
<td>30.15</td>
<td>69.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>22.22</td>
<td>48.10</td>
<td></td>
</tr>
<tr>
<td><strong>then</strong></td>
<td>140</td>
<td>69</td>
<td>209</td>
</tr>
<tr>
<td></td>
<td>18.32</td>
<td>9.03</td>
<td>27.36</td>
</tr>
<tr>
<td></td>
<td>66.99</td>
<td>33.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>37.94</td>
<td>17.47</td>
<td></td>
</tr>
<tr>
<td><strong>there</strong></td>
<td>107</td>
<td>98</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>14.01</td>
<td>12.83</td>
<td>26.83</td>
</tr>
<tr>
<td></td>
<td>52.20</td>
<td>47.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29.00</td>
<td>24.81</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>369</td>
<td>395</td>
<td>764</td>
</tr>
<tr>
<td></td>
<td>48.30</td>
<td>51.70</td>
<td>100.00</td>
</tr>
</tbody>
</table>

TABLE 4.8: STATISTICS TABLE FOR ADJUNCTS

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>3</td>
<td>66.6407</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Likelihood Ratio Chi-Square</td>
<td>3</td>
<td>68.2548</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

4.2.4.2 PRESENTATION OF BAR GRAPHS

Figure 4.7 shows the normalised frequency of adjuncts in the two corpora. Figure 4.8 shows the percentage of texts that contain particular adjuncts in the two corpora.
FIGURE 4.7: FREQUENCY OF ADJUNCTS

FIGURE 4.8: PERCENTAGE OF TEXTS THAT CONTAIN PARTICULAR ADJUNCTS
4.2.4.3 INTERPRETATION AND DISCUSSION

The results of the chi-square test in Table 4.8 shows a significant difference in the use of adjuncts as referential cohesion in the corpus at the p-value <0.0001. In terms of percentage, Table 4.7 shows the overuse of now at 16.48% (NLEC) compared to 7.11% (LOCNESS) with the LL value indicating significant overuse at +44.09; and the underuse of then at 5.98% (NLEC) compared to 12.14% (LOCNESS) with the LL value indicating significant underuse at -24.61. Below are extracts from the two corpora showing the use of adjuncts.

Extract 14

Under Mitterrand we have seen the nationalisation of firms and new balance of power in Parliament. The text is more the privileges and wields power in the same manner as his predecessors adhered to now as Mitterrand has not got a majority to back up his policies in Parliament but he still enjoys <ICLE-BR-SUR-0024.1>.

Extract 15

We must understand that the advancement has helped our economic and it has given rise to people especially the students, to have a broad spectrum of ideas and carry out their functions as students, but these has now been abused by people, as fraudulent activities are now carried out with them. <NLEC – 004>

In the extracts above, the use of the referential adjunct now in the context of usage operates as an indication of reference to the time of discourse by the writers. It helps to put the events being discussed as happening or taking place in the present. Likewise, the extracts below also reveal the use of then as referential adjuncts of time. In extract 16, then indicates the discourse in terms of time in the past (i.e. time of reference in the past) while in extract 17, then is used to indicate time in the future (i.e. time of reference in the future expectation).

Extract 16

In 1989, U.S. faced almost 4,500 subpoenas. Since then the numbers have definitely increased. The real danger in the rush to subpoena reporters is not that news organizations will face expense or inconvenience but that stories that used to be hard to get will become ... well-nigh impossible (Henry 56). <ICLE-US-SCU-0013.3>
Extract 17

I will like to start by saying if subsidy is meant to reduce the peoples poverty level by making fuel affordable to the people and it is been removed to create amenities and infrastructure values to the nation the necessary measures should be made available to the people to at least ease the problems and challenges to be faced by the community and this amenities should be done in the shortest possible amount of time, but government is giving a duration of 4 years what are the people expected to be managing with till then. <NLEC – 207>

From the extracts and the discussion above on the use of referential adjuncts, it is evident that although there is a difference between the frequencies of usage in the two corpora, this does not result in poor usage or underdevelopment in terms of usage of the said reference items by the NLEC learners. It is clearly seen from Table 4.7 that the major difference in the use of adjuncts in the two corpora is temporal rather than spatial. The frequency table reveals very similar usage of place adjuncts in two corpora.

4.2.6. ANALYSIS OF COMPARATIVE ADVERBS

Comparative reference is a form of indirect reference that is established by means of identity. Comparative adverbs modify. But in this case they show a degree of comparison. They are used when people, places, or things are compared. The use of adjuncts as reference cohesive items in the two corpora is statistically analysed and interpreted below.

4.2.5.1 STATISTICAL ANALYSIS AND TABLES

Table 4.9 gives the normalised frequency of occurrence of adjuncts at each level of the variable, together with log-likelihood values, neither of which meets the criterion for statistical significance. A total of 74 instances of comparative adverbs were extracted and analysed. Due to low numbers of the cell counts, no statistical analysis was done for comparative adverbs.
TABLE 4.9: FREQUENCY PROCEDURE FOR COMPARATIVE ADVERBS.

<table>
<thead>
<tr>
<th>Normalised_Comparative Adverbs</th>
<th>CORPUS</th>
<th></th>
<th></th>
<th>LOG-</th>
<th>LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STD_LOCNESS</td>
<td>STD_NLEC</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less</td>
<td>34</td>
<td>50.00</td>
<td>87.18</td>
<td>68</td>
<td>91.89</td>
</tr>
<tr>
<td>similarly</td>
<td>5</td>
<td>83.33</td>
<td>12.82</td>
<td>6</td>
<td>8.11</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>52.70</td>
<td>47.30</td>
<td>74</td>
<td>100.00</td>
</tr>
</tbody>
</table>

4.2.5.3 PRESENTATION OF BAR GRAPHS

Figure 4.9 shows the normalised frequency of comparative adverbs in the two corpora. Figure 4.10 shows the percentage of texts that contain particular comparative adverbs in the two corpora.
FIGURE 4.9: FREQUENCY OF COMPARATIVE ADVERBS

FIGURE 4.10: PERCENTAGE OF TEXTS THAT CONTAIN PARTICULAR COMPARATIVE ADVERBS
4.2.5.4 INTERPRETATION AND DISCUSSION

The analysis indicates that the use of comparative adverbs as reference cohesive device is quite an infrequent choice by learners in the two corpora. Table 4.9 shows a relatively similar use of comparative adverbs in the two corpora. There is no significant difference in the use of comparative adverbs as referential cohesion in the two corpora.

4.3 SUMMARY OF FINDINGS ON REFERENCE COHESION

The quantitative analysis indicates there are many cases of overuse and underuse of personal referential items as cohesive devices by Nigerian learners in the study. Regarding the use of personal pronouns, the analysis reveals the overuse of 1st person personal pronoun I and 3rd person plural personal pronouns we and us. It also indicates the underuse of 3rd person singular personal pronouns he, she, him and her in NLEC. The qualitative analysis however, shows the cause of this overuse and underuse is due to the learners’ essays being a response to topics requiring them to take a point of view and argue it with the aim of convincing the readers to agree with the learners. The underuse does not in any way detract from the overall cohesion and coherence of the NLEC texts.

The overuse of 3rd person plural pronouns is also traced to the learners’ cultural background of communality, inclusiveness and solidarity. The Nigerian culture places emphasis on interpersonal involvement in the society. This culture reflects in verbal interaction, ensuring inclusiveness, communality and solidarity in discourse. These findings concur with Connor’s (2002) assertion that texts are functional parts of ever-changing cultural contexts. Contrastive rhetoric has established the fact that writers in different languages and cultures make distinguished literacy practices and preferences in writing. It has also been proven that stylistic preferences of writing are culturally embedded and that second language learners may carry over those preferred rhetorical patterns of their native languages in their second language writing. Thus, the Nigerian learners’ choice of personal pronouns, i.e., the overuse of certain pronouns and the underuse of others, I conclude, does not amount to underdevelopment. The observed variation in the use of personal pronouns as referential
The qualitative analyses of reference items, as seen in the extracts, point to their importance as contributory elements to the overall quality of the texts. The reference items build up as semantic properties of discourse that are formed through the interpretation of individual
fragment and or sentence, relative to the interpretation of other fragments and or sentences. Thus, they enable the overall cohesion and coherence of the texts.

4.4 ANALYSIS OF CONJUNCTIONS

Conjunctions help readers interpret the pragmatic connections in a text in relation to the writer’s thinking as well as expressing the semantic relations between clauses (Hyland, 1998). The use of conjunctions has been shown to help maintain text cohesion and coherence in academic discourse. They help to create the semantic unity. Halliday and Matthiessen (2004) refer to conjunctive cohesion as how the writer creates and expresses logical relations between the parts of a text using conjunctions. The importance of connectors for the understanding of inter-sentence relations and for the construction of cohesive devices for text coherence has been highlighted by scholars such as: Chen (2006), Rahimi and Qannadzadeh (2010), Tseng and Liou (2006), and Yang and Sun (2012), among others. Many reasons are proposed for the usage of these connective devices, including cultural differences, e.g. reader/writer responsibility, issues of positive politeness, and for stylistic impact (Fulwiler & Hayakawa, 1997; Hinds 1983, 1987).

Conjunctions operate as logical connections between clauses, sentences and paragraphs in discourse, adding them together, comparing them, sequencing them in time, or explaining their causes, purpose or conditions. Different conjunctions serve different purposes within a text. In stories, conjunctions can be used to link events together in sequence of time, while in persuasive texts, they can be used to construct the logic of an argument from hypothesis to evidence to conclusion (Martin, 2004). Conjunctive cohesion is discussed under four main categories, namely additive, adversative, causal and temporal conjunctions as follows:

- Additive conjunctions connect phrases, clauses and sentences in writing. They are used to further the discourse topic.

- Causal conjunctions mark the relationships of reason, consequence and purposes.

- Adversative conjunctions operate to introduce an item of information which is ‘contrary to expectation’ in discourse.
Temporal conjunctions specify the time sequence relationship which exists between propositions.

A more detailed discussion of conjunctive cohesion has been presented in Chapter 2, section 2.5.2.4. The above conjunctive categories are extracted from the learners’ writing in the two corpora. These conjunctive items and their contributions to cohesion in the learners’ essays are analysed, interpreted and discussed in the following section.

### 4.4.1 ANALYSIS OF ADDITIVE CONJUNCTIONS

Additive conjunctions are commonly used to connect phrases, clauses and sentences in writing. They are used to expand discourse, and when necessary, to take the topic of discourse further. Additive conjunctions are generally used to indicate elaboration and exemplification. They are different kinds of additive words that enhance cohesive relations (Halliday & Hassan, 1976:244). They are used to provide related information in a text. Additive conjunctions are used as expressions to introduce an item as either a specific or a more general claim. They mark transitions from a more general point to a more specific supporting point or argument, or mark transitions to a specific supporting example. Additive conjunctions are also used to link compound and complex sentences. A compound sentence is a sentence with more than one subject or predicate, i.e. has two independent clauses or sentences, while a complex sentence contains an independent clause and at least one dependent clause. The use of additives as connectors to enhance cohesion in the two corpora is statistically analysed and interpreted below. The examples of usage are then extracted and discussed to indicate quality of use by learners.

#### 4.4.1.1 STATISTICAL ANALYSIS AND TABLES

Table 4.10 gives the normalised frequency of occurrence of additive conjunctions at each level of the variable, together with the log-likelihood value of each individual conjunctions, with an asterisk marking significant differences. Table 4.11 presents the chi-square and
likelihood ratio chi-square statistical analysis. In total, 7246 instances of additive conjunctions were extracted and analysed.

**TABLE 4.10: FREQUENCY PROCEDURE FOR ADDITIVE CONJUNCTIONS**

<table>
<thead>
<tr>
<th>Table of Additive_Conjunction by CORPUS</th>
<th>CORPUS</th>
<th>LOG-LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised_Additive Conjunction</td>
<td></td>
<td></td>
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<tr>
<td>Frequency Percent</td>
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<td></td>
</tr>
<tr>
<td>Row Pct</td>
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<td></td>
</tr>
<tr>
<td>Col Pct</td>
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<td></td>
</tr>
<tr>
<td>also</td>
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<td></td>
</tr>
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</tr>
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</tr>
<tr>
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<td>2650</td>
<td>3.65</td>
</tr>
<tr>
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<td>51.43</td>
<td>77.76</td>
</tr>
<tr>
<td>and</td>
<td>2503</td>
<td>34.54</td>
</tr>
<tr>
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<td>65.22</td>
</tr>
<tr>
<td>and</td>
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</tr>
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</tr>
<tr>
<td>furthermore</td>
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<tr>
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<tr>
<td>in addition</td>
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<td>in other words</td>
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</tr>
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</tr>
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</table>
### Table of Additive Conjunction by CORPUS

<table>
<thead>
<tr>
<th>Frequency</th>
<th>CORPUS</th>
<th>LOG-LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
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<td>STD_NLEC</td>
</tr>
<tr>
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<td>0.08</td>
</tr>
<tr>
<td>Col Pct</td>
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<td>54.55</td>
</tr>
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<td>0.16</td>
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<td>likewise</td>
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<td>6</td>
</tr>
<tr>
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<td>2</td>
</tr>
<tr>
<td>not only</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>or</td>
<td>354</td>
<td>747</td>
</tr>
<tr>
<td>thus</td>
<td>47</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>3408</td>
<td>3838</td>
</tr>
<tr>
<td></td>
<td>47.03</td>
<td>52.97</td>
</tr>
</tbody>
</table>

### TABLE 4.11: STATISTICS TABLE FOR ADDITIVE CONJUNCTIONS

<table>
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<tr>
<th>Statistic</th>
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<th>Value</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
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</tr>
<tr>
<td>Likelihood Ratio Chi-Square</td>
<td>15</td>
<td>273.5635</td>
<td>&lt;.0001</td>
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</tbody>
</table>

### 4.4.1.3 PRESENTATION OF BAR GRAPHS

Figure 4.11 shows the normalised frequency of additive conjunctions in the two corpora. Figure 4.12 shows the percentage of texts that contain particular additive conjunctions in the two corpora.
FIGURE 4.11: FREQUENCY OF ADDITIVE CONJUNCTIONS

![Bar chart showing frequency of additive conjunctions](chart1)

FIGURE 4.12: PERCENTAGE OF TEXTS THAT CONTAIN PARTICULAR ADDITIVE CONJUNCTIONS

![Bar chart showing percentage of texts containing additive conjunctions](chart2)
4.4.1.3 INTERPRETATION AND DISCUSSION

From the chi-square test in Table 4.11, it is observable that a significant difference between the two groups in their general use of additive conjunctions at the p-value <0.0001 exists. In terms of percentages, Table 4.10 shows the following additive conjunctions are overused in NLEC: or at 10.31% (NLEC) compared to 4.89% (LOCNESS) with the LL value indicating significant overuse at +143.42; furthermore at 0.52% (NLEC) compared to 0.07% (LOCNESS) with the LL value indicating significant overuse at +28.70; also at 5.27% (NLEC) compared to 3.22% (LOCNESS) with the LL value indicating significant overuse at +36.46; and for instance at 0.59 % (NLEC) compared to 0.07% (LOCNESS) with the LL value indicating significant overuse at +34.46.

The following extracts are examples of the learners’ attempt at presenting a well-connected essay using additive conjunctions:

Extract 18

Technology advancement has also caused sight problems for example, in the past, you seldom see people wearing spectacles whereas now, almost every teenagers is wearing spectacles. The reason is because many teenagers now use the computers for so long to the extent that they spoil their own eyes. Also, it also serves as material for distraction for example blackberry, ipod, are used in the lecture room when lectures are going on, which can distract the lecture himself and also other students sitting beside them. Furthermore, recently in the United States the former health and human services secretary Tommy Thompson announced that he will be getting an implanted microchip under his skin, once it is under his skin he has no freedom again because with this microchip he can be easily tracked which can also damage the skin. Indeed, technology advancement is a curse in Nigeria rather than blessing because it is through technology advancement that we have crude oil which has caused economic breakdown. For instance, the government have abandon agriculture products and other mineral resources for crude oil which is unsustainable for the country. <NLEC - 011>

A look at an extract of the NLEC learners’ essay above shows a general high-density of additive conjunctions, while an extract from LOCNESS, with a similar length, shows otherwise. From the extracts above and many others, Nigerian students tend to adopt overt connectives for coordination and subordination rather than use other cohesive devices. These
connections are made explicit by the use of different additive conjunctions. It is also evident that the NLEC learners are very familiar with these additive connectors and their usage. Thus, they tend to use them a lot in their texts to achieve logical organisation. Below is an extract from LOCNESS and the number and frequency of additive conjunctions is very low compared to extract 18 above.

**Extract 19**

It seems we are being subconsciously and consciously led to believe that a woman can do anything a man can do without considering the consequences of that concept. The intentions seem honorable on the surface, however when reality comes into play, reality is often altered to accommodate the need to create equality. For example, when a female enters the military, her intellectual capabilities to enter military service may be the same as a males, however once in the military and given assignments of equal capacities as a male, the standards for a particular routine are sometimes lowered to accommodate the physical weakness of the weaker sex. And goes into the military, her intellectual capability to enter may be the same, however once in the military and given assignments of equal capacity as a male, the standards for a particular routine are sometimes lowered to accommodate the physical weakness of the weaker sex. This could result in a distortion and/or deterioration of proper standards for warfare routines. In an effort to create this equal environment among the sexes in the military, the standards in which this equality is measured should be in terms of mentality and intellectual capabilities but it somehow filters over into the physical and emotional sense as well. <ICLE-US-SCU-0001.4>

From the extracts and discussions above, it is clear that NLEC learners overuse additive conjunctions. This might be attributed to their over-familiarity with certain additive conjunctions, hence the overuse of additives in their essays. It may also be an attempt by learners to impose surface logicality in their writing. This could also be an indication of NLEC learners’ explicit style of writing. They attempt to fully and clearly express their points, hence, leaving nothing implied. They leave no room for confusion by their use of additive conjunctions. It is also important to state that the obvious over-indulging in the use of additives by the learners might be attributed to their eagerness to make a good impression on the reader, who in this instance is the lecturer. It could also be due to the fact that the L2 learners are writing from a limited linguistic repertoire, hence, they overuse the familiar additives. The repetition of familiar lexical items has been labelled as lexical teddy bear by Hasselgren (1994).
The analysis also shows that the additive conjunction *thus* is underused in the NLEC at 0.12% compared to 0.65% in LOCNESS. The extracts below are examples of the use of *thus* as a connector in the corpus:

**Extract 20**

The effects of Alcohol on the body is also largely influenced by the climate. In the North Montesquieu makes a comparison with China which had laws to reinforce "l'esprit général" of the people. They have festivals to celebrate harvests and award incentives to the hardest workers *thus* encouraging the people. The effect of alcohol on the body is also largely influenced by the climate. In the North although they drink, the alcohol does not evaporate and coagulate in the blood. Such is the effect of alcohol in the south and *thus* people are more given to drunkeness. As Montesquieu says "L'Allemand boit par coutume, le spaniard par choix." The major characteristic of the cold climate being virtue, led to the formation of a Republican system of government. In order for Republicanism to be sustained in these regions education involved the inculcation of virtue in the citizens. In the temperate climates, honour being the main characteristic of the people led to the establishment of Monarchies. Education *thus* involved the inculcation of patriotic duty and honour into the people. In hot climates however Despotism reigned…Montesquieu's theory of the influence of climate on societies is largely based on empirical evidence and exaggerated anecdotes. 18 Century France was not very well educated on the cultures of other continents and could *thus* come to such biased conclusions as Montesquieu did. <ICLE-BR-SUR-0014.2>

The extract above shows the use of *thus* as an additive conjunction in text. For example, the first *thus* in the extract is used as an additive to connect the phrase ‘encouraging the people’ to the phrase before it ‘They have festivals to celebrate harvests and award incentives to the hardest workers’. It functions as the link used by the writer to expand discourse, thereby furthering the discourse for a clearer understanding by the reader. The use of *thus* enhances the coherence of the text. This is also true with the other use of *thus* in the extract. The use of *thus* by the writer indicates a good command of the cohesive item which enhances the stylistic/ rhetorical variation in the text, contributing to the overall cohesion and coherence of text. As Hinds (1987:147) states, ‘It is the writer’s task to provide appropriate transition statements so that the reader can piece together the thread of the writer’s logic which binds the composition together’. The extract below shows one of the rare instances where *thus* is correctly used as an additive connector.
Extract 21

The second definition of subsidy says it is a kind of benefit given by government to groups or individuals and thus, helping to remove some kind of burden… <NLEC – 177>

This identified underuse may be due to learners’ unfamiliarity with it. This unfamiliarity might be the reason why the learners are not competent or confident enough to use them to indicate additive connections in their essays. The unfamiliarity of the learners to the proper use of these additive connectors may have resulted in the avoidance and low usage by NLEC writers.

4.4.3 ANALYSIS OF CAUSAL CONJUNCTIONS

Casual conjunctions are used to in discourse to indicate a relationship of cause and effect. They are used to explain the relationship between events or things, where one is the result of the other or others. They indicate ‘why’ and ‘what’ happened as a result in discourse. The use of causal conjunctions as connectors to enhance cohesion in the two corpora is statistically analysed and interpreted below. The examples of usage are then extracted and discussed to indicate the quality of use by corpus.

4.4.2.1 STATISTICAL ANALYSIS AND TABLES

Table 4.12 gives the normalised frequency of occurrence of causal conjunctions at each level of the variable, as well as a log-likelihood value, where significant differences are marked by an asterisk. Table 4.13 presents the chi-square and likelihood ratio chi-square statistical analysis. In total, 1844 instances of causal conjunctions were extracted and analysed.
### TABLE 4.12: FREQUENCY PROCEDURE FOR CAUSAL CONJUNCTIONS.

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</thead>
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</tr>
<tr>
<td>Percent</td>
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<td>so as</td>
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<td>6</td>
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<td>16.22</td>
</tr>
<tr>
<td>0.78</td>
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<tr>
<td>to this end</td>
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</tr>
<tr>
<td>1</td>
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<tr>
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<tr>
<td>because</td>
<td>307</td>
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<tr>
<td>consequently</td>
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<td>0.27</td>
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<tr>
<td>Hence</td>
<td>8</td>
<td>0.65</td>
</tr>
<tr>
<td>in order to</td>
<td>43</td>
<td>2.93</td>
</tr>
<tr>
<td>in that case</td>
<td>1</td>
<td>0.11</td>
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<tr>
<td>in this respect</td>
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<td>otherwise</td>
<td>9</td>
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<td>since</td>
<td>55</td>
<td>2.22</td>
</tr>
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<td>so</td>
<td>221</td>
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</tr>
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<td>6</td>
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</tr>
<tr>
<td>to this end</td>
<td>1</td>
<td>0.05</td>
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*Note: LL.VALUE indicates the log-likelihood value for each causal conjunction.*
<table>
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<td>-6.21</td>
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**TABLE 4.13: STATISTICS TABLE FOR CAUSAL CONJUNCTION**

<table>
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<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Prob</th>
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<tr>
<td>Chi-Square</td>
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<tr>
<td>Likelihood Ratio Chi-Square</td>
<td>13</td>
<td>77.3765</td>
<td>&lt;.0001</td>
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</table>

**4.4.4.2 PRESENTATION OF BAR GRAPHS**

Figure 4.13 shows the normalised frequency of causal conjunctions in the two corpora. Figure 4.14 shows the percentage of texts that contain particular causal conjunctions in the two corpora.
FIGURE 4.13: FREQUENCY OF CAUSAL CONJUNCTIONS

As a result
Because
Consequently
Hence
In order to
In that case
In this respect
Otherwise
Since
So
So as
To this end
Unless
therefore

FIGURE 4.14: PERCENTAGE OF TEXTS THAT CONTAIN PARTICULAR CAUSAL CONJUNCTIONS

As a result
Because
Consequently
Hence
In order to
In that case
In this respect
Otherwise
Since
So
So as
To this end
Unless
therefore
4.4.2.3 INTERPRETATION AND DISCUSSION

The chi-square test in Table 4.13 indicates a significant difference between the two groups in their general use of casual conjunctions at the p-value <0.0001. In Table 4.12, the percentages of use show the following causal conjunctions are overused in NLEC: as a result at 2.24% (NLEC) compared to 0.58% (LOCNESS) with the LL value indicating significant overuse at +21.27; because at 21.48% (NLEC) compared to 14.95% (LOCNESS) with the LL value indicating significant overuse at +24.14; so at 18.07% (NLEC) compared to 10.76% (LOCNESS) with the LL value indicating significant overuse at +38.42; and so as at 1.51% (NLEC) compared to 0.29% (LOCNESS) with the LL value indicating significant overuse at +18.49. The following are examples of how the learners used these casual conjunctions in the two corpora:

Extract 22

France was "the sick man of Europe”. De Gaulle saw this sickness as a result of the role and authority of the state being undermined and on coming to power in 1958 de Gaulle was determined to strengthen the state and create a strong Executive, which he hoped he would lead. His importance in shaping the 1958 constitution cannot be overestimated and, though it can be said that it was tailor-made for him, it would be truer to say that the constitution became more and more tailor-made for him as a result of constitutional amendment and changes in political life. <ICLE-BR-SUR-0024.1>

Extract 23

It will also lead to riot among the country citizens which to them is a form of exploitation due to the increase in competition in limited resources which become limited as a result of subsidy removal. <NLEC–218>

In extract 22 above, the writer used the casual conjunction as a result to indicate that the sickness of France is an effect which was caused by the role and authority of the state being undermined, also that the ‘constitutional amendment and changes in political life’ caused the constitution to be tailor-made for De Gaulle. Likewise, in extract 23, the conjunction was used to indicate that the competition in limited resources is an effect which was caused by the removal of oil subsidy.
Extract 24

An Example of this type of gouging is Depo-Provera. Because the FDA the use of this former cancer drug for use as an oral contraceptive, the price jumped from 14$ to 34$ per dose. Even though UpJohn argued that it was trying to recup the cost of R&D by raising the price of a "luxury drug”, they were mistaken in doing so. An oral contraceptive is an important drug, too because it decreases the risk of unwanted pregnancy. <ICLE-US-MRQ-0010.1>

Extract 25

The world is advancing today because of technology and Nigeria is one of those countries that experiences advancement in technology so we can say it is a blessing to our societies as a whole. Why it is a blessing to the society is that, it eases out the stress face by human kind in diverse area of our lives. With the invention of motor vehicles in existence this days compare to the days of our four fathers who trek distance instead of using vehicle because the world was not advanced in their own days and some of them use cattles. This distance they experience compare to this days took them longer time to reach their destination compare to vehicle that find it easier to reach their destination without much stress to experience. <NLEC – 394>

In extract 24 above, the writer used the casual conjunction because to indicate that the price of the drug Depo-Provera increased drastically, which was an effect that was caused was by the FDA’s use of the cancer drug as oral contraceptive. Also, in extract 25, the conjunction was used to indicate ‘the world advancing’ as an effect, caused by technology.

Extract 26

Clamence also lost his sense of silence, which was so important to Camus in earlier writings especially l'Etranger. When he heard the laugh - <quote>. As he tries to escape the laugh through debauchery he still hears <quote>, and then he decides to stop the laugh compleletly and take on the job of judge, and penitent at the same time, so that noone can laugh at him, and he has time to confess before they speak. This is also reflected in the narration - which is a cacophony of sound, a <?> monologue where his 'interlocutor' cannot speak, and his silence is forced by Clamence. <ICLE-BR-SUR-0011.1>

Extract 27

This reason make me believe that the removal of fuel subsidy will definitely help immensely on the improvement of our economy, it will take the grace of God and the determination of a good leader with the help of me (the masses) to bear and endure just for some time so we can figure it out with the government. <NLEC - 243>
Extracts 26 and 27 above are instances of the use of *so* as a causal conjunctions in the two corpora. In extract 26, the writer used the device *so* to indicate the fact that for no one to laugh at Camus, he had to take on the job of judge, and penitent at the same time. His action is an event, which results in the other. Also, in extract 27, the conjunction was used to indicate that, for the masses to figure out the benefit of subsidy removal, as an effect, it will be caused by the grace of God, a determined leader and endurance by the masses. The two extracts indicate a good use of the causal conjunction as a cohesive device in the texts. Their use of causal conjunctions also enhances text coherence as the writers are able to make their points clear to their readers and create logical links between cause and effect, thereby relating points made by the writers in the texts. This ensures that the reader is able to make sense of the discourse.

The analysis shows a considerably less frequent use of causal conjunctions in general compared to the use of additive conjunctions in the study, and also that the writers do not make equal use of all the lexical options available. *Because* and *so* are the two most used causal conjunctions in the two corpora. *Because* is used 307 times in LOCNESS and 441 times in NLEC. Similarly, *so* is used 221 times in LOCNESS and 371 times in NLEC. The table also indicates that *therefore*, *in order to* and *since* show below average use in the two corpora. *Therefore* is used 99 time in LOCNESS and 67 times in NLEC; *in order to* 43 times in LOCNESS and 54 times in NLEC; and *since* is used 55 times in LOCNESS and 41 times in NLEC. All the other causal conjunctive items are used infrequently in the two corpora. *Unless*, *otherwise*, *consequently*, *unless*, *to this end*, *in that case* and *in this respect* all have a frequency of use of less than ten in the two corpora. These findings indicate that both the native and second language learners need to improve in using a wider lexical range of causal conjunctions as cohesive device in their texts. The ability to do this can greatly improve the overall coherence of their texts.

The analysis of the use causal connectors in the two corpora reveals that the density of casual conjunctions used by Nigerian learners is higher, although their variety is limited, than that of their English native speaker counterparts. This results in the overuse of causal conjunctions
by the Nigerian learners. This finding concurs with Hinkel’s (2002), Ma’s (2001), Mo’s (2015) and Zhao’s (2003) findings on the overuse of causal conjunction in L2 learners’ writings. These causal relationships, while necessary for illustrating reasons why an argument is important and why it is supported, provide a somewhat simplified account of the logical reasoning used to support an argument. The frequency table demonstrates that the two causal conjunctions because and so are more frequently used by the learners in the two corpora. These findings seem to point at over-familiarity on the part of the learners with the said devices. However, the insufficient variety implies that Nigerian learners’ and even the LOCNESS learners’ acquisition and manipulation of causal connectives are rather limited and there is need for improvement.

4.4.5 ANALYSIS OF ADVERSATIVE CONJUNCTIONS

Adversative conjunctions moderate or qualify the information in the first half of the sentence, paragraph or text. Adversative conjunctions perform various sub-functions which all play a significant role in the interpretation of discourse. They are used to establish counterclaims or to order the sequential structure of events (Alyousef & Alnasser, 2015). They operate as elaborative devices to provide focus on the content of discourse. Adversative conjunctions are used to indicate that a thing is surprising, unusual or unexpected in relation to another thing. This is called concession. They also operate as transitional markers in discourse. The study reveals a considerably less frequent use of adversative conjunctions as cohesive devices by learners in the two corpora compared to additive and causal conjunctions. The use of adversative conjunctions as connectors to enhance cohesion in the two corpora is statistically analysed and interpreted below. The examples of usage are then extracted and discussed to indicate quality of use by learners.

4.4.3.1 STATISTICAL ANALYSIS AND TABLES

Table 4.14 gives the normalised frequency of occurrence of adversative conjunctions at each level of the variable, alongside a log-likelihood value for each individual adversative conjunction and an evaluation of statistical significance. Table 4.15 presents the chi-square
and likelihood ratio chi-square statistical analysis. In total, 7246 instances of adversative conjunctions were extracted and analysed.

**TABLE 4.14: FREQUENCY PROCEDURE FOR ADVERSATIVE CONJUNCTIONS.**

<table>
<thead>
<tr>
<th>Table of Adversative Conjunctions by CORPUS</th>
<th>CORPUS</th>
<th>LOG-LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised_Adversative Conjunctions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency Percent Row Pct Col Pct</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>although</strong></td>
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<td></td>
</tr>
<tr>
<td>68</td>
<td>4.43</td>
<td>9</td>
</tr>
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<td>7.46</td>
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<td>1</td>
<td>0.07</td>
<td>7</td>
</tr>
<tr>
<td>12.50</td>
<td>0.46</td>
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<td>87.50</td>
<td>7.46</td>
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<td>18.44</td>
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<td>14.72</td>
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<td>0.11</td>
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<td>42</td>
<td>2.74</td>
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<td>4.61</td>
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<td>88</td>
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<td>STD_NLEC</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Col</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

though
- 51
- 3.32
- 65.38
- 5.60
- 27
- 1.76
- 34.62
- 4.33
- 78
- 5.08

whereas
- 16
- 1.04
- 59.26
- 1.76
- 11
- 0.72
- 40.74
- 1.76
- 27
- 1.76

yet
- 54
- 3.52
- 81.82
- 5.93
- 12
- 0.78
- 18.18
- 1.92
- 66
- 4.30

Total
- 911
- 59.39
- 623
- 40.61
- 1534
- 100.00

| Table 4.15: Statistics Table for Adversative Conjunctions |
|----------------------------------|--------|--------|
| Statistic                        | DF     | Value  | Prob  |
| Chi-Square                       | 14     | 114.2808 | <.0001|
| Likelihood Ratio Chi-Square      | 14     | 124.6361 | <.0001|

4.4.3.2 Presentation of Bar Graphs

Figure 4.15 shows the normalised frequency of adversative conjunctions in the two corpora. Figure 4.16 shows the percentage of texts that contains particular adversative conjunctions in the two corpora.
FIGURE 4.15: FREQUENCY OF ADVERSATIVE CONJUNCTIONS

FIGURE 4.16: PERCENTAGE OF TEXTS THAT CONTAIN PARTICULAR ADVERSATIVE CONJUNCTIONS
4.4.3.3 INTERPRETATION AND DISCUSSION

The chi-square test in Table 4.15 indicates a significant difference between the two groups in their general use of adversative conjunctions at the p-value <0.0001. In terms of percentages, Table 4.14 indicates a general underuse of the following adversative conjunctions in NLEC: although, at 0.59% (NLEC) compared to 4.43% (LOCNESS) with the LL value indicating significant underuse at -51.20; however, at 3.78% (NLEC) compared to 10.94% (LOCNESS) with the LL value indicating significant underuse at -55.88; still at 3.32% (NLEC) compared to 5.73% (LOCNESS) with the LL value indicating significant underuse at -10.97; though at 1.76% (NLEC) compared to 3.32% (LOCNESS) with the LL value indicating significant overuse at -10.91; and yet at 0.78% (NLEC) compared to 3.52% (LOCNESS) with the LL value indicating significant underuse at -28.91. Extracts showing the use of various additive conjunctions are presented and discussed below:

Extract 28

Obviously the women's championship is not as important as watching the men tip-off. Once again the women are put behind the men in the world of college athletics. Whatever happened to Title IX, guaranteeing equal sporting opportunities for male and female athletes? Although this may be a hypothetical situation, it shows the point that women athletes are still being treated as second-class citizens in comparison with the men. <ICLE-US-MRQ-0020.1>

Extract 29

Likewise the lecturers it is now based on what you know before getting a colour job at your choices that is the real career once cannot given the opportunity from what they belongs to be recruited or employed. Although the political desperation had turn everything into politics without them no food for lazy person according to what they assigned you them to do so, that's why the good ones are yet to produces a quality system of education and the standard living in the society in order to achieve our aims and objectives. <NLEC – 375>

The adversative conjunction although means ‘in spite of something’. It is a subordinating conjunction and is used to establish counterclaiams or to order the sequential structure of events. This means that the clause which they introduce is a subordinate clause and needs a main clause to make it complete. Although is used to create concession in discourse. Extracts 28 and 29 are examples of how the learners used the adversative although in their texts. The
extracts point to the correct use of the adversative, despite the low frequency in the Nigerian learners’ essays. Other examples of use of additive conjunction are presented below:

**Extract 30**

Health care statistics on expenditures alone are mind boggling. The pharmaceutical industry argues that the cost of drugs used outside hospitals was $36.4 billion in 1991, only five percent of the total national health costs—a whopping $751.8 billion. That sounds like a nice picture. **However** these statistics are flawed because 55 percent of what American consumers paid for health care was directly out of pocket, mostly because Americans were getting prescriptions outside of hospitals.  <ICLE-US-MRQ-0010.1>

**Extract 31**

While subsidy on the other hand, connotes ability to subsidize the price of commodity i.e. subsidizing any commodity purchased by a consumer. **However**, I want to disclose that the removal of fuel subsidy will not help Nigerian economy but will hinder the progress of the nation due to the following reasons.  <NLEC – 047>

**However** is used to introduce a statement that contrasts with or seems to contradict something that has been previously said. It means ‘even so’ or, ‘on the other hand,’ in discourse and usually indicates a concession. The two extracts above (30 and 31) show the use of the adversative conjunction **however**. These examples indicate the correct use of **however** to introduce a contradictory statement by the writers.

**Extract 32**

A unified Europe, **though**, could be expected to have a more representative legislative body, although there is no guarantee that we will not be in a minority then. Perhaps Europe will be organised on a federal system as a “United States of Europe”, each state with limited legislative authority for its own affairs and one supreme house to co-ordinate foreign policy and the like. We have already begun to integrate our trade, and we have free movement of labour within the community.  <ICLE-BR-SUR-0017.3>
Extract 33

With the introduction of technological devices such as computers, handsets, iphone, ipads which are available to many people from the young to the old. **Though** there are some disadvantages of using them, the advantages has more applicable to the society. <NLEC – 461>

**Though** is an adversative conjunction which means ‘despite the fact that’. Like **although**, it also functions as a subordinating conjunction and it is used to establish counterclaims or to order the sequential structure of events. Extracts 32 and 33 above show the correct use of this adversative conjunction as a connector in the learners’ texts.

Extract 34

The text is more adhered to now as Mitterrand has not got a majority to back up his policies in Parliament **still** he enjoys the privileges and wields power in the same manner as his predecessors. <ICLE-BR-SUR-0024.1>

Extract 35

So if we can make justice to ourselves everybody known the Nigeria is a great country which has so many mineral resources such as gold, diamond, silver, iron-ore, tin, culumbite and also fuel, but in the present of all resources **still** Nigeria is suffering with financial difficulties because of the fraudulent, misappropriation of cash and squandering of wealth and mismanagement of affairs. <NLEC – 274>

The adversative conjunction **still** means ‘nevertheless, nonetheless, notwithstanding’ etc. it is usually used to introduce a statement that contrasts with or seems to contradict something that has been previously said. The extracts above show that the learners correctly used **still** as an adversative in their texts. Although **still** is underused in the Nigerian leaners’ corpus, it is evident that the quality of use is of good standard.

Extract 36

There are even some cartoon programs that are on early in the morning and early in the evening that are suitable for children, to watch. The parents do not pay attention to the cartoon programs to see what the content is. They just assume that because it is a cartoon that it is suitable for their child to watch. I do not allow my four year old and eight year old to watch **11 The Simpsons”, because along with profanity Bart Simpson is disrespectful and **yet** children think he is so great and so funny. <ICLE-US-SCU-0010.2>
Extract 37

The advent of advance technology has come with benefits that are immeasurable, if one wants to judge, one will or might get confused where to start from, is it, the advanced method of farming that has come with so much of food for the masses, yet they complain that food is not enough for all. If not with the recent mechanized system of farming, if we were still in the old method of farming, <NLEC – 320>

Yet is also an adversative conjunction which means ‘but at the same time’, ‘nevertheless’ and ‘however’. Like other adveratives yet is used to establish counterclaims or to order the sequential structure of events. As seen in extracts 36 and 37, yet is used by the writers to express the unusual or unexpected in relation to the statement preceding it. The use of adveratives in the extracts signifies semantic relations necessary for the complete understanding and interpretation of meanings in the text parts. The examples show that the second part of the text provides more detailed information about the content of the first text part. The coherence relation between the text parts is that of elaboration. However, from the quantitative analysis, it is obvious that the use of this adversative, like others above, is even lower in NLEC than in LOCNESS.

It has been observed that adveratives usage in writing signify a much more complicated relationship between discourse units, thus, it might be somewhat challenging for less skilful L2 writers to manipulate. Their use in argumentative writing is important for semantic and logical consequence. Thus, the underuse of adveratives observed in NLEC is of great concern. However, the few learners who used the adveratives in the corpus used them correctly. The underuse may also be due to the learners’ lower familiarity with the usage of these words as contrastive connectors. The underuse, I believe is an indication of NLEC learners’ underdevelopment in their knowledge and use of adversative conjunctions.

The findings above are similar to the findings of previous studies such as Altenberg and Tapper (1998), Narita et al. (2004) and Henning (2006). Altenberg and Tapper (1998)
compared advanced Swedish and LOCNESS learners’ use of adverbial connectors in essay writing. They found that contrastive adverbial connectors however, though and yet are significantly underused by Swedish learners. Similarly, Narita et al. (2004) investigated the use of logical connectors in advanced Japanese university students’ essays and LOCNESS. Their findings indicate that the Japanese learners significantly underuse contrastive connectors such as yet and instead. Henning (2006) also examined the use of linking adverbials in Tswana learners’ writing (South Africa) with the LOCNESS and Dutch students’ writing. Her study revealed that the Tswana learners infrequently use extending adversatives in their essays compared to their ENL and EFL counterparts.

4.4.4 ANALYSIS OF TEMPORAL CONJUNCTIONS

Temporal conjunctions are used to express relations in time. They are used when events in texts are related in terms of time of occurrence. They express occurrence in terms of simultaneity, anteriority or posteriority. These connectives answer the questions ‘when’ in connection to event occurrence in discourse. The use of temporal conjunctions as connectors to enhance cohesion in the two corpora is statistically analysed and interpreted below. The examples of usage are then extracted and discussed to indicate quality of use.

4.4.4.1 STATISTICAL ANALYSIS AND TABLES

Table 4.16 gives the normalised frequency of occurrence of temporal conjunctions at each level of the variable, together with the log-likelihood value for each individual adversative conjunction and an evaluation of statistical significance Table 4.17 presents the chi-square and likelihood ratio chi-square statistical analysis. In total, 681 instances of temporal conjunctions were extracted and analysed.
### TABLE 4.16: FREQUENCY PROCEDURE FOR TEMPORAL CONJUNCTIONS.

<table>
<thead>
<tr>
<th>Table of Temporal_Conjunction by CORPUS</th>
<th>CORPUS</th>
<th>LOG-LIKELYHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised Temporal_Conjunction</td>
<td>STD_LOCNESS</td>
<td>STD_NLEC</td>
</tr>
<tr>
<td>Frequency Percent</td>
<td>Row Pct</td>
<td>Col Pct</td>
</tr>
<tr>
<td>and then</td>
<td>19</td>
<td>2.79</td>
</tr>
<tr>
<td>at last</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>at once</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>at the same time</td>
<td>7</td>
<td>1.03</td>
</tr>
<tr>
<td>at this moment</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>at this point</td>
<td>5</td>
<td>0.73</td>
</tr>
<tr>
<td>finally</td>
<td>23</td>
<td>3.38</td>
</tr>
<tr>
<td>in conclusion</td>
<td>3</td>
<td>0.44</td>
</tr>
<tr>
<td>in short</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>meanwhile</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>next</td>
<td>22</td>
<td>3.23</td>
</tr>
<tr>
<td>previously</td>
<td>7</td>
<td>1.03</td>
</tr>
<tr>
<td>Frequency Temporal_Conjunction</td>
<td>CORPUS</td>
<td>LOG-LIKELIHOOD</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------</td>
<td>----------------</td>
</tr>
<tr>
<td>Normalised Temporal_Conjunction</td>
<td>STD_LOCNESS</td>
<td>STD_NLEC</td>
</tr>
<tr>
<td>soon</td>
<td>14</td>
<td>2.06</td>
</tr>
<tr>
<td>subsequently</td>
<td>4</td>
<td>0.59</td>
</tr>
<tr>
<td>to conclude</td>
<td>3</td>
<td>0.44</td>
</tr>
<tr>
<td>until then</td>
<td>1</td>
<td>0.15</td>
</tr>
<tr>
<td>after</td>
<td>110</td>
<td>16.15</td>
</tr>
<tr>
<td>before</td>
<td>62</td>
<td>9.10</td>
</tr>
<tr>
<td>while</td>
<td>68</td>
<td>9.99</td>
</tr>
<tr>
<td>Total</td>
<td>353</td>
<td>51.84</td>
</tr>
</tbody>
</table>

**TABLE 4.17: STATISTICS TABLE FOR TEMPORAL CONJUNCTIONS**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>18</td>
<td>64.0346</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Likelihood Ratio Chi-Square</td>
<td>18</td>
<td>69.6349</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>
4.4.4.3 PRESENTATION OF BAR GRAPHS

Figure 4.17 shows the normalised frequency of temporal conjunctions in the two corpora. Figure 4.18 shows the percentage of texts that contain particular temporal conjunction in the two corpora.

FIGURE 4.17: FREQUENCY OF TEMPORAL CONJUNCTIONS
FIGURE 4.18: PERCENTAGE OF TEXTS THAT ContAIN PARTICULAR TEMPORAL CONJUNCTIONS

4.4.4.3 INTERPRETATION AND DISCUSSION

The chi-square test in Table 4.17 indicates a significant difference between the two groups in their general use of additive conjunctions at the p-value <0.0001. In terms of percentages, Table 4.16 indicates a general overuse of before in NLEC at 18.94% (NLEC) compared to 9.10% (LOCNESS) with the LL value indicating significant overuse at +24.01. The table also indicates the underuse of after in NLEC at 12.48% (NLEC) compared to 16.15% (LOCNESS), however the LL value of -3.41 is not significant. Below are extracts showing the use of the temporal conjunctions in the two corpora.

Extract 38

Clamence also lost his sense of silence, which was so important to Camus in earlier writings especially l'Etranger. When he heard the laugh. As he tries to escape the laugh through debauchery he still hears, and then he decides to stop the laugh completely and take on the job of judge, and penitent at the same time, so that no one can laugh at him, and he has time to confess before they speak. <ICLE-BR-SUR-0011.1>
Extract 39

Examinations are not true measures of students’ ability and should be abolished yes! This is true because nowadays examination is not like before. Before I proceed will like to define examination… To see a situation where by student’s have already see the exam before they are tested on it… If this bribery and corruption can stop it may even help in the examination malpractice furthermore, examination are not true measures of students ability through the bribery and corruption, the society is worth to the extent that students will have seen the questions even months before the examination can we now say that examination is a true measure? No. However the only main point that the question usually leak before it is been written. Some students do not write it. Stay in class just because they already know that after all the question will be seen before the examination. Before I drop my pen I will like to say if there is any means of testing student ability rather than examination it could have been better. <NLEC - 010>

The temporal conjunction before is used to connect an action or an event to a point in time. The use of before in discourse signals events happening in the anterior. The overuse of before, as observed from the extract 39 compared to extract 38, is a clear example of overuse resulting in the superfluity of the conjunction. The observed overuse affects the overall quality of the text.

Extract 40

On one channel at three o'clock a soap opera is on which has sex, violence, and profanity. At four o'clock Opra talk show is on which has sex and profanity usually. At five o'clock Ricki Lake talk show is on which has sex and profanity. After her show we have the News a game show and then a nigh time soap opera. By this time it's nine o'clock and time for the child to go to bed and out of six hours there was one thirty minute game show that is fit for a child to watc. With these television programs on every day the child starts to watch his or her favorite show and once interested then wants to experiment. <ICLE-US-SCU-0010.2>

Extract 41

As they discuss with their partner online or the person to send their goods to them, after paying a lot of money to the person that will send their goods to them, they found out that their goods is not coming out after many year have past and they have also lost contact with the person that are doing the business with meaning that have used 419 for the person. Also in the adult life, the adult people engage in online communication whereby they meet different kinds of people either through yahoo mail.com, facebook.com, Hotmail.com, and so on. They used this means of communication for evil deeds rather than good. <NLEC-111>
After as a temporal conjunction signifies the occurrence of an event in the posterior. As seen in the two extracts, the temporal conjunction is used to indicate other events that took place following a particular event as evident in extract 40 and following a period of time in extract 41. Despite the observed low usage of after as a temporal conjunction by Nigerian learners, they are correctly used in the corpus.

Temporal conjunction is the least used sub-category of conjunction compared to the other three types in the two corpora. Table 4.16 shows the very low frequency of use in both corpora at a total of 353 in LOCNESS and 328 in NLEC. Nineteen temporal conjunctive items were extracted and analysed. The frequency table shows that, of the 19 items, only three, i.e. after, before and while have relatively fair frequency of use with after used 110 times in LOCNESS and 85 times in NLEC; before is used 62 times in LOCNESS and 129 times in NLEC; and while is used 68 times in LOCNESS and 47 times in NLEC. Other temporal conjunctive items such as at last, at once, at this moment, at the same time, at this point, in short, meanwhile, previously, etc. all have below ten frequency of use in the two corpora. Four items, at the same time, in conclusion, subsequently and until then are not used at all by Nigerian learners.

This finding indicates that, like causal conjunctions, both the native and second language learners whose essays were analysed in my study need more grooming on the use of temporal conjunctions as cohesive devices in their texts. The knowledge of how and when to use temporal conjunctions in writing can enhance the coherence of their texts. The observed general underuse or non-use in some instance of temporal conjunction in second language learners’ writing, evident in this study and other recent studies like Martinez (2015) and Mohammed (2015) are proof of learners’ underdevelopment in the use of temporal conjunctions. The underuse or non-use of these conjunctions might be an indication that the learners are yet to master the mechanics of text connection in terms of event occurrence through temporal conjunctions.
4.5 SUMMARY OF FINDINGS ON CONJUNCTIONS

From the quantitative analysis, it is evident that additive and causal conjunctions formed the largest occurrence of use in NLEC, followed by adversative and temporal conjunctions respectively. This is evident from the normalised frequency tables presented in the analysis. The total frequency for additive conjunction is 3838, while causal conjunctions totalled 1075. Adversative conjunctions added up to 624. The least frequent were temporal conjunctions at a total of 328. There is also limited lexical diversity of conjunctions from each category. Certain additive conjunctions, i.e., or, also, furthermore and for instance were overused, whilst thus was underused by the Nigerian learner writers. The analysis also shows that the NLEC learners repeatedly use the same conjunctions in their texts. The observed overuse of conjunctive items may be linked to the fact that learners tend to use lexical items they feel familiar and safe with in their writing. It may also be an attempt by learners to present a more formal academic style of writing.

The observed difficulties in the employment of conjunctive devices by Nigerian learners agree with Granger and Tyson’s (1996) statement that even at a reasonably advanced level, connectors are difficult to master in L2 acquisition. The underuse and limited variety of conjunctive items in the Nigerian learners’ corpus imply that the learners’ acquisition and manipulation of connectors are rather limited. This reveals that for these learners the use of conjunctions still remains at a basic stage, which inevitably affects the overall quality of the writings. These Nigerian learners, despite being at the advanced level of learning, still exhibit significant difficulty in using the full range of available conjunctive ties effectively in English writing. This difficulty may emanate from a restricted repertoire of linking words and knowledge of the relationships they signal. According to Biber (1988) and Ben-Anath (2005), conjunctions which explicitly show the logical relations between sentences display the formal written style features and they are indispensable for the organisation and interpretation of a text. The adequate adoption of conjunctions is, therefore, of great importance in the written text. Hinkel (2001) observed that, in many L2 texts, conjunctions represent the most prevalent overt means of tying portions of text together.
The Nigerian learners use conjunctions to indicate the argumentative logic between larger text chunks. However, their essays do not show the optimal awareness of the structuring possibilities in the use of conjunctions to create stylistic or rhetorical variation in writing. They seem to possess a restricted repertoire of syntactic alternatives to the different class of conjunctions available for use in writing. As observed in the study, the conjunctive items adopted by them were often repetitive, thus lacking depth and variety. Although the essays display a fair level of cohesion and coherence, the better and improved use of the various cohesive devices and not the monotonous use of a conjunction will ultimately enhance the overall coherence of the NLEC essays.

4.6 CONCLUDING REMARKS

In this chapter, two sets of cohesive devices were applied to the data from the two corpora, and samples in the form of extracts were presented and analysed. The hypotheses were statistically tested and the results discussed with reference to the aims of the study. The relevant statistics tables were presented to enhance a clearer understanding of the findings of the study. The findings helped to achieve the research aim which was to see how Nigerian advanced learners, who are ESL learners, achieve cohesion in written text compared to their Native speaker counterparts. The study also set out to observe where the Nigerian learners show underdevelopment in their usage of cohesive devices compared to the standard norms and to point out areas where they can still develop.

The substantial contribution of reference and conjunction to the achievement of cohesion in discourse was highlighted while developing the theoretical framework for this study (see Chapter 2, section 2.5). Thus, to shed light on the similarities and differences that exist in the choice of reference and conjunctive cohesive devices used to enhance cohesion in Nigerian learners and their native speaker counterparts’ writings, quantitative and qualitative analyses were carried out in this chapter.
The analysis revealed differences in the use of reference cohesion at the macro level. The breakdown analysis shows differences in the use of personal pronouns, possessive pronouns/determiners, demonstratives and adjuncts and a similar use of comparative adverbs. The observed overuse and underuse of personal reference cohesive items were found to be task-related. The NLEC learners’ essays are responses to topics that require them to take a particular position and argue it in order to convince the readers to agree with them. The overuse and underuse of referential items was also traced to the NLEC learners’ cultural background of communality, inclusiveness and solidarity. The Nigerian culture places emphasis on interpersonal involvement in the society. The findings align with contrastive rhetoric theory that stylistic preferences of writing are culturally embedded and that second language learners may carry over those preferred rhetorical patterns of their native languages into their second language writing. Other factors, like stylistic choices of explicitness and overt persuasiveness, were also observed as reasons the NLEC learners repeat lexical items especially from their essay topics and overuse 1st person singular and plural pronouns I, we and us.

On the use of conjunctions in the two corpora, the analysis shows a difference in the use of additive, causal, adversative and temporal conjunctions. The analysis indicated that the NLEC learners use the same conjunctions repeatedly in their texts. This was traced to the phenomenon Hasselgren (1994) referred to as lexical teddy bear. Although the NLEC learners use conjunctions to indicate the logical connection between larger chunks in their texts, they do not display the maximum awareness of the structural possibilities of using conjunctions for stylistic/rhetorical effects in writing. They demonstrate restricted repertoire of syntactic alternatives to the different types of available conjunctions. Hence, the conjunctive items used in their texts are monotonous, lacking depth and variety.

Overall, the analyses reveal significant differences in the use of particular reference and conjunctive cohesive items. Areas of underdevelopment on the part of the Nigerian advanced learners’ writings with regards to reference and conjunctions as cohesive tools were also identified. The possible reasons for the observed differences were also discussed. The three
other types of cohesion, i.e. ellipsis, substitution and lexical cohesion will be analysed in the next chapter. Recommendations emanating from the findings in this chapter will be presented later in Chapter 6.
CHAPTER 5
ANALYSIS OF ELLIPSIS, SUBSTITUTION AND LEXICAL COHESION

5.1 INTRODUCTION
This chapter focuses on the analysis of ellipsis, substitution and lexical cohesion using a data sample set of twenty-thousand (20,000) words each from LOCNESS and NLEC respectively. The data sample was generated using Star Trek online Random Number Generator. The essays were read one after the other and the instances of ellipsis, substitution and lexical cohesion were manually identified and extracted. The process was repeated numerous times to ensure the accuracy of extraction analysis. The extracted instances of each cohesive device are then presented, in the discussion and findings, followed by the statistical table.

Chapter 5 is structured as follows: section 5.1 presents the general introduction to the chapter. Section 5.2 presents the extraction and analysis of ellipsis. This is followed by section 5.3 with the extraction and analysis of substitution. Section 5.4 gives a summary of the findings on ellipsis and substitution. Section 5.5 focuses on the extraction and analysis of lexical cohesion. Section 5.6 provides a summary of findings on lexical cohesion. Finally, section 5.7 offers the concluding remarks for this chapter.

5.2 ANALYSIS OF ELLIPSIS
Ellipsis involves the process of using a set of resources by which full repetition of a clause or clause element can be avoided thereby signalling to readers that they should retrieve the wording from a previous clause. Ellipsis operates in the same cohesive class as substitution: it is the omission of words, groups or clauses (it is also referred to by Halliday and Hassan (1976) as ‘substitution by zero’). Ellipsis is often used to compact the surface structure without reducing the clarity of text (Biesenbach-Lucas & Weasenforth, 2001). An elliptical item leaves specific structural slots to be supplied from elsewhere. The use of ellipsis increases the connection between elements in the text through mutual dependency.
Where there is ellipsis, there is the presupposition, in the structure, that something is to be supplied that has been left unsaid. This occurrence refers specifically to sentences and clauses, among others, whose structure leaves room for the presupposition of some preceding item(s), which then serves as the source of the missing information. The use of this omission in discourse helps to avoid needless repetition, especially since the omitted item(s) does not affect or limit the understanding of the text. Ellipsis contributes to the overall cohesion of the text as its use connotes a relation within the text and in most instances, indicates an anaphoric relation and occasionally, an exophoric relation.

Ellipsis signifies a grammatical relation, that is, a relation in the wording rather than in the meaning, thus the different types of ellipsis are defined grammatically rather than semantically. The criterion for its classification is the grammatical function of the omitted item. The omitted lexical item may function in the sentence as a noun, a verb, or a clause. Thus, the three types of ellipsis: nominal, verbal, and clausal. Nominal ellipsis refers to omission within the nominal group; verbal ellipsis refers to omission within the verbal group; and clausal ellipsis refers to the omission of multiple grammatical elements in the sentence. A more detailed discussion on ellipsis is presented in Chapter 2, section 2.5.3.2. These omitted but nevertheless understood items and their contributions to cohesion in the sample of learners’ essays are analysed, interpreted and discussed below.

5.2.1 EXTRACTION OF ELLIPSIS

A total of 13 instances of nominal ellipsis were extracted from LOCNESS and six were extracted from NLEC. There were two instances of verbal ellipsis from LOCNESS and one from NLEC. One instance of clausal ellipsis was extracted from both LOCNESS and NLEC respectively. One instance of each ellipsis type from the two corpora is presented below for discussion and qualitative analysis. The remnant extracted instances of ellipsis from the two sampled groups’ essays are extracts numbered 48-65 and are presented as Appendix C and D. Presented below are extracts 42 and 43 which show the use of nominal ellipsis from the two groups:
Nominal Ellipsis- LOCNESS

Extract 42

Oreste murders the king and queen, and __ stands before the crowds who are looking to kill him. <ICLE-BR-SUR-0001.1>

Nominal Ellipsis- NLEC

Extract 43

In the United States, half of the population are reported watching television while eating dinner and more than a third watch __ while eating breakfast. <NLEC-012>

Extracts 42 and 43 above indicate that the writers omitted the head nouns or their appropriate pronouns in the later part of the extracted sentences i.e. the omission of the head noun Oreste or its appropriate pronoun in the second part of the sentence in extract 42; and extract 43 exhibits the omission of the noun television or the appropriate pronoun in the second part of the sentence. Thus, the writers omitted the presupposed nominal items which, as seen in the extracts, are present in the preceding part of the texts. The elided nominal items function as cohesive devices in the texts to avoid producing unnecessary repetitions. The structurally necessary but omitted noun and pronoun did not reduce the lucidity of the sentences. Below are examples of the use of verbal ellipsis from the two groups:

Verbal ellipsis-LOCNESS

Extract 44

He has detached himself from the solidarity with mankind and __ lost sight of himself. <ICLE-BR-SUR-0001.1>

Verbal ellipsis - NLEC

Extract 45

Examinations do not show students’ true knowledge, __ only __ their ability to memorize. <NLEC-271>
Extract 44 from LOCNESS above indicates an instance of the omission of the auxiliary verb *has* in the latter part of the sentence while extract 45 from NLEC indicates the omission of lexical verb *show* also in the latter part of the sentence. The presupposed verbs, which were stated earlier in the sentence but left unsaid in the second part, operated as cohesive devices in the texts to avoid needless repetitions. It is also clear from the extracts, that their omission neither reduces the clarity of the sentences nor does it hinder the reader’s understanding of the sentences. Two extracts showing the use of clausal ellipsis are presented below:

**Clausal Ellipsis-LOCNESS**

**Extract 46**

It does not represent the southern way of life, but rather ______ short bursts of fury raging against those who wanted to do away with slavery. <ICLE-US-SCU-0001.2>

**Clausal ellipsis- NLEC**

**Extract 47**

These attitude must be abolished, because it causes a lot of destructions in the life of the students and even ___ their parents or guidance. <NLEC-067>

Extract 46 and 47 above are instances of the omission of clausal fragments. Extract 46 shows the omission of the clause *it represents the* in the second part of the sentence and extract 47 shows the omission of the clause *causes a lot of destruction in the lives of* in the second part of the sentence. The elliptical clauses in the two sentences appeared in the latter segment of the respective sentences and the presupposed clauses appeared in the former, which are instrumental for the interpretation of the omitted elements. In order to correctly interpret the clausal ellipsis, the reader has to supply what is left unsaid by correctly tapping from their linguistic ability to interpret language within the text and not in isolation. With this said the elided clauses, if correctly retrieved, help contribute to the cohesion of the sentences.
5.2.2 STATISTICAL ANALYSIS FOR ELLIPSIS

Table 5.1 presents the total number of frequency for nominal, verbal and clausal ellipsis in the data sample. The overall frequency of ellipsis in the twenty-thousand (20,000) words is presented first. The frequency was then normalised to one-hundred thousand (100,000) words.

<table>
<thead>
<tr>
<th>ELLIPSIS</th>
<th>LOCNESS</th>
<th>NLECE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FREQUENCY</td>
<td>NORMALISED FREQUENCY</td>
</tr>
<tr>
<td>NOMINAL ELLIPSIS</td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td>VERBAL ELLIPSIS</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>CLAUSAL ELLIPSIS</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td>80</td>
</tr>
</tbody>
</table>

5.2.3 DISCUSSION OF FINDINGS

As evident from the frequencies displayed in Table 5.1; ellipsis as a cohesive device is rarely used in the sampled data with its total usage at 16 and normalised frequency of 80 in LOCNESS and eight as its total usage then normalised to 40 in NLEC, which does not warrant the use of statistical tests. The infrequent occurrence of this cohesive device could be attributed to the nature of the device. This is because typically, ellipsis is known to occur in dialogues or spontaneous conversations (Halliday 2000:33) and is seldom used in formal writing. Thirteen instances of nominal ellipsis were extracted from LOCNESS and six instances were extracted from NLEC. As seen in extract 42 as well as extracts 48-59 (see Appendix C) in LOCNESS and extract 43 in addition to extracts 61-65 (see Appendix D) in NLEC, the writers omitted the head nouns or their appropriate pronouns in the later part of the extracted sentences, thereby leaving out the presupposed nominal items. Although there is a slight difference in the use of nominal ellipsis between the two corpora, the difference is not significant enough to account for underdevelopment on the part of NLEC writers. Two
instances of verbal ellipsis were extracted from LOCNESS and one from NLEC. Extract 44 indicates an instance of the omission of the auxiliary verb in the second part of the sentence while extracts 45 and 60 (see Appendix C) show the omission of lexical verbs. The presupposed verbs, which were stated earlier in the sentence but left unsaid in the second part, avoided repetition by operating as cohesive devices in the texts. The omitted items did not hamper the interpretation of the texts. The use of verbal ellipsis in the three extracts from both corpora indicates anaphoric relation.

Lastly, one instance of clausal ellipsis was extracted from LOCNESS and NLEC respectively. In extracts 46 and 47 the elliptical elements in the two sentences appeared in the latter segment of the respective sentences and the presupposed clauses, necessary for accurate interpretation of the omitted items appeared in the earlier part of the sentences. In order for readers to correctly infer meaning from the clausal ellipsis, they would need to draw on their linguistic ability to interpret language within the text. Overall, analysing the use of ellipsis by the learners as a cohesive device in the data sample supports Halliday and Hassan’s (1976:142) assertion that, ‘there is always a great deal more evidence available to the hearer (reader) for interpreting a sentence than is contained in the sentence itself’.

Based on the analysis, ellipsis rarely occurred in LOCNESS and NLEC writers’ texts. The outcome of the analysis demonstrates that the learners, both native and second language speakers, are aware of the inappropriateness of using ellipsis in formal writing, thus restricting their occurrence by design. However, the few instances of usage are grammatically acceptable and interpretable and they contribute to the cohesion and overall coherence of the individual texts.

5.3 ANALYSIS OF SUBSTITUTION

Substitution is used in discourse when a speaker or writer wishes to avoid the repetition of a lexical item and is able to draw from his or her grammatical resources of the language to replace the item. According to Halliday and Hasan (1976:88), substitution is a relation between linguistic items, such as words or phrases and a relation on the lexico-grammatical level, the level of grammar and vocabulary, or linguistic form. Substitution signifies a
Substitution, like ellipsis, is a grammatical relation in the wording rather than in the meaning. As is the case with ellipsis, the different types are defined grammatically rather than semantically. The criterion is the grammatical function of the substitute item. The substitute may function as a noun, a verb, or a clause. Thus the three types of substitution are: nominal, verbal, and clausal. Nominal substitution refers to substitution within the nominal group with one/ones or same to replace the head of the group. Verbal substitution refers to substitution within the verbal group with do in a place previously occupied by the lexical verb. Clausal substitution refers to the substitution of multiple grammatical elements with so or not in the sentence. A more detailed discussion of substitution is presented in Chapter 2, section 2.53.3. These substituted but nevertheless understood items and their contributions to cohesion in the sampled learners’ essays are analysed, interpreted and discussed below.

5.3.1 EXTRACTION OF SUBSTITUTION

A total of four instances of nominal substitution were extracted from LOCNESS and one from NLEC. Four instances of verbal substitution were extracted from LOCNESS and one from NLEC. One instance of clausal substitution was extracted from LOCNESS and eleven instances from NLEC. One instance of each substitution type from the two sampled groups is presented below for discussion and qualitative analysis. The remaining extracted instances of substitution from the two sampled groups’ essays are extracts numbered 72-88 which are presented as Appendix E and F.

Nominal Substitution- LOCNESS

Extract 66

Clarence hears the scream on the bridge, which triggers his mind into recalling and recognizing various incidents of his ‘fall’, he realizes that his previous life was in fact a guilty one, a duplicitous one. <ICLE-BR-SUR-0004.1>
In extract 66 from LOCNESS, *one* is used twice to substitute the noun *life* mentioned earlier in the sentence. In extract 67 from NLEC, *one* is used to substitute the noun *effect* also mentioned earlier in the sentence. In both extracts, *one* is used as a substitute to presuppose the nouns’ function as head in the nominal groups. *One* in the sentences operates as a substitution filler, which is placed to fill the noun positions. The meaning of the filler *one* is found in the foregoing parts of the sentences. The use of the substitute forms in each extract presupposes elements within the same sentence and serves as a convenient cohesive device used by the writers to avoid unnecessary repetition of the nouns substituted in the sentences. Presented below are two extracts from the groups showing the use of verbal substitution:

**Verbal substitution- LOCNESS**

**Extract 68**

Although he himself does not believe he *falls into this category*, his belief that some others *do*. <ICLE-BR-SUR-0004.1>

**Verbal substitution- NLEC**

**Extract 69**

People in the US *spend* more time watching television than they *do* talking to their spouses. <NLEC-012>

Extract 68 from LOCNESS shows that *do* is used to substitute for the verb *fall* along with the other, earlier stated elements in the clause. Extract 69 from NLEC shows that *do* is used to substitute the verb *spend* as well as the other preceding stated elements in the clause. The verbal substitute *do* operates as the head of the verbal group in the place previously occupied by the lexical verbs and, in some instances, as in the examples above, it also substitutes for the other elements in the clause. As seen in the extracts,
the substitute *do* indicates an anaphoric relation. Its use in each extract presupposes elements within the same sentence as itself. Thus, there is a structural relation linking the presupposed to the presupposing clauses. This acts as a source of cohesion within the sentences. Two instances of clausal substitution from the two groups are presented as extracts below:

**Clausal substitution- LOCNESS**

**Extract 70**

Whether Britain will lose its sovereignty or **not**, is entirely a personal point of view. <ICLE-BR-SUR-0007.3>

**Clausal substitution- NLEC**

**Extract 71**

I don’t think technology has bad impact, I believe misunderstanding make it seems **so**. <NLEC-021>

Extract 70 shows that *not* indicates the negative form of clausal substitution in addition to the other elements in the clause *whether Britain will lose its sovereignty*. The use of *not* in the extract functions as the negative form of the clausal substitute which presupposes the entire clause within the sentence it operates. Extract 71 shows *so* being used as a clausal substitute which presupposes the whole of the clause *technology has bad impact*. In the extract, *so* is used as a positive form of clausal substitution. Its use in the sentences presupposes the whole of the clause preceding it. The use of *not* and *so* in the extracts above, indicate anaphoric relations and derive their cohesion internally from the sentence structures. They function as primary means of textual cohesion and contribute to the overall cohesion in discourse.

**5.3.2 STATISTICAL ANALYSIS FOR SUBSTITUTION**

Table 5.2 presents the total number of frequency for nominal, verbal and clausal substitution in the sampled data. The overall frequency of substitution is presented first and the frequency was then normalised to one-hundred thousand (100,000) words. Once again, in view of the small numbers, the use of inferential statistical tests would not be appropriate.
TABLE 5.2: FREQUENCY AND PERCENTAGE FOR SUBSTITUTION

<table>
<thead>
<tr>
<th>ELLIPSIS</th>
<th>LOCNESS</th>
<th>NLEC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FREQUENCY</td>
<td>NORMALISED FREQUENCY</td>
</tr>
<tr>
<td>NOMINAL SUBSTITUTION</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>VERBAL SUBSTITUTION</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>CLAUSAL SUBSTITUTION</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9</td>
<td>45</td>
</tr>
</tbody>
</table>

5.3.3 DISCUSSION OF FINDINGS

Although the use of substitution is a convenient cohesive device to avoid needless repetition, both groups did not employ substitutions much in their texts. As seen from the frequencies Table 5.2, substitution as a cohesive device is rarely used in the data sample with its total usage at 9 and normalised frequency of 45 in LOCNESS and 14 instances normalised to 70 in NLEC. Substitution is a speaker/writer choice and not a compulsory feature (McCarthy, 1991:43), especially in written discourse. Accordingly, substitution seldom occurred in these sampled texts. However, as seen in the extracts and subsequent discussions, students elegantly used substitutions as a cohesive device in their writings.

Four instances of nominal substitution were extracted from LOCNESS and two instances from NLEC. As seen in extract 66 and extracts 72-74 (see Appendix E) from LOCNESS and extract 67 along with extracts 78-88 (see Appendix F) from NLEC, the substitute one is used to presuppose the nouns functioning as head in their respective nominal groups. One in the sentences, act as substitution counters, inserted to fill the noun slots. The meaning of the slot filler found in the respective preceding text. The use of the substitute forms in each extract presuppose elements within the same sentence as itself and serve as a convenient cohesive device used by the writers to avoid unnecessary repetition of the nouns.
The analysis also indicates four instances, extracted from LOCNESS and one instance from NLEC of verbal substitution. Extracts 68 and 75-77 (see Appendix E) from LOCNESS and extract 69 from NLEC offer clear instances of verbal substitution. The verbal substitute *do* operates as the head of the verbal group in the place previously occupied by the lexical verb and in some instances, seen in the examples above, it also substitutes for the other elements in the clause. Based on the extracts, the substitute *do* indicates an anaphoric relation. Its use in each extract presupposes elements within the same sentence as itself. Thus, there is a structural relation linking the presupposed to the presupposing clauses. This acts as a source of cohesion within the text.

Lastly, one instance of clausal substitution was extracted from LOCNESS and 11 instances were extracted from NLEC. Clausal substitution is expressed in two forms, positive or negative; the positive is expressed by *so* and the negative is expressed by *not*. Both forms are used by learners in the study to express clausal substitution. Extract 70 from LOCNESS and extracts 71 and 79-88 (see Appendix F) from NLEC show the use of clausal substitution in the learners’ essays. In extracts 71 above and 79-81 (see Appendix F), *not* is used to indicate the negative form of the statement (fact) presented earlier in each of the sentences. The use of *not* in the extracts acted as the negative form of the clausal substitute presupposing the entire clause within the environment they operate. In the context of use, *not* is a cohesive element in the texts.

In extracts 82-88 (see Appendix F) the positive form of clausal substitution *so* is used as clausal substitute. Its usage in the extracted sentences presupposes the whole of the clause preceding them. The use of *not* and *so* in the extracts indicate anaphoric relations and derive their cohesion internally from the sentence structure and across sentence boundaries. They function as primary means of textual cohesion. Clausal substitution occurs in the context of hypotaxis and it is a viable instrument of enhancing cohesion in discourse. Its usage in the extracts is an indication of the learner writers’ understanding of the contribution of this cohesive device, which is not compulsory in written discourse, in order to achieve textual cohesion and overall cohesion in discourse.
The analysis reveals a somewhat more frequent use of clausal substitution by Nigerian learners at the normalised frequency of 55 compared to 5 in LOCNESS. However, because both numbers are extremely low, the difference does not have any significance with regards to underdevelopment in the use of cohesive devices. What is evident from the analysis is that to avoid unwanted repetition of lexical items, learners were able to draw from their grammatical resources of the language to replace the item. Their ability to do this correctly, contributes to the cohesion and the overall coherence of their texts.

5.4 SUMMARY OF FINDINGS ON ELLIPSIS AND SUBSTITUTION

The results (see Table 5.1 & 5.2) are congruent with the discoveries and conclusions of existing research such as Biesenbach-Lucas and Weasenforth (2001) Halliday and Hasan (1976), McCarthy (1991) and Liu and Braine (2005) that substitution and ellipsis are more characteristically found in dialogues and seldom used in formal written discourse. Substitution and ellipsis rarely occurred in the LOCNESS and NLEC texts, as their normalised frequency ranged between 70 and 45. This outcome demonstrates that these advanced learners are, to a great extent, aware of the inappropriateness of substitution/ellipsis in formal writing, thus restricting their occurrence by design.

The infrequent or non-occurrence of these two devices in learners’ texts has also been reported in a number of other ESL studies such as: Abusharkh (2012) on Palestinian college students essays; Kwan and Yunus (2014) on Malaysian University Pre-service teachers’ narrative essays; Mohamed-Sayidina (2010) on Arab college students academic research papers, and Mohammed (2008) on Nigerian Diploma students essays among others. The rare occurrence, however, seems to be natural as these ties are more characteristically found in dialogues, where the typical sequence is based on pairs or longer structures that are related by interpersonal meaning.

5.5 ANALYSIS OF LEXICAL COHESION

Lexical cohesion has been defined as the semantic relationship created by specific lexical items in spoken and written texts. Lexical cohesion is created through the use of vocabulary. It operates as the central device that makes a text unified. Hence, lexical cohesion is the
predominant means of connecting sentences in discourse. Halliday and Hasan (1976:278-282) discussed lexical cohesion in relation with texture. They identified two major categories of lexical cohesion: reiteration and collocation. In the two categories, the interpretation of one lexical element in a text is made possible by the presence of another. Halliday and Hasan (1976) described reiteration as a phenomenon in which one lexical item refers back to another to which it is related by having a common referent, i.e., a common source for interpreting the two items. Furthermore, collocation is described as the association of lexical items that regularly co-occur. Collocation will be discussed later under sub-section 5.5.4.

5.5.1 ANALYSIS OF REITERATION

Lexical reiteration consists of four categories: (1) repetition of the same word; (2) use of a synonym; (3) use of a superordinate; and (4) use of a general word. The prominent use of reiteration as an indispensable tool for cohesion in discourse has been confirmed by Hasan (1984) and Hoey (1991); they found that about forty to fifty percent of a text’s cohesive ties are lexical ties. Aside this prominent qualitative dimension of cohesion (including lexical cohesion) in creating cohesive written discourse, Guiju (2005) and Witte and Faigley (1981) draw attention to the qualitative dimension of it where an underlying an undeniable relationship between lexical cohesion and writing quality exists. When lexical items used in compositions are diversified they are sure to improve writing quality. Lexical reiteration is an explicit cohesive mechanism used by writers to build up ideas and eventually, the text as a whole. The quality of lexical reiteration used in a text affects the overall quality of the text. It is indeed an essential tool of discourse. A more detailed discussion of lexical cohesion is presented in Chapter 2, section 2.5.3.5. These essential discourse tools and their contribution to the sampled learners’ essays are extracted, analysed and discussed in this section.

To achieve the needed connection in discourse, it has been established that one lexical item sometimes refers back to another one related to it because they have a common referent. This phenomenon is called reiteration. Reiteration in discourse operates as a form of lexical cohesion that has to do with the repetition of lexical items at one end of the scale, or the use of a general word, to refer back to a lexical item or a number of things in between them, including the use of synonyms, near-synonyms or superordinates at the other end of the scale (Halliday & Hasan, 1976: 278). The use of reiteration by learners to enhance cohesion in the
sampled data from the two corpora is extracted, analysed and discussed to indicate quality of use by writers.

The instances of lexical reiteration were extracted under the three categories of repetition, synonyms and superordinates. The extracted instances are presented in tables for each group. Table 5.3 (see Appendix G) and Table 5.4 (see Appendix H) present the extracted instances of repetition. Table 5.6 (see Appendix I) and Table 5.7 (see Appendix J) present the extracted instances of synonyms and near-synonyms. Finally, Table 5.9 (see Appendix K) and Table 5.10 (see Appendix L) present the instances of superordinate words from each group respectively.

5.5.1.1 REPETITION

Repetition is a process of achieving cohesion through the repetition of lexical items that have already been said or written in discourse for clearer understanding by the listener or reader. Lexical reiteration contributes to the better understanding of the relationships existing between words in discourse. The repetition of words, or in some cases, the repetition of words sharing the same root words help maintain semantic continuity. Repeated words sometimes have identical meaning or their meaning change as affixes are added to them. These derivational forms of the root words sometimes function in the same syntactic environment and help create cohesion in discourse. The different instances of repetition used by the learners in the sampled data were manually extracted and tabulated (Appendix G and H). One essay from each corpus is then presented to identify the use of repetitions and to discuss their contribution to the cohesion of the essays in section 5.5.1.1.2.

5.5.1.1.1 EXTRACTION OF REPETITION

All the instances of lexical repetitions were extracted from the sampled data. The extracted instances are presented in Table 5.3 as extract 101 to 115 (see Appendix G) for LOCNESS and Table 5.4 as extract 116 to 160 (see Appendix H) for NLEC respectively. Overall, the frequency of repetition in sampled data from LOCNESS totals 385. The frequency was then
normalised to 100,000 words. The normalised frequency of repetition is 1925. The overall frequency of repetition from NLEC adds up to a total of 829. The frequency was then normalised. The normalised frequency of repetition is 4145. The log-likelihood test for significant difference between the two groups was performed using Rayson’s log-likelihood and effect size calculator. The result indicates a significant overuse of repetition by the NLEC group with an LL value of + 167.42, also visualised through the asterisk that is used throughout the thesis. The table is presented below:

**TABLE 5.5: FREQUENCY AND LOG-LIKELIHOOD VALUE TABLE FOR REPETITION**

<table>
<thead>
<tr>
<th>REPETITION</th>
<th>LOCNESS FREQUENCY</th>
<th>NLEC FREQUENCY</th>
<th>NORMALISED FREQUENCY</th>
<th>NLEC NORMALISED FREQUENCY</th>
<th>LOG-LIKELIHOOD VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>385</td>
<td>1925</td>
<td>829</td>
<td>4145</td>
<td>167.42*</td>
</tr>
</tbody>
</table>

5.5.1.1.2 **DISCUSSION OF THE USE OF REPETITION**

To examine the choice and usage of repetition in the two sampled groups from the two corpora, essays were extracted and the repeated words are highlighted and discussed below:

**EXTRACT 89**

*Candide*, is a *conte* which seeks to examine the value of *philosophical optimism* by its application to human *life*. It is a satirical novel where *optimism*, as embodied in Pangloss and for a time the hero *Candide*, is tested against an acute, if not at times ridiculous, portrayal of society. The *conte* was written to counter the views of Leibnitz and Pope who believed, as *Pangloss* that all was for the best in the best of all possible worlds. This witty work had profound effect upon the intellectuals of the time, many feeling that it was impossible to hold Leibnitz’ *philosophy* in any degree of esteem after Voltaire so successfully exposed it. While the *conte* is an application of optimism to *life* so as to destroy its credulity *Voltaire* also seeks to present its opposite *pessimism* as an equally distorting and negative *philosophy*. He manages to present these views through characters who lack personality but maintain a *philosophical* identity, albeit in many cases perversely.
The conte is a journey for Candide and the reader. Voltaire achieves a good deal of success in this approach since as Candide travels and expands his physical and intellectual horizons so the reader journeys also. The structure of the work reinforces this as it is symmetrical. Candide travels away from Westphalia armed with his philosophy of optimism only to meet with despair… Candide however does not seek to stay in El Dorado and leaves to travel back towards Europe in the company of Martin who epitomises pessimism. The second half of the conte is an examination of pessimism and it culminates in a uniting of the main characters in the conte and Candide making his own choice about philosophy. Candide began his journey armed with the ignorance of a closeted life and an inculcated philosophy of optimism. By adopting such a structured approach Voltaire opens the readers mind with Candide’s, allowing the reader to progress from a state of ignorance with the hero. This literary technique is important in considering how Voltaire tackles the issue of optimism in the novel. It must be said that he does so without exerting any of the force of his personality on the work in any overt manner and although the constant recurrence of people supposed to be dead is at times absurd the light humour of the novel overcomes any indignation or hostility on the part of the reader.

Secondly the treatment of optimism in the novel must be considered in a substantial way. Voltaire, like many appreciates the human condition as can embody both states of good and bad according to the position of the person experiencing it. The optimists do not experience great difficulty in explaining the state of goodness which involves human pleasure however they do seek to explain human suffering away as being truly for the individuals good although experience would dictate otherwise. This blinkered approach cannot really epitomise a valid philosophy. Voltaire realised that it was distorting and repugnant to any idea of humanists. Candide leaves Westphalia, where he has never been exposed to any type of suffering only to encounter a world where both he and others suffer in abundance.

Voltaire does not seek to counter the necessity of suffering as part of our condition but is repulsed by the attitude of the individuals who constitute the church, who induce suffering inesssarily. The auto da fé clearly shows this. Here people are made to suffer to appease God a theory which arose from the superstition and dogmatic approach of the church. Voltaire makes no attempt to subvert the church as an idea but exposes the inadequacy of its members (example the syphilis being spread by a monk). The idea of pre-ordination which seems to underly the philosophy of optimism is also rebutted by Voltaire. Once again he does not do so explicitly, merely by exposing the fallacy of the argument. Pangloss’ theory that we have glasses thus noses its obviously laughable but what is more repulsive however is the optimists view that pre-ordination pre-supposes passivity to whatever happens. This is exposed as James the virtuous Anabaptist drowns in Lisbon harbour. This man, an epitomy of true virtue is left to die by Pangloss who states that by the theory of pre-ordination Lisbon harbour was created so that he could die there.

Ultimately Candide rejects optimism and adopts a policy which is devoid of philosophical abstraction as he goes to work upon his condition. "Il faut cultiver le jardin". This does allow him
the free will to ameliorate his lot which the theory of preordination opposes and while not rejecting suffering as an intrinsic part of our condition he seeks to avoid it as it is repugnant to our human feeling. Although Candide finally achieves a certain degree of philosophical stability albeit in rather unfortunate circumstances he has it must be remembered left of his own volition the paradise of El Dorado. He did this because of his human lust and desires. Once he had achieved ‘the best of all possible worlds’ that the optimists would envisage he forced himself to leave, driven by individual feeling and free will they would have difficulty acknowledging… Voltaire realised that one could not prevent the natural disasters such as plagued Lisbon but one could diminish the human element of suffering in a world which was quite clearly not the best of all possible worlds. <ICLE-BR-SUR-0021.2>

Extract 90

Technology advancement is a curse rather than a blessing to our society

Technology is one of the greatest thing that has happened to human being. It has really helped in shaping the lives of everybody and has laid a big impact on the globe. Technology has helped in changing lives and making things easier for us. Technology can be divided into parts, e.g. The internet, Telecommunications, Social networking and Educationally. I would want to stress the points one after the other and pick their uniqueness and hazards. The internet has really helped and has contributed immensely to the growth of modernizations in the world today. Back in the days people used to do things manually and it takes and consume time and also increases the backlog of every firm, then when going to the bank you will have to queue on a very long line before paying money and to recipient receiving the money will take some time before getting it and withdrawals of money also faces the same problem. But today the case has changed, with coming of technology advancement you can pay money to another person’s account through your phone through mobile banking and withdrawals can be done easily by using your ATM (any time money) card within seconds and it has really helped and has saved the time of people. People even uses the internet for messages and other things.

Telecommunication can be called the major force in the advancement of technology and has transformed the globe. Back in the days when there was no telecommunication, people will need to send message through the post office, but the case has changed today with the coming of modern technology. Messages can be sent via phones and even contacts are easily made through phones and a whole lot of varieties are derived from telecommunication. Social networking is one of the busiest market in the world today with the coming of the following social networking sites e.g. Facebook, Yahoo chat, Blackberry, Twitter, to mention a few. These social networks has really united the globe making it easier for people to meet new people and make friends.

Educationally it has improved the educational sector globally and has helped in many ways and has brought about the coming of e-learning and pupil can read online and make research their
field through the internet. This is not the case today because people has taken advantage of the technological advancement and has turned it into fraud and other dubious acts. The internet today has turned into a house of fraud with people using it as a means to fraud people and become rich. Telecommunication has done a whole lot of damage to the lives of people and people uses telecommunication to all sorts of fraud. Social networks is a big distraction to youth of today and is really causing more havoc than expected. Educationally it has made the students of today weak in their study leaving them to depend on internet solutions rather than reading through the book. I think technological advancement is a curse rather than a blessing to our society, because it is not helping matters. Without technology the likes of Obafimi Awolowo, Chinua Chebe, Ajayi other and the host of others were able to achieve their dreams and wrote their names on the wall of history and has laid a very huge impact on our society today. In my own words, I think that technological advancement is cursing more evil than good to the world today. <NLEC-060>

As is evident from the use of repetition of lexical items in extract 89 and 90, linguistic items are repeated throughout the text and they have structural and semantic effects on the texts. In extract 89, the writer repeated words like philosophy, optimism, pessimism, journeys, human, life and church to emphasise and drive into the reader’s mind the focus of the texts. The repetition of these words helps to strengthen the topic and points discussed by the writer. The repetition of the words from the first to the last paragraph indicates anaphoric chains of reference and they contribute extensively to the development and organisation of ideas in the text. Likewise, in extract 90, technology, technological, advancement, telecommunications, internet, social networking, phone, people and society are extensively repeated in the text.

The repetition of the words like technological advancement functions as an anaphoric reference to and maintains the topic of discourse. These words also add emphasis and strengthen the topic and message of the text. The repeated words also operate as major cohesive device for text connectedness. Another observation from the extracts is the difference in the kinds of repeated words in the two texts. On the one hand, in the LOCNESS text, repeated words are almost exclusively topic-related. On the other hand, many of the NLEC repeated words are also topic-related but there is a further subset, i.e. today, back in the days and people that are general words. The function of repetition is therefore more extensive in the NLEC text.
Overall, the writers’ use of lexical repetition helps to draw the attention of the reader to the message of discourse. It also ensures that the main ideas are driven into the reader’s mind. The structural effects of the repeated words are visible as they help to cohesively link the issue of discourse and develop the ideas in the text into a cohesive whole. They also help to ensure that sets of ideas are clearly tied together from the beginning to the end of the text. However, the quantitative analysis of repetition in the two sampled groups shows the overuse of repetition by NLEC learner writers as evident in the normalised frequency of 4145 compared to 1925 of LOCNESS. The analysis of the NLEC learners’ essays revealed that some Nigerian learners tend to reiterate previously introduced information more than LOCNESS learners do. Although LOCNESS learners used ample numbers repetition, their lexical choices showed more diversity, sophistication and less density than the NLEC learners. These findings are further elaborated by a more in-depth comparison and analysis of extracts from both groups. They are presented below:

Extract 91

Drastic advances in medicine in recent years are causing us to re-think certain issues. These issues need re-defining in a world where new techniques, treatments, and ideas are increasingly complicated. Some of these advancements now are tried and true, others give only a small hope for recovery, while others are barely out of the experimental stage. These new issues are raising more and more questions. Not only does this pose a dilemma to the physicians, it provokes thought in each individual. We must consider what the boundaries are on how much we are willing to go through to try to cheat death. The right to refuse life-support is an individual one, and one that should be considered by each and every individual. To make a decision this important to our lives, we must first decide what human life means to us. Everyone has their own attitude toward life. This attitude helps define our life. We each perceive events in our lives differently. <ICLE-US-MRQ-0029.1>

Extract 92

Technology advancement is a curse rather than a blessing to our society. Technology is said to have begin in the 190’s but become well know and effective in the 20th century. Technology is of different type such as radio, television, computer, digital camera, satellite, phone etc. Technology has being of great help and impact in individuals and country’s life when it comes to communication and information. Technology is of two impact in the society and the impact are of good and bad. The good part of technology is that it has help in communication, people from long distance are able to communicate through phone either message or call. The good
impact of technology is also through education, student prefers to go online to seek more knowledge and information. ... Technology has also help to improve human relationship with one another most especial through the social technology which are facebook, twitter, 2 go 2-mail-MSMB, people from different place and background meet to discuss in the chat room and learn from each other. < NLEC 021>

Indeed it is clear from extract 91 and 92 that the NLEC writer overuse lexical repetition in a daunting manner. This overreliance on repetition by the NLEC writer as a pointer to help guide the reader through the essay has the negative effect of distracting the reader and bedimming the message of the essay. In extract 91 from LOCNESS, the writer repeated three lexical items, i.e. advance (ment) (2), individual (2), issues (3), and life (s) (3). The total numbers of repeated lexical items amounted to ten. In extract 92 from NLEC with a similar length to extract 91, five lexical items are repeated, however, the number of repetitions, i.e. technology (9), impact (4), communication (3), good (3) and information (2) amounts to a total of 21 lexical repetitions.

The observed overuse of repetition by the writers from NLEC compared to LOCNESS as a tool of reiteration for the intention of reinforcing ideas leads to lack of depth in the NLEC essay, as the continuous repetition of technology in the extract, for instance, makes the discussion of the essay to appear shallow and rudimentary for an advanced level learner’s essay. It is apparent that the excessive repetition reduces the overall quality and stalls the reading of the essay. To further exemplify this alarming finding of the extreme use of repetition of lexical items by some NLEC writers, a more detailed comparison is done below using four more extracts each from LOCNESS and NLEC respectively. The compared extracts and discussions are presented below:

Extract 93

Oreste's birthplace was Argos and on the death of his father, the king (who was, incidentally, murdered) he was taken away to Athens to be brought up there by a noble family. When he returns to Argos, he cannot feel a part of the city for the simple reason that he is innocent, and feels innocent, whereas all those citizens born in Argos and living there, have supposedly been born into guilt. The whole point of the play seems to be an attack on the Church and religion (especially Catholic) which holds good considering Sartre's atheism. The whole city of Argos is
in perpetual mourning and repentence for a murder which happened unbeknown to many of them: for those who were around, guilt is theirs for not having prevented the atrocity. The Queen’s mournful clothing and black funereal make-up emphasize the point: there is no happiness in the city. They are all allowing themselves to be ruled by the past and, in fact, seem to be in a time-warp, not moving forward, not even seeing their futures. <ICLE-BR-SUR-0001.1>

Extract 94

Examinations are not true measures of student’s ability and should be abolished (against). Before I proceed will like to define examination as a whole. Examination can be defined as a formal test of knowledge or ability. It is also a detailed inspection. Examination is a true measures of student’s ability in the sense that after a whole semester n a section, it is advisable for all lecturers to carry out a test of knowledge for the student in other to know their ability and capability. In Nigeria today, most schools carry out examinations for student. There are many student in Nigeria who still do not know the means of going to school. Some think it is only for exams and tests and after all they are promoted to the next class. Without examinations, one cannot know whether he or she is doing good in class. The examinations conducted in many schools nowadays is a corrupt one such that student don’t want to read only for them to pass. <NLEC-051>

As seen from extract 93 from LOCNESS, the writer repeated five lexical items, i.e. Argo (4), city (3), innocent (2), guilt (2), murder (ed) (2) and mourning(ful) (2). They amount to a total of 15 lexical repetitions. Eight lexical items were repeated in extract 94 from NLEC. The repeated lexical items are: examination(s) (7), student (6), ability (4), test(s) (3), school(s) (3), class (2), knowledge (2) and measure (2). A total of 31 lexical repetitions were used in extract 94.

Extract 95

In the play Caligula Camus is dealing with the themes of death and the absurd, and throughout the play we can see different characters reacting in different ways. They also however interact with each other, making the arguments of the other more credible or maybe discounting other’s arguments and thus swaying the audience to one side. It can be said that this is the case in Caligula, it is amazing that we can have sympathy with Caligula at the end of the play after seeing his deeds - but through studying his words and the words and actions of others we can see how this is so. At the beginning of the play, Drusilla, his sister, dies. The audience is clearly able to sympathize with death and the effect of mourning - but we are confused to hear later that the
death' only revealed a 'verité' to him. Shocked that it is not for his sister that he mourns but the state of the human condition, Caligula however manages to open our eyes to a 'wider' truth and we begin to find him fascinating. <ICLE-BR-SUR-0011.1>

Extract 96

Truly most university degrees are theoretical and do not prepare students for the real career world because most students end up doing another job entirely different from the course they did in schools. There are various examples such as a man working in a bank as a cashier and who had studied chemistry or chemical engineering in school. Thus, career work is not the same thereby leading to various training endured by the man in order to have a job at hand. Also some students only come to school for just the purpose of getting the degree certificate and not for the purpose of using the certificate for anything based on the course that had been taken in school those kind of student might already have a job ready or waiting for them after school. Also, most courses such as engineering courses are in need of the practical aspect of the study and not the theoretical aspect because in the career world, practicals are applied and not the theory though the theoretical aspect is also needed. < NLEC- 155>

Extract 95 from LOCNESS indicates the repetition of a total of six lexical items, i.e. Caligula (4), play (4), death (3), arguments (2), words (2), sister (2) and mourn(s, ing) (2). They add up to a total of 19 lexical repetitions in the extract. In extract 96 from the NLEC, a total of eleven lexical items were repeated: course (4), theory (tical) (4), job (3), student (3), career (3), school(s) (3), degree(s) (2), world (2), certificate (2), practical (s) (2), and aspect (2). A total of 33 lexical repetitions were used in extract 96.

Extract 97

'Candide' is a conte which seeks to examine the value of philosophical optimism by its application to human life. The conte is a journey for Candide and the reader. Voltaire achieves a good deal of success in this approach since as Candide travels and expands his physical and intellectual horizons so the reader journeys also. The structure of the work reinforces this as it is symmetrical. Candide travels away from Westphalia armed with his philosophy of optimism only to meet with despair. He meets Cacombo (a pragmatic realist) and together they find El Dorado which lies both at the centre of the conte and of Voltaire's aspirations. El Dorado can rightly be seen as a heaven on earth. It is a place free from the evils that have been encountered in the preceeding parts of the work. Candide however does not seek to stay in El Dorado and
leaves to travel back towards Europe in the company of Martin who epitomises pessimism.

Extract 98

The removal of fuel subsidy will help improve the nation’s economy. Subsidy is a tax that is opposed on a goods or rather a sum of money given to help keep the price of a product or service low. In Nigeria, today majority of the population are below average, removing of fuel subsidy will be a burden and increase the rate of poverty instead of improving the nation’s economy. Removal of fuel subsidy will increase the price of food stuffs, where on a normal day three quarter of Nigerians cannot afford three square make, so in opposing of fuel subsidy will only melt than the economy than improving it. Removal of fuel subsidy will increase the price of transportation. Students all over Nigeria have found it difficult to transport to school with the little amount of money that have been given to them. Workers also found it difficult to pay times two of the normal price so removing of fuel subsidy will not help the nation economy at all. <NLEC-212>

Extract 97 from LOCNESS shows that the writer repeated five lexical items, i.e. Candide (4), conte (3), El Dorado (3), philosophy (cal) (2), journey (2), Voltaire (2), travels (2) and optimism (2). They add up to a total of 20 lexical repetitions in the extract. In extract 98 from NLEC a total of eight lexical items were repeated, i.e. subsidy (7), fuel (6), removal (ing) (5), economy (4), price (4), nation (3), increase (2), money (2), improving (2), Nigeria (2) and transport (tion) (2). A total of 41 lexical repetitions were made in extract 98.

Extract 99

Who is provided with the authority and/or responsibility to prohibit the reading and studying of certain text? Is it the school boards of education, the parents within the various school districts or censorship groups such as the Citizens for Excellence in Education (CEE)? Who has given these persons the power to ban books--the voices of authors? As I last recalled the Constitution of the United States provided all people with the freedom of speech. However, since Johannes Gutenberg’s printing press in 1455 and Pope Leo X condemnation of Martin Luther's Ninety-Five Thesis, materials have been censored in what one sees as danger or threat to society. Now in more recent times, instead of groups prohibiting the reading of so-called “inappropriate text”), they go as far as to bum them. Did you know that in the year 1991-92, the People of the American Way (PAW) reported in their journal, Attacks on the Freedom of speech that 376 attacks were made on the freedom to learn; <ICLE-US-SCU-0015.4>
Extract 100

Advertising is an act of awareness of a products or goods to the general public that is to publicize a product, service etc. to increase sales or a job vacancy to encourage applications. It is also a notice or display of advertising. Something which will be of a good products or goods to the nations. Advertising helps in the promotion of sales which will help the products to reach all necessary, and relevant and hidden areas for the user of the product to be. In Nigeria today, advertising are socialize in a very good and a well manner. It can be done through various business organization such as in the bank, computer centre, on-line net internet which is not only necessary on the television. When television was first invented it was advertised as an innovation that brought families together to spend quality time with each other. Once again, I will like to say advertising is the creation of awareness of goods or a product to people in order to promote the sales of the business and a general notices or display to publicize the products.

In extract 99 from LOCNESS, the writer repeated three lexical items, i.e. reading (2), school (2), and freedom (3). They add up to a total of seven lexical repetitions in the extract. In extract 100 from NLEC, a total of eleven lexical items were repeated, i.e. product(s) (7), advertising (6), goods (3), public(ize) (3), general (2), awareness (2), good (2), television (2), promote (tion) (2), notice(s) (2), and display (2). A total of 33 lexical repetitions were used in extract 100. It is apparent from the extracted samples and discussions that many of the NLEC texts included a good deal of what Witte and Faigley (1981) referred to as ‘conceptual and lexical redundancy’. Although for purposes of attaining cohesion in a text, some redundancy is a virtue as exemplified in LOCNESS extracts and as Hoey (2001) and Zhu et al. (2001) rightly observed, a variety of repetitive forms should be used between sentences to achieve cohesion. However, the monotonous use of lexical repetition in these NLEC texts is a flaw because these texts failed to supply alternative lexical items or explanations at the point where it would be expected to appear for the purpose of lexical variety. As seen from the extracts above, it is obvious that the consecutive repetition of lexical items does not necessarily increase readability or cohesion of the text. Rather, it retards reading and frustrates the reader.

These findings are similar to previous research on lexical repetition by ESL learner writers. Connor (1984) in her analysis of cohesion in the writings of ESL students found that ESL students had high percentages of lexical repetition with relatively smaller numbers of
synonymy and collocation. Similarly, in his study on cohesion and coherence in Arab EFL college students’ writing, Khalil (1989) found that Arab students overused lexical cohesive ties, especially reiteration of the same word. Liu (2000) also observed that the most prominent use of context lexical ties by English for speakers of other languages is lexical repetition. Also, Mojica’s (2006) study on reiterations in Filipino university learners’ academic papers showed that repetition was the most frequently used type of lexical cohesion.

Some NLEC writers repeated ideas or concepts especially from the topic of discourse. The most severely repeated lexical items are usually used as anaphoric reference to the topic of discourse. This is seen in extract 92’s repetition of technology as reference to the topic Technology advancement is a curse rather than a blessing to our society; in extract 94’s repetition of examinations and student in Examinations are not true measures of student’s ability and should be abolished; in extract 96’s repetition of theoretical, students, and degree in Most university degrees are theoretical and do not prepare students for the real career world; in extract 98’s repetition of removal, fuel, subsidy, nation and economy in The removal of fuel subsidy will help improve the nation’s economy; and lastly, in extract 100’s repetition of advertising in Advertisement: information or manipulation?. This constant repetition of the topic lexical items could be a result of L1 transfer of discourse organisation into L2. This repetition could also be due to the very explicit nature of referencing in the discourse of most Nigerian languages (see more detailed explanation under summary of findings on lexical reiteration in sub-section 5.5.3). Nevertheless, the number of repetitions observed is exhausting and detract from the overall textual quality of the essays.

5.5.1.2 SYNONYMS OR NEAR SYNONYMS

A synonym is a word or phrase that means nearly the same as another word or phrase in the same language. Synonymous words can be very similar, but they do not necessarily mean the same. The different instances of synonyms used by the learners in the sampled data were manually extracted, tabulated and labelled Table 5.6 and Table 5.7. The tables are presented as Appendix I and J. One essay from each corpus is then presented to identify the use of synonyms and to discuss their contribution to the cohesion of the essays in section 5.5.1.2.2.
5.5.1.2.1 EXTRACTION OF SYNONYMS

All the instances of synonyms were extracted from the data sample. The extracted instances are presented in Table 5.6 along with extracts 163-176 (see Appendix I) for LOCNESS and Table 5.7 with extracts 177-208 (see Appendix G) for NLEC, respectively. The overall frequency of synonyms in the 20,000 words data sample from LOCNESS amounts to a total of 116. The frequency was then normalised to a number per 100,000 words. The normalised frequency of repetition is 580. The overall frequency of synonyms in the 20,000 words data sample from NLEC amounts to a total of 108. The frequency was then normalised to 100,000 words. The normalised frequency of repetition is 540. The log-likelihood test for significant difference between the two groups was performed using the Rayson’s log-likelihood and effect size calculator, the result indicates a non-significant difference of synonyms in the two groups with an LL value of -0.26. The table is presented below:

TABLE 5.8: FREQUENCY AND LOG-LIKELIHOOD VALUE TABLE FOR SYNONYMS

<table>
<thead>
<tr>
<th>SYNONYMS</th>
<th>LOCNESS</th>
<th>NLECS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYNONYMS</td>
<td>FREQUENCY</td>
<td>NORMALISED FREQUENCY</td>
</tr>
<tr>
<td>TOTAL</td>
<td>116</td>
<td>580</td>
</tr>
<tr>
<td>TOTAL</td>
<td>108</td>
<td>540</td>
</tr>
</tbody>
</table>

LOG-LIKELIHOOD VALUE

0.26

5.5.1.2.2 DISCUSSION OF THE USE OF SYNONYMS

To examine the choice and usage of synonyms in the two sampled groups, essays were extracted and the synonymous words are highlighted and discussed.

Extract 161

Who is provided with the authority and/or responsibility to prohibit the reading and studying of certain text? Is it the school boards of education, the parents within the various school districts or censorship groups such as the Citizens for Excellence in Education (CEE). Who has given these persons the power to ban books--the voices of authors? As I last recalled the Constitution of the United States provided all people with the freedom of speech. However, since Johannes Gutenburg's printing press in 1455 and Pope Leo X condemnation of Martin Luther's Ninety-Five Thesis, materials have been censored in what one sees as danger or threat to society. Now in
more recent times, instead of groups prohibiting the reading of so-called "inappropriate text"), the
go as far as to burn them. Did you know that in the year 1991-92, the People of the American
Way (PAW) reported in their journal, Attacks on the Freedom of speech that 376 attacks were
made on the freedom to learn; 348 demands were made for the removal of certain texts from
school curriculum and public libraries; and 44 of the 50 states took part in such discrimination
and censorship. The censorship of literary works range from magazine articles to children's stories
to lengthy novels. In New Hampshire, the magazine, Ms., was considered to be inappropriate for
the reading of high students. Nashua's Board of Education felt that speaking openly about
vibrators, contraceptives, materials on lesbianism and witchcraft was not acceptable…

In conclusion, I feel that the School of Board's of Education, many parents, and ministers try to
**stop** the world for turning. They think that because they prohibited a book from being read or
burning it to ashes will stop of the violence and sinning of the world today. Unfortunately, they
have yet to realize that if the children do not read it, they will see it. Watching cartoons, <?>, a
soap opera or even taking a causal walk to the park can be an eye-opener. Sex, violence, and
profanity fills the streets of this world. Putting a **restrain** of the voices of authors such as Mark
Twain, J.D. Salinger, John, Steinbeck, Judy Blume, and Maya Angelou deprives the American
Society of what beauty there can be in words... <ICLE-US-SCU-0015.4>

Extract 162

Technology advancement is a curse rather than a blessing to our society.

The recent developments in the world now has greatly been influenced by the **emergence** of the
new technologies. Some of this technologies are computer, ATM machines, blackberries, mobile
phones, space satellites, etc. This technologies have helped in executing work faster, in fact it is
now an important tool for all organizations as it helps research and skill acquisition most
especially the computer. We must understand that the **advancement** has helped our economic and
it has given rise to people especially the students, to have a broad spectrum of ideas and carry out
their functions as students, but these has now been abused by people, as **fraudulent** activities are
now carried out with them. “Cybercrime” is no new phenomena, many people mostly the youths,
of this era engage themselves in ghost transactions with the foreigners thereby releaving them of
their hard earned money. Apart from the computer crimes, ATM machines has also been
manipulated by criminals and has resulted to many citizens losing their money. Another evil
carried out by the youths/people is the use of internet to watch **illicit** videos (pornograph) since
the access to internet has been made very easy to all without restrictions by most parents.
Children have taken the opportunity to explore sites with this illicit content rather than looking up
educational materials what will help them in their various areas of concentration.

Furthermore, it is necessary to point out this evil done with technologies and set up measures to
combat the misuse of them. The advancements negative effects may create impressions of it being
a curse to our society but we must understand or rather consider the greater positive sites in which

208
they provide. In the course of my write up I enumerated some salient advantages of this technologies and how it has greatly influenced our economy at present.

In conclusion, I believe if the inventors of this technologies can setup strong firewalls to resist minors, it will do our society a real good. As regards to the crimes done with the ATMS’s and all other technologies, security measures must be put in place to bring those who involve themselves in the ‘act’ to book. The government also has a very important role to play to ensure that citizens are provided enough job opportunities for both the educated and non-educated. A huge reduction of crime will be experienced in our society and the saying of it being a ‘curse’ to our society will be a thing of the past. <NLEC-004>

Extract 161 from LOCNESS shows the use of semantically equivalent words like prohibit and ban; reading and studying; and danger and threat. Extract 162 from NLEC shows the use of semantically similar words like emergence and advancement; important and salient; and illicit and fraudulent. The use of these words from the extracts helps to avoid the monotonous use of same words and they add variety to the lexical choice of the writers. The use of the synonymous words gives the essays lexical flexibility and show good vocabulary development of the writers. It also helps to keep the presentation of the ideas in the extracts fresh and interesting. It boosts the linguistic sophistication and cohesiveness of the two essays. The quantitative analysis revealed a closely similar normalised frequency of 580 for LOCNESS and 540 for NLEC in the use of synonyms in the sample groups from the two corpora. The log-likelihood value also shows no significant difference in the two groups.

5.5.1.3 SUPERORDINATES

Superordinates refer to lexical items whose meanings include that of an earlier mentioned lexical item operating within a system of classification. In other words, a superordinate denotes a general class under which a set of subcategories is subsumed, for example, child is the superordinate of boy and girl; fruit a superordinate of orange and banana. The different instances of superordinate words used by the learners in the data sample are extracted, and their contribution to the cohesion of their essays is discussed later in section 5.5.1.3.2.
5.5.1.3.1 EXTRACTION AND ANALYSIS OF SUPERORDINATE

The instances of superordinate words were extracted from the sampled data. The extracted instances are presented in Table 5.9 as extracts 211-217 (see Appendix K) for LOCNESS and Table 5.10 as extracts 218-240 (see Appendix L) for NLEC respectively. The overall frequency of superordinate words in the 20,000 words sampled data from LOCNESS amounts to a total of 50. The frequency was then normalised to 100,000 words. The normalised frequency of superordinate words is 250. The overall frequency of superordinate words in the 20,000 words data sample from NLEC amounts to a total of 146. The frequency was then normalised to 100,000 words. The normalised frequency of repetition is 730. The log-likelihood test for significant difference between the two groups was performed using the Rayson’s log-likelihood and effect size calculator, the result indicates a significant overuse of superordinates by the NLEC group with an LL value of +49.37. The table is presented below:

**TABLE 5.11: FREQUENCY AND LOG-LIKELIHOOD VALUE TABLE FOR SUPERORDINATES**

<table>
<thead>
<tr>
<th>SUPER-ORDINATES</th>
<th>LOCNESS</th>
<th>NLEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY</td>
<td>NORMALISED FREQUENCY</td>
<td>FREQUENCY</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50</td>
<td>250</td>
</tr>
</tbody>
</table>

5.5.1.3.2 DICUSSION OF THE USE OF SUPERORDINATES

To examine the choice and usage of superordinate words in the two sampled groups, essays were extracted and instances of superordinate words and their subcategories are highlighted and discussed.

**EXTRACT 209**

Due to the European Communities Act 1972, the United Kingdom has since been subject to community law which, as specified in the original treaty, is supreme over all other domestic law of all the member states. Therefore, by being a signature to the 1972 Act and to the preceeding
Treaty of Rome, we have relinquished the legislative supremacy of our Parliament, which means that hitherto the European Communities Act, no other organ existed with the power to create or repeal legislation, but which is now no longer the case. This surrendering of sovereignty is of course only partial but results in the United Kingdom (I use this term to include England, Wales, Scotland and Northern Ireland, which constitutes the state of the United Kingdom, which is in question, rather than Great Britain which includes only England, Wales and Scotland; no longer being known as a full sovereignty in the international sense indicating complete independence and freedom from external control… <ICLE-BR-SUR-0015.3>

EXTRACT 210

Technology advancement is a curse rather than a blessing to our society

Technology advancement is a curse rather than a blessing to our society and should be abolish. First and foremost I will like to give honour to whom honour is due to by greeting all protocol observe, and all who has taking part in the development and well-wishers of this country Nigeria…This technology has done much harm than good to youth in the sense that when you see youth watching this so call blue films on the internet it lead to what is called raping. raping is also an illegal act that is practice among youth in the society which is not a habit that should be accepted in society. Technology also lead to social vices such as stealing, robbery, killing, prostitution and lot more. When we talk about robbery technology is use to rob in such a way that they use computers to know people movement, where you are, where you are going and when you will return before you return they will have stolen all your goods in the house. <NLEC-094>

Extract 211 shows the use of the superordinate term United Kingdom and later listed the countries as England, Wales, Scotland and Northern Ireland. The writer also used the term Great Britain and later listed England, Wales and Scotland as countries that make up Great Britain. The listed countries function as lexical items whose meaning include an earlier mentioned lexical item operating within a system of classification, which in this instance, is United Kingdom and Great Britain. Similarly in extract 212, the term social vices is used and further listed stealing, robbery, killing, raping and prostitution as some of the social vices.

The use of the superordinate words and their list in the two essays exhibit anaphoric relations within the texts. Its use helps the text hang together as a whole, thereby creating a cohesive link with the preceding referent or superordinate term and the class members. The log-likelihood value indicates a significant overuse of superordinates by the NLEC group.
compared to their LOCNESS counterparts. The observed overuse, however, does not indicate underdevelopment on the part of the NLEC learners, instead it is a positive cohesive instrument that enhances the overall writing quality of the NLEC texts.

5.5.1.4 GENERAL STATISTICAL ANALYSIS FOR REITIRATION

For a general overview of the use of lexical reiteration between the two sample groups from LOCNESS and NLEC, the overall frequency, normalised frequency and log-likelihood value of each sub-category was calculated and is presented in Table 5.12.

### TABLE 5.12: OVERALL FREQUENCY, NORMALISED FREQUENCY AND LOG-LIKELIHOOD VALUE TABLE FOR LEXICAL RETIRATION

<table>
<thead>
<tr>
<th>REITERATION</th>
<th>LOCNESS</th>
<th>NLEC</th>
<th>LOG-LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FREQUENCY</td>
<td>NORMALISED FREQUENCY</td>
<td>FREQUENCY</td>
</tr>
<tr>
<td>REPETITION</td>
<td>385</td>
<td>1925</td>
<td>829</td>
</tr>
<tr>
<td>SYNONYMS</td>
<td>116</td>
<td>580</td>
<td>108</td>
</tr>
<tr>
<td>SUPERORDINATES</td>
<td>50</td>
<td>250</td>
<td>146</td>
</tr>
<tr>
<td>TOTAL</td>
<td>551</td>
<td>2755</td>
<td>1083</td>
</tr>
</tbody>
</table>

5.5.1.5 SUMMARY OF FINDINGS ON LEXICAL RETIRATION

Based on the extracted instances and the statistical analysis in Table 5.12, it is apparent that the learners from the two corpora mainly relied on repetition for lexical reiteration in both groups at a normalised frequency of 1925 out of the total reiteration frequency of 2755 in LOCNESS and a normalised frequency of 4145 out of the total reiteration frequency of 5415 in NLEC. The high number of frequency clearly suggests the overuse of repetition by NLEC writers. The analysis of the NLEC learners’ essays revealed some Nigerian learners tend to reiterate previously introduced information more than LOCNESS learners do. Although
LOCNESS learners used ample numbers of repetition, their lexical choices showed more diversity, sophistication and less density than the NLEC learners.

Although NLEC writers show the higher frequency of repetition of the two corpora, the overall analysis in Table 5.12 also shows that repetition is the most frequent form of lexical reiteration in LOCNESS. This overreliance on repetition and relative underuse of superordinate and synonymous or near-synonymous words in both groups suggests the advanced learners’ almost similar competency in the use of lexical reiteration. It is, therefore, clear that this problem has continued to challenge learner writers in general but more critically the L2 writers of the English language as is evident in the case of NLEC writers. The sampled essays indicate the lack of diversity in repeated lexical items. In the sampled NLEC’s essays, almost all of the extracted lexical reiteration ties are repetitions of the same lexical items. These findings, coupled with the observation of the low usage of synonyms or near-synonyms and superordinate words, lead to two conclusions: (1) the learners are either unaware that they can create cohesion by using other lexical reiteration devices instead of direct repetition only; and (2) they still need to develop their vocabulary in order to present the same ideas or concepts using a suitable range of expressions successfully.

The NLEC essays clearly suffer from lack of lexical flexibility, which could improve with constant and conscious attempts at vocabulary development. Although writing is, to a great extent, dependent on knowledge of grammar and vocabulary, it is more than the sum of grammar and vocabulary knowledge that makes for good academic writing. Given that some learners have adequate knowledge of vocabulary and grammar but are inefficient in writing skillfully, it becomes a matter of exposing the learners to some basic understanding of good writing style. Teachers can also assist these learners by facilitating their understanding of possible alternative uses of acquired lexical items. This knowledge will help the learners to vary all aspects of their essays, to keep the presentation of the ideas fresh and interesting, and thus avoid monotony and enhance linguistic sophistication and cohesiveness of their writing.

The repetition could also be as a result of cultural influence from the learners’ L1. Nigeria has a rich oral storytelling culture (Dibia & Nwosu, 2014; Faseke, 1990; Omotoso, 1978).
Repetition is a prominent feature of traditional folktales and the repetition of words and rhythm are two characteristics of oral story telling in Africa. Story tellers repeat words, phrases and stanzas. The use of repetition makes the stories easy to memorise and recollect if and when necessary. The most common referential cohesive device in the Nigerian languages’ oral story telling culture is the repetition of the same nouns for clarity and emphasis. A popular Yoruba (one of the 3 major languages in Nigeria) folk tale is *The tortoise and the snake*. The story, which is originally in the Yoruba language, was translated to English and was posted on the Nairaland forum website on the 16th of April, 2006. The website is a popular Nigerian online community trying to educate Nigerians at home and in the diaspora about the Nigerian culture. The English translation of the story is extracted and presented below to show how repetition is used in storytelling.

**Extract 241**

The Tortoise and the Snake

Ijapa the tortoise went on a long walk. He walked very far and got very tired. Ijapa was very hungry too. Ijapa came to the village where Ojola, the boa snake, lived. Ijapa thought, "I am so hungry, I will stop here. Ojola will surely give me food to eat."

Ijapa went to Ojola’s house and Ojola welcomed him. They sat in the cool house and talked. Ijapa smelled food cooking in the other part of the house. Ojola said, "Come, let us get ready to eat together."

Ijapa went outside to prepare for the meal. When he came back, the food was placed in the center of the house and Ijapa smelled the aroma. But the tortoise could not reach the food. The snake was coiled all around it. Ijapa got more and more hungry.

Ojola the snake said, "Come sit with me and eat." Ijapa said, "I would be very happy to sit and eat. But Ojola, why are you surrounding the meal?"

Ojola replied, "This is the way of the snakes. When we eat, we sit around the food like this." Ojola ate and ate of the food, but Ijapa could not get it at all. Ojola finished eating at last. He said to Ijapa, "How good it is to eat with a friend."

Ijapa was even hungrier after the meal than when he came to Ojola’s house. He felt much in his heart about what happened.

Ijapa decided to invite Ojola to his house for a meal on a feast day. Ijapa’s wife prepared all the foods and Ijapa went out to weave a long tail for himself out of grass. He stuck it on with tree gum.
Ojola arrived to share the feast. The tortoise welcomed him and said, "You have come a long way and you are hungry." Ojola went to wash at a spring and when he returned to Ijapa’s house, he saw Ijapa was already eating. Ijapa had coiled his long grass tail all around the food. Ojola could not get near enough to eat. Ijapa heartily ate the food.

Around and around Ojola went. He could not get to the food. "Ijapa," the snake said, "how is it that you used to be so short and now you are so very long?"

"One person learns from another," Ijapa said.

The above folktale illustrates how repetition plays a significant role in the explicit narration of the storyline. The use of repetition helps the audience remember and clarify the major characters, settings and events. Using short phrases makes the stories easier to understand and recall from memory. When audiences who are familiar with the stories actively participate in their telling, they feel a sense of belonging to the community. Oral traditions make it possible for a society to pass knowledge across generations without writing. They help people make sense of the world and are used to teach children and adults about important aspects of their culture. It is, therefore, possible that the learners unconsciously practice this tradition of repeating the lexical items with the aim of achieving clarity, emphasis and guiding the reader through their essays. It is clear that for these learners a notable separation between oral and written modes of discourse has not yet been properly established. There is, therefore, a need for teachers of English in Nigeria to consciously attend to this problem in order to improve the learners’ writing quality.

Another possible cause of the problem could be that although textbooks and grammar books abound in examples of cohesion of other types, lexical cohesion is not dealt with in and the most widely used English language textbooks at secondary level. A textbook like the *New Oxford secondary English course for junior and secondary classes* (Banjo et al., 2015) explores in detail basic language skills, which include grammar, pronunciation spellings, reading comprehension and literature. A similar structure is found in other textbooks like the *Intensive English for junior and senior schools* (Oluikpe et al., 2000, 2002), and *Junior/Senior English project for secondary schools students’ books* (Grant et al., 2007, 2011). Even at the tertiary level, the appraisal of three Nigerian universities’ use of English course materials, to see how cohesion and coherence are taught to the advanced learners, revealed
that there is no section on lexical cohesion in any of the three texts (see Chapter 1, section 1.2.3).

Hence, it seems that this apparently minor but important issue for successful academic writing has been ignored in Nigerian English textbooks. As such, teachers as well as language learners seem to be left alone to solve the problem on their own. This surprising finding leads to the suggestion that, if learners are given conscious training on how to achieve lexical cohesion in their texts through class practice, they might reduce redundancy. The learners can be encouraged to work together in groups to list as many synonyms of given words or expressions by teachers before using the dictionary or thesaurus. Moreover, they could make a similar list in their native language and the teacher could then work on translating them into English with the learners. This practice could improve learners’ repetition of the same lexical items. As seen in the analysis, synonyms are actually more useful in writing than learners realise. Knowing the synonyms of words and how they compare in terms of formality can really help to make changes in register clear to the learners, hence improving their writing quality.

Furthermore, based on observation, the problem could partially be attributed to writing teachers generally talking about learners’ incoherent and in-cohesive pieces of writing and rarely addressing other linguistic mechanisms that make a text coherent and cohesive, as is underlined by Lee (2002). By drawing attention to the same problem and underlying the claim that something is wrong with how cohesion is viewed and achieved, Witte and Faigley (1981) underscore that cohesion can be better taught if it is better understood. They also stress the fact that adequate training is not given in most college writing classes on how to achieve cohesion and coherence in writing. Given this lack of adequate training on this issue and its benefits, the study of Majdeddin (2010) gives promising results. Based on his study of cohesive devices in students' writing tasks, Majdeddin (2010) found that overt instruction is a predictor of success in the use of cohesive ties in writing tasks, highlighting the findings that the greatest improvement was observed in the use of reference and superordinate words.
As in the case of conjunction, it seems that matters of lexical repetition need to be addressed in L2 writing instruction. To tackle the issue of overuse in lexical repetition by Nigerian learners, teachers need to work to expand students’ accessible repertoire of lexis. For example, teachers can make learners aware of the significance of lexical choice and lexical strategies. In this regard, standard native speakers’ texts can be used to identify and generate lexical sets. As Carter and McCarthy (1988) point out, one way of making notions such as synonyms and superordinates accessible to learners is to show them how such relations occur over sentence boundaries in texts. This practice, coupled with adequate and continuous feedback from teachers could lead to better linguistic finesse and cohesiveness of the Nigerian learners’ writing.

However, it is important to indicate that the redundant repetition and lack of lexical flexibility is not the case with all NLEC writers. A few essays demonstrate adequate lexical flexibility. The extract below is an example of reduced repetition by Nigerian learner writers:

Extract 242

I write in favor of the motion which says: Most university degrees are theoretical and do not prepare student for real career world. The Nigerian universities are producing graduates in different fields in sciences and social sciences every year. In fact in thousands but they lack practical experience in their fields. Sciences in particular which we are demanding them here in Nigeria such as mechanical, civil, electrical, chemical, building, mining, engineers which both of these we have them in theories but in practical they are few. Let me give examples of some engineers which you can find them doing teaching or office work which is not there field of endeavor but here in Kaduna we have them in ministries, parastatals, and some department which they are not supposed to be in that area but I take the blame on Government because of unemployment rates. We need the (practical) work of these engineers which if to say they have the technical and practical experience our nations will develop medium what we are now in Nigeria's particularly these engineers would help to develop the dilapidated roads and factories and these would create more jobs opportunities…<NLEC-351>

The above extract from NLEC is one of a few examples of good use of repetition from the sample. The repeated words as seen above are used by the writer in ways that show lexical variety and flexibility. They create semantic ties in the texts. The use of repetition is not in any way overbearing or monotonous. Repetition in the extract is used correctly and helps to
achieve cohesion in the text. The extract also demonstrates the use of other lexical device like superordinate words, for example: Nigeria is superordinate for Kaduna (a state in Nigeria) and government as the superordinate for ministries, parastatals and departments. The use of the devices contributes to the cohesion and coherence of the text.

5.5.2 ANALYSIS OF COLLOCATION

Collocation plays a crucial role in vocabulary development. It is important to learn collocations because they are important for the naturalisation of one's speech and writing. Collocations also broaden speakers’ scope for expression. Another advantage of learning and using collocations is predictability. Words do not operate as independent and interchangeable parts of the lexicon, but as part of a lexical system. It is therefore necessary for any user of English to not only to build up an active vocabulary, but also to be aware of collocation and the selection restrictions on words as they enter into collocational relationships with other words (Howarth, 1996; Nesselhauf, 2006; Wray 2002). Collocations enable second language learners to know more about language chunks used by native speakers and improve their skills in speech and writing (Hatami, 2015).

5.5.2.1 EXTRACTION OF COLLOCATION PATTERNS

Three-word recurrent trigrams with the minimum frequency of five occurrences were extracted from the data. The recurrent trigrams were extracted using Wordsmith tools 5.0 (Scott 2010). A total of 39 instances were extracted from LOCNESS and 144 from NLEC. The result lists were then filtered manually to eliminate topic-influenced trigrams using content words from the list. The manual filtration revealed that the NLEC writers repeated fragments from the topic frequently in the first and the last paragraphs of their essays (see chapter 3, section 3.6.1.5 for details on the manual filtration). After the manual filtration process, a total of 28 recurrent collocating words in LOCNESS and 49 recurring collocating words in NLEC remained. The lexical collocating items in which topic influence is ruled out are presented in Table 5.13 for LOCNESS (Appendix M) and Table 5.14 for NLEC (Appendix N) respectively.
5.5.2.2 STRUCTURAL CLASSIFICATION OF EXTRACTED COLLOCATING ITEMS

The structural classification of the extracted collocating lexical items was done using the structural taxonomy proposed by Biber et al. (1999, 2004) and the modification by Hyland (2008b). The extracted collocating phrases fall under the three major grammatical fragment categories of: noun-based, verb-based and prepositional-based. Other collocating lexical items identified are conjunction-based and clause-fragment related. The structural patterns are classified and presented in table 5.15 below:

TABLE 5.15: STRUCTURAL CLASSIFICATION OF COLLOCATION PHRASES

<table>
<thead>
<tr>
<th>STRUCTURE TYPES</th>
<th>LOCNESS</th>
<th>NLEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun phrase</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Prepositional phrase</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Verb phrase</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Verb phrase + N</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Verb phrase + Prep</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Verb phrase + To</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Modal + VP</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Anticipatory it + VP</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Pronoun + VP</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Adverbial phrase</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Adverbial phrase + clause fragment</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Adjectival phrase</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>That clause fragment</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Conjunction + NP</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Conjunction + VP</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Conjunction + Ant it</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Conjunction + To</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>28</strong></td>
<td><strong>49</strong></td>
</tr>
</tbody>
</table>
5.5.2.3 COLLOCATION

The instances of collocating words were extracted from the data sample. The extracted instances are presented in appendices K and L respectively. The overall frequency of lexical collocation in the sampled data from LOCNESS amounts to a total of 193. The frequency was then normalised to 100,000 words. The normalised frequency of lexical collocation is 965. The overall frequency of lexical collocation in data NLEC amounts to a total of 336. The frequency was then normalised to 100,000 words. The normalised frequency of repetition is 1680. The log-likelihood test for significant difference between the two groups was calculated using Rayson’s log-likelihood and effect size calculator, the result indicates a significant overuse of collocation by the NLEC group with an LL value of + 39.53. The result table is presented below:

TABLE 5.16: FREQUENCY AND LOG-LIKELIHOOD VALUE TABLE FOR COLLOCATION

<table>
<thead>
<tr>
<th></th>
<th>LOCNESS</th>
<th>NLEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>193</td>
<td>336</td>
</tr>
<tr>
<td>COLLOCATION</td>
<td>965</td>
<td>1680</td>
</tr>
<tr>
<td>LOG-LIKELIHOOD VALUE</td>
<td>+39.53*</td>
<td></td>
</tr>
</tbody>
</table>

5.5.2.4 DISCUSSION OF FINDINGS ON COLLOCATION

The result indicates a significant overuse of collocation by the NLEC group. However, the classification of the structural types of collocation phrases indicates a similar number with regards to lexical collocation in the two sample groups. A total of 12 noun-based collocations were extracted from LOCNESS and 13 from NLEC. The extracted preposition-based collocations from LOCNESS add up to nine and a total of 10 from NLEC. Extracted verb-based collocations in LOCNESS amounted to two, and four from NLEC. Hence, a similar usage of lexical collocation in both groups is evident. The extracts below are examples of lexical collocation from both corpora.
Noun P-based collocation – LOCNESS

Extract 243

When the South decided to become independent, they decided to take on a certain *way of life*. This "*way of life*" was one that was cherished by those who resided in the South. <ICLE-US-SCU-0001.2>

Noun P-based collocation - NLEC

Extract 244

The graduate face with *a lot of* problem which could hinder there performances on their chosen career <NLEC – 375>

Preposition P-based collocation - LOCNESS

Extract 245

Oreste is pursuing a quest for truth, in search of the meaning of freedom, *in order to* discover himself. <ICLE-BR-SUR-0004.1>

Preposition P-based collocation - NLEC

Extract 246

Raping is also an illegal act that is practice among youth *in the society* which is not a habit that should be accepted *in the society*, <NLEC – 094>

Verb P-based collocation - LOCNESS

Extract 247

Caligula *is unable to* distinguish between his satiety at mealtimes and the hunger of his people. <ICLE-BR-SUR-0002.1>

Verb P-based collocation - NLEC

Extract 248

They are not *supposed to be* in the same level<NLEC – 458>
The extracts above show how prefabricated chunks, used by L2 learners, can produce numerous correct collocations. The quality of the use of lexical collocation as seen above is similar in the two corpora. Thus, in terms of the quantity and the quality of lexical collocation use, NLEC learners demonstrate no difference from their L1 counterparts. This finding concurs with Nesselhauf’s (2005) findings on collocation in German learner corpus. She found that German learners of English made extensive use of collocations in her corpus research and that the difference lies in the elements (lexical groups) of collocation used by L1 and L2. Similarly, Siyanova and Schmitt, (2008) also analysed adjective–noun collocations from the ICLE sub-corpus written by Russian learners of English based on frequency and Mutual Information (MI) scores. They found that the L2 results, when compared to those from native speakers, showed very little difference based on these criteria.

The analysis indicates that the overuse emanated from the use of grammatical collocation by NLEC writers in their texts as seen in table 5.15. The use of these grammatical collocations is positive as indicated by the NLEC writers who are able to process and use these prefabricated chunks/ fixed / semi-fixed expressions correctly in their texts. This is illustrated by the examples below:

**That-clause fragment collocation**

**Extract 249**

Any nation develop the practical through analyzing and research and the research mainly is practical so through the practical the engineer become professional in his field *that is why* countries like Japan, China, Germany, South Korea…<NLEC – 351>

**Adverbial P-based collocation**

**Extract 250**

*There is no* doubt that women liberation and freedom were highly consequential on the progress of our modern world, <NLEC – 291>
Conjunction +NP collocation

Extract 251

Due to technology people know their genotype before marriage and this will enable them to marry the appropriate person<\textit{NLEC – 125}>

The extracts show the qualitative use of grammatical cohesion by NLEC writers. Thus, the overuse is not seen as negative, since the collocations are used correctly in the texts and their usage contributes to the cohesiveness of discourse and the overall quality of the texts. The observed positive use of multiword units in the NLEC group should be encouraged as their use leads to native-like fluency and improved text coherence.

5.6 SUMMARY OF FINDINGS ON LEXICAL COHESION

The quantitative analysis indicates the overuse of lexical reiteration categories of repetition and superordinate words by NLEC and a similar usage of synonyms by the two groups. The qualitative analysis shows the over-reliance of repetition by NLEC. The extensive analysis of repetition in the NLEC learners’ essays revealed that some learners reiterate previously introduced information more than LOCNESS learners do. Although LOCNESS learners used ample numbers of repetition, their lexical choices showed more diversity, sophistication and less density than the NLEC learners. The redundant repetitions as shown by the extracts make the discussion in the essays shallow and rudimentary for advanced level learners’ essays. The excessive repetition reduces the overall quality of the essay and stalls the reading of the essay. The repetitions were traced to cultural influence from the Nigerian learners’ L1. The oral storytelling culture in Nigeria make use of repetition extensively for clarity and emphasis. I believe the learners unintentionally practice this tradition of repeating the lexical items with the aim of achieving clarity, emphasis and guiding the reader through their essays. Hence, the learners need to be taught how to differentiate between oral and written modes of discourse in order to improve their writing quality.

The quantitative analysis also indicates the relatively infrequent use of synonyms as cohesive device by both the LOCNESS and NLEC groups. However, the qualitative analysis of the
few instances of synonymous words in the analysed extracts points to the need for language teachers to help learners avoid the monotonous use of same words and to add variety to their lexical choice. The use of synonyms gives the essays lexical flexibility and indicates good vocabulary development of the writers. Synonyms also help to keep the presentation of the ideas in the extracts fresh and interesting. They contribute significantly to the stylistic elegance of the essays where they are used. They also enhance the overall quality of the essays, hence their coherence.

The analysis also shows significant overuse of superordinates by the NLEC group compared to LOCNESS. The observed overuse, however, does not indicate underdevelopment on the part of the NLEC learners, instead it is a positive cohesive instrument that enhances the overall writing quality of the NLEC writers. The qualitative analysis reveals the use of the superordinate words and their class members in the essays, which exhibit anaphoric relation within the texts. The superordinate words and their class members help unify the text, thereby creating cohesive links with the preceding referents or superordinate terms and class members.

Lastly, the analysis also indicates the overuse of collocation by the NLEC group. However, the structural classification of the collocation points to a similar pattern of lexical collocation in the two sampled groups. The observed differences stem from the use of grammatical collocation by NLEC writers in their texts. The analysed extracts show the qualitative use of grammatical cohesion by NLEC writers. Hence it can be concluded that the overuse is not negative since their use contribute to the cohesiveness of discourse and enhance the overall quality of the texts.

5.7 CONCLUDING REMARKS

This chapter completes the analysis of cohesion in the study. The analysis of ellipsis, substitution and lexical cohesion was done using a data sample of 20,000 words from LOCNESS and NLEC respectively. The relevant statistics tables were presented to enhance a clearer understanding of the findings of the study. One of the research objectives is to examine how Nigerian advanced learners, who are ESL learners, achieve cohesion in written
text compared to their native speaker counterparts. This has been achieved with the analysis in both Chapter 4 and in this chapter. The study also set out to observe where the Nigerian learners show underdevelopment in their usage of cohesive devices compared to the standard norms and to point out areas where they can still develop. The findings of the analysis offer the necessary pointers to the research objectives. The similarities and differences that exist in the use of ellipsis, substitution and lexical cohesion by learners to achieve cohesion in Nigerian learners’ and their native speaker counterparts’ writings were established through the quantitative and qualitative analysis carried out in this chapter.

The analysis of ellipsis and substitution indicates that they are infrequently used by both groups in the study. Nonetheless, the few extracted instances show that their usage helps compact the surface structure without reducing the clarity of the texts where they are used. They also increase the connection between linguistic elements in texts through mutual dependency. Their use contributes to the cohesion and overall coherence of the individual texts. The analysis of lexical cohesion uncovered differences in the use of lexical reiteration and collocation. The analysis indicates the overuse of lexical categories of repetition and superordinate words by NLEC and a similar usage of synonyms by the two groups. The qualitative analysis flagged the very extensive use of repetition by NLEC writers. The reasons for the overuse were identified and discussed respectively. Some of the identified reasons refer to cultural influence from the learners’ L1, inadequate vocabulary development and inadequate teaching instruction and material attending to lexical cohesion.

The analysis of collocation also points to the overuse by NLEC writers. However, the structural classification reveals similar use of lexical collocation in the two sample groups. The overuse is due to the fact that NLEC writers used a substantial amount of grammatical collocation in their essays. The identified areas of underdevelopment on the part of the Nigerian advanced learners’ writings with regards to lexical cohesion as cohesive tools were extensively discussed and the recommendations emanating from the findings will be presented in the next chapter. Chapter 6, which is the final chapter, presents the study’s contribution, alongside the pedagogical implications.
CHAPTER 6
CONCLUSION

6.1 INTRODUCTION

This chapter discusses the findings of the study. The main findings of the study are presented with reference to the methodology used in answering the research questions and achieving the objectives, which lead to the findings. Thereafter the study’s contributions and the pedagogical implications are discussed. This is followed by the limitations of the study and suggestions for future research.

Chapter 6 is structured as follows: Section 6.1 gives the introduction to the chapter. Section 6.2 focuses on the review of the research objectives and methodology. Section 6.3 presents the discussion of the research findings. Section 6.4 presents the pedagogical implications of the research findings. Section 6.5 focuses on the various contributions of the study. Section 6.6 addresses the limitations of the study and offers suggestions for future research. Section 6.7 proffers the closing remarks of the chapter.

6.2 REVIEW OF RESEARCH OBJECTIVES AND METHODOLOGY

This study carried out a corpus-based analysis of cohesion in written English essays of Nigerian tertiary learners. The study set out to examine how cohesive devices are used by learners and how they account for cohesion and coherence of learners’ texts. The following research questions were posed in this study:

1. How do Nigerian learners, who are ESL learners, achieve cohesion in written texts?
2. How is cohesion related to coherence in the learners’ texts?
3. In what areas do learners show underdevelopment in their usage of cohesive devices compared to the standard norms?

The research questions guided the development of the research objectives. The research objectives are as follows:
To compile a 200,000 word Nigerian learner English Corpus.

To examine if and how learners achieve cohesion in their texts.

To examine the relationship between cohesion and coherence in learners’ texts.

To identify areas where learners show appropriate development and underdevelopment in their usage of cohesive devices compared to the standard norms and where they can improve.

Steps were taken to compile the corpus using the ICLE guidelines. Four hundred and sixty seven (467) essays were gathered with the total number of words amounting to 188,008. A review of existing literature was undertaken in Chapter 2 to enhance a better understanding of the field of cohesion and coherence, the teaching of writing in an ESL context and developing writing skills. This helped to develop operational definitions and to create a synthesis that enhances a deeper understanding of the underlying issues that necessitated this research. It also helped in the development of the analytical framework used in the study. The developed framework was used in the annotation of data and the data analysis.

The ENL corpus, LOCNESS, was used as the basis for comparison to determine where overuse or underuse was observed in NLEC and was guided by the statistical analysis of the various cohesive devices. A comparative analysis was then carried out using the two corpora to examine (1) how learners achieve cohesion in texts; (2) the relationship between cohesion and coherence in their texts; as well as (3) identifying areas where Nigerian learners show underdevelopment in their usage of cohesive devices compared to the standard norms. Contrastive rhetoric was used as part of the interpretation framework for the analysis to help understand the differences in the choice and usage of cohesive devices by the learners in their writing, which may not necessarily be as a result of deficiency or underdevelopment but rather due to cultural differences.
6.3 DISCUSSION OF RESEARCH FINDINGS

Following Halliday and Hasan’s (1976) framework, the five categories of cohesion were analysed in order to examine if and how learners achieve cohesion in their texts. The findings will be discussed under reference, conjunction, ellipsis, substitution, and lexical cohesion.

6.3.1 SUMMARY OF FINDINGS ON REFERENCE COHESION

Reference cohesion was analysed in the study using the three subtypes of reference cohesion, namely, personal reference, demonstrative reference, and comparative reference (Halliday & Hassan, 1976:38-39; see Chapter 4, section 4.2). The quantitative analysis showed many cases of overuse and underuse of personal referential items as cohesive devices by Nigerian learners in the study. Regarding the use of personal pronouns, the analysis revealed the overuse of 1st person personal pronouns I and plural we and us. It also indicated the underuse of 3rd person singular personal pronouns he, she, him and her in NLEC. The qualitative analysis however, showed that the cause of this overuse and underuse is as a result of the learners’ essays being a response to topics requiring them to take a point of view and argue it with the aim of persuading readers of their argued view. The overuse of 3rd person plural pronouns was also traced to the learners’ cultural background of communality, inclusiveness and solidarity. Hence, I conclude that the NLEC learners’ choice of personal pronouns does not amount to underdevelopment.

The analysis also revealed the overuse of possessive pronouns/ determiners my and our and the underuse of his, her and its. The overused possessives found are used by the NLEC learners in an attempt to convince the readers and create a context involving the writer and the intended audience. The choice of the possessives indicates inclusivity in terms of experience and the context of discourse. Based on the analysis, I deduce that this stylistic preference for the above possessives differentiates NLEC from LOCNESS. The underuse of possessives, however, is linked to the underuse of the identified personal pronouns in the corpus. This is due to the fact that possessives combined with personal pronouns for effective cohesion and coherence of discourse. On the use of demonstrative reference, no significant overuse was found, however, the Nigerian learners underused the singular and plural demonstrative determiners this and these in their texts. Quantitatively, these clarifying
determiners, although underused by the learners in the study, are correctly used to indicate reference. With regards to the use of adjunct in the two corpora, it was observed that Nigerian learners overuse *now* and underuse *then* as reference adjuncts in their texts. The adjuncts indicate reference to the time of discourse. The difference in the use of adjuncts in the two corpora is not due to underdevelopment but stylistic preference as shown by the qualitative analysis. Lastly, the use of comparative adverbs in the two corpora revealed a fairly similar usage. I observed that comparative adverbs as cohesive item is an uncommon choice by learners in the two corpora. Thus, no significant difference in the use of the analysed comparative adverbs was found.

The qualitative analyses of reference items pointed to their importance as contributory elements to the overall quality of the texts. The reference items build up as semantic properties of discourse that are formed through the interpretation of individual fragments and/or sentences, relative to the interpretation of other fragments and or sentences. Thus, they enable the overall cohesion and coherence of the learners’ texts.

6.3.2 SUMMARY OF FINDINGS ON CONJUNCTIONS

Conjunctions were extracted and analysed from the two corpora under four main categories: additive, causal, adversative and temporal (Halliday & Hassan, 1976:242-243). The quantitative analysis revealed that additive and causal conjunctions have the two highest frequency in NLEC, followed by adversative and temporal conjunctions respectively. This is evident from the normalised frequency tables presented in the analysis. The total frequency for additive conjunctions is 3838, while that of causal conjunctions amounted to 1075. This is followed by adversative conjunctions which added up to 624. The least used were temporal conjunctions which stand at a total of 328. There is also limited lexical diversity in the choice and use of conjunctions from each category.

A number of problems were observed with the use of conjunctions. Additives like *or*, *also*, *furthermore* and *for instance* were overused, while *thus* is underused by NLEC writers. NLEC learners used more simple sentences in their essays, hence the use of overt connectives, especially the additive conjunctions for linking the sentences together.
analysed extracts showed that NLEC learners used the same conjunctive items repeatedly to impose surface logicality in their essays. NLEC learners also overused some causal conjunctions, namely, *as a result, because, so* and *so as*. The observed overuse of conjunctive items may be linked to the fact that learners tend to use lexical items they feel familiar and safe with in their writing. The analysis also showed a general underuse of adversative conjunctions by NLEC learners with the total normalised frequency of 623 compared to 911 in LOCNESS. The use of temporal conjunctions is also infrequent in NLEC at the normalised frequency of 328 but the comparative analysis indicated a similar frequency of 353 in LOCNESS.

The findings on the use of conjunctive devices by Nigerian learners corroborate Granger and Tyson’s (1996) statement that even at a reasonably advanced level, connectors are difficult to master in L2 acquisition. The findings suggest that the learners’ acquisition and manipulation of connectors are restricted. I observed that for most of these learners the use of conjunctions still remains at a basic stage, which inevitably affects the overall quality of the writings. These Nigerian learners, despite being at an advanced level of learning, still exhibit significant difficulty in effectively using the full range of available conjunctive ties in English writing. Yet, as pointed out by Biber (1988) and Ben-Anath (2005), the adequate adoption of conjunctions is of great importance in the written text. Hinkel (2001) also stated that conjunctions represent the most prevalent overt means of tying portions of text together in many L2 texts. It is therefore prime importance that the Nigerian learners improve their choice and use of conjunctions in order for them to present native-like texts.

The Nigerian learners use conjunctions to indicate the argumentative logic between larger text chunks. However, their essays do not show the maximum awareness of the structuring possibilities in the use of conjunctions to create stylistic or rhetorical variation in writing. They seem unaware of the syntactic alternatives to the different class of conjunctions available for use in writing. As observed in the study, the conjunctive items adopted by them were often monotonous, thus lacking depth and variety. Although the essays display a fair level of cohesion and coherence, the better and improved use of the various cohesive devices will enhance the overall coherence of the NLEC essays.
6.3.3 SUMMARY OF FINDINGS ON ELLIPSIS AND SUBSTITUTION

The three types of ellipsis extracted and analysed are nominal ellipsis, verbal ellipsis, and clausal ellipsis (Halliday & Hassan, 1976:146). Ellipsis as a cohesive device is rarely used in the corpora. The analysis indicated that the learners are aware of the inapt use of ellipsis in formal writing, thus restricting their occurrence. However, the few observed instances are used correctly and they contribute to the cohesion and overall coherence of the individual texts. The three types of substitution that were extracted and analysed are nominal substitution, verbal substitution, and clausal substitution (Halliday & Hassan, 1976:91). Although the use of substitution is a convenient cohesive device to avoid undesired repetition, both groups did not employ substitutions much in their texts, as seen from the data extraction and analysis. The analysis revealed a slight overuse of clausal substitution NLEC. However, because the normalised frequency of both groups is extremely low, the difference does not have any significance with regards to underdevelopment in use of cohesive devices. It is apparent from the analysis that learners were able to omit or replace lexical items in order to avoid unwanted repetitions. Their ability to do this correctly, contributes to the cohesion of their texts.

The results of the analysis of ellipsis and substitution are consistent with the findings and conclusions of existing research such as Biesenbach-Lucas and Weasenforth (2001) Halliday and Hasan (1976), McCarthy (1991) and Liu and Braine (2005) that substitution and ellipsis are more characteristically found in dialogues and are seldom used in formal written discourse. Substitution and ellipsis infrequently occurred in the LOCNESS and NLEC. The infrequent or non-occurrence of these two devices in learners’ texts have also been reported in a number of other ESL studies (see Abusharkh, 2012; Kwan & Yunus, 2014; Mohammed, 2008; Mohamed-Sayidina, 2010).

6.3.4 SUMMARY OF THE FINDINGS ON LEXICAL COHESION

The two major categories of lexical cohesion extracted and analysed are reiteration and collocation. Lexical reiteration was extracted and analysed under the three categories of repetition, synonyms and superordinates (Halliday & Hassan, 1976:274-288). The quantitative analysis indicated the overuse of lexical reiteration categories of repetition and
superordinate words by NLEC, but relatively similar use of synonyms by the two groups. The qualitative analysis showed the over-reliance of repetition by NLEC. The extensive analysis of repetition in the NLEC learners’ essays revealed that some learners reiterate previously introduced information more than LOCNESS learners do. Although LOCNESS learners used ample numbers of repetition, their lexical choices showed more diversity, sophistication and less density than the NLEC learners. The redundant repetitions as shown by the extracts make the discussion in the essays shallow and rudimentary for advanced level learners’ essays. The excessive repetition reduces the overall quality of the essay and stalls the reading of the essay.

The quantitative analysis also indicated the relatively infrequent use of synonyms as cohesive device by both the LOCNESS and NLEC groups. However, the qualitative analysis of the few instances of synonymous words in the analysed extracts points to the need to help learners to avoid the monotonous use of same words and to add variety to their lexical choice. The use of synonyms gives the essays lexical flexibility and indicates good vocabulary development of the writers. Synonyms also help to keep the presentation of the ideas in the extracts fresh and interesting. Furthermore, the use of synonyms contributes significantly to the stylistic elegance of the essays where they are used in addition to enhancing the overall quality of the essays, hence their coherence.

The analysis also showed significant overuse of superordinates by the NLEC group compared to LOCNESS. The observed overuse, however, does not indicate underdevelopment on the part of the NLEC learners, instead it is a positive cohesive instrument that enhances the overall writing quality of the NLEC writers. The qualitative analysis revealed that the use of the superordinate words and their class members in the essays exhibit anaphoric relation within the texts. The superordinate words and their class members aid text unity, thereby creating cohesive links with the preceding referents or superordinate terms and class members.

Finally, the analysis also indicated the overuse of collocation by the NLEC group. However, the structural classification of the collocation pointed to a similar pattern of lexical
collocation in the two sampled groups. The observed differences stem from the use of grammatical collocation by NLEC writers in their texts. The analysed extracts showed the qualitative use of grammatical cohesion by NLEC writers. Hence, the overuse is not negative since their use contributes to the cohesiveness of discourse and the overall quality of the texts.

6.3.5 IDENTIFIED AREAS OF UNDERDEVELOPMENT

- NLEC learners overuse additive conjunctions. This might be attributed to their over-familiarity with certain additive conjunctions, hence the overuse of additives in their essays. It may also be an attempt by learners to impose surface logicality in their writing. It could also be due to the fact that the L2 learners are writing from a limited linguistic repertoire.

- NLEC learners’ essays used higher numbers of causal conjunctions compared to LOCNESS but they displayed limited variety. This results in the overuse by the Nigerian learners.

- NLEC learners generally underuse adversative conjunctions. The underuse is an indication of NLEC learners’ under-development in their knowledge and use of adversative conjunctions.

- Both groups of learners make infrequent use of temporal conjunctions. This signifies underdevelopment in the use of this group of conjunctions. The low use might be as a result of the genre of the learners’ texts. It might also be an indication that the learners are yet to master the mechanics of text connection in terms of event occurrence through temporal conjunctions.

- NLEC learners significantly overuse lexical repetition. The essays show lack of diversity in repeated lexical items. The over-reliance on repetition by the NLEC writers has the negative effect of distracting the reader and bedimming the message of their essays. The overused repetitions reduce the overall quality of the essays and stall the reading of the essays.

- Both groups of learners underuse synonyms in their texts. It seems learners are unaware that they can create cohesion by using other lexical reiteration devices instead of direct repetition only. The analyses showed that NLEC learners still need to
improve in their vocabulary development in order to be able to present the same ideas or concepts using a suitable range of expressions.

6.4 PEDAGOGICAL IMPLICATIONS

In the light of the quantitative and qualitative findings of this study, pedagogical implications are offered in this section.

To begin with, there is the need for the coordinated teaching of cohesion and coherence, starting from the secondary level to the tertiary level of education in Nigeria. Two popular Nigerian English textbooks at the secondary school levels (see Chapter 5, section 5.5.3) and three Nigerian universities’ use of English course materials (see Chapter 1, section 1.2.3) were analysed to see how cohesion and coherence are taught. This investigation revealed that there is no coordinated teaching of cohesion and coherence. I found bits and pieces of cohesive types treated under different grammar and writing sections. Cohesion and coherence need to be included in the secondary school curriculums and subsequently the school syllabus and finally in the English language textbooks at the junior and senior secondary levels. At the tertiary level, the concepts of cohesion and coherence should also be included as coordinated entities in the use of compulsory English course materials. The absence of the coordinated teaching of the two concepts and how they contribute to successful academic writing, I believe, accounts to a great extent, for the identified areas of underdevelopment observed in this study.

The two major areas where Nigeria learners displayed underdevelopment is in the use of conjunctions and lexical reiteration. Teachers need to work with learners to improve in these areas. Hubbard (1993) indicated that conjunctive cohesion regularly links the meaning of textual units as wholes. This accounts for its importance to the overall coherence of texts. The overuse of certain additive and causal conjunctions and the underuse of others observed in this study are an indication of learners’ insufficient knowledge in this area of cohesion. Such insufficient knowledge, as the analysis revealed, is likely to be problematic to readers, and negatively affect textual coherence. It was also observed that the cause-effect text connection by learners needs to be consciously developed and better enhanced in writing. With regards
to adversative and temporal conjunctions, rigorous teaching needs to be done as learners’ development in these areas seems basic and their use lacks variety. There is indeed a great deal of teaching needed to be done in the field of conjunctions. Language teachers need to raise learners’ awareness of the stylistic impact of different conjunction types and the effect it has on text coherence.

The overuse of lexical repetition and relative underuse of synonymous or near-synonymous words and the negative effects on Nigerian students’ texts have also been flagged in this study. The problem was traced to possible cultural influence from the learners’ L1. The researcher observed that for some of the learners a conscious separation between oral and written modes of discourse has not yet been properly established. There is, therefore, a need for teachers of English in Nigeria to attend to these problems in order to improve the learners’ writing quality. This knowledge will help the learners to vary all aspects of their essays and to keep the presentation of the ideas fresh and interesting, thereby avoiding monotony. This knowledge will also enhance their linguistic sophistication and cohesiveness of their writing.

English language teachers need to pay more attention to learners’ vocabulary development. Patrico (1993) stated that the common denominator between lexis and good writing is reading. However, reading is another problematic area in Nigeria. Studies of scholars have documented the poor reading culture of Nigerians (see Aina et al., 2011; Alakam, 2015; Bissala, 2016a; Leonard, 2015; Opara, 2016). Reading is an essential source of knowledge. It provides the mind with the intellectual exercise it needs to function efficiently. Educationists have established a strong correlation between reading and academic success, just as there is correlation between reading and acquisition of good communication skills, including an extensive vocabulary (Bissala, 2016b). Language teachers need to encourage and ensure a better reading culture in learners to achieve improved vocabulary development. Instructional reading and vocabulary development programmes are essential to overall cohesion and coherence of Nigerian learners’ writing.

Lastly, language teachers need to facilitate the teaching and learning of cohesion in context and not in isolation. The importance of all the cohesive devices and their contributions to the
logical development needs to be emphasised. However, teachers need to discourage learners from imposing surface cohesion through the repetitive use of conjunctions as observed in this study. Learners need to be encouraged to practice and use all the types of cohesive devices and not over-rely on the ones that they are familiar with.

6.5 CONTRIBUTIONS

One of the major contributions of this study is the compilation and development of the Nigerian learner English corpus (NLEC). At the onset of this research (June 2011), I visited the Université Catholique de Louvain’s (UCL) website which consists of a list of learner corpora around the world compiled by the Centre for English Corpus Linguistics (CECL). No available corpus from Nigeria or any West African country was found. The UCL website is a very important resource on learner corpora. Nigeria’s name appeared under countries whose corpora were still under compilation. The ICE-Nigeria project is part of the International Corpus of English project. ICE-Nigeria was being amassed, with the written component completed and the spoken component still being compiled (see Gut, 2012; Gut et al., 2009) however it was not available for public use. Due to the fact that the ICE-Nigeria was not yet available for commercial use at the inception of my study, I embarked on the process of compiling this corpus under the guidance of my supervisor. I believe that the corpus developed during this study will contribute and add to available corpora of Nigerian English usage.

The second contribution relates to the research methodology. The literature review indicates no evidence of corpus-based analysis of cohesion of student writing in Nigeria. Since this study is corpus-based, it is pioneering because it would be one of the first corpus-based studies of Nigerian advanced learners’ English. It is my hope that the results from this study will offer a more accurate analysis of Nigerian learners’ language than those presently available. This is due to the observation that the data sources of previous studies on learners’ writing are mostly sampled essays from either a class or group of learners from single educational institutions. The existing studies made use of limited samples in their analysis and it might not be adequate to use the result of analysis or form a generalised opinion of millions of learners’ writing in the country based on essays of 23 learners as seen in Wayar (2008), or 70 in Olateju (2006). Some of the results can possibly be influenced by the
teachers’ intuition since some of these scholars researched the writings of the students they teach. This study's use of corpus linguistics as a method becomes imperative because the corpus data is more objective and can easily be verified and shared by other researchers. Corpus linguistics also provides the possibility of total accountability of linguistic features i.e. the analyst is able to access and view all entry words/ linguistic features from the corpus, not just selected ones. This can serve as a resource for researchers and language teachers within and outside Nigeria (Barker, 2010; Lindquist, 2009; McEnery & Xiao, 2010; Svartvik, 1992).

The third important contribution is the complete analysis of all groups of cohesive devices in this study. Other studies regarding cohesion in Nigerian tertiary learners writing focused on one type of cohesive device, e.g. Malah (2015) focused on lexical cohesion in academic discourse using 40 research article abstracts of university students; Malgwi (2016) focused on lexical cohesion in written essays of pre-service ESL teachers from the American University of Nigeria, Yola, Nigeria; and Mohammed (2015) focused on conjunctions as cohesive devices in the writings of 20 students’ texts from Bauchi State University, Gadau, Nigeria. This study differs from the studies above, as it focused on all five the cohesive groups. The comprehensive analysis done in this study will enhance a more effective understanding of the nature of cohesion and coherence in Nigerian tertiary leaners’ writing. The study is also comparative, hence, the comparison of Nigerian learners’ cohesive devices to their native counterparts’.

Another contribution of this study is the use of Contrastive rhetoric as part of the interpretation framework for the research analyses. The review of literature showed no evidence of the application of contrastive rhetoric theory on Nigerian learners’ written texts. The theory helps to understand the differences in the choice and usage of cohesive devices by learners in their writing that might be as a result of L1 influence. The theory of contrastive rhetoric helped to appropriately interpret potential alternative composition styles and its implications should aid the future teaching of cohesion and coherence in Nigeria and other similar L2 context. According to Connor (2002:493), contrastive rhetoric examines the differences and similarities in ESL and EFL writing across languages and cultures. It considers texts as functional parts of the ever changing cultural contexts. She further stated
that contrastive rhetoric has had appreciable impact on the understanding of cultural
differences in writing and will continue to have an effect on the teaching of ESL and EFL
writing. The relevance of the theory in understanding the different rhetorical patterns
observed in NLEC writing is indispensable. Some of the differences identified in the Nigerian
learners’ texts were traced to the L1 influence, i.e., the overuse of 1st person plural pronouns
we and us and possessive pronouns our as well as the overuse of lexical repetition. The
overuse were traced to the Nigerian learners’ cultural background.

Finally, the study identified a gap in the Nigerian English texts books at the secondary and
tertiary levels concerning the lack of coordinated teaching of cohesion and coherence. The
analysis of some Nigerian English language textbooks at the secondary and tertiary levels
revealed that neither of them have any section or sub-section on ellipsis, substitution or
lexical cohesion, nor do they have reference and conjunctive cohesion discussed together as
cohesive devices. The various grammar units, however, have fragments of cohesive devices
like personal pronouns, determiners, adjectives and conjunctions taught separately, while
coherence is discussed under paragraph unity. It seems that the scholars believe that the
problem regarding cohesive writing will automatically be solved with the teaching of basic
grammar rules and writing skills. The reports of assessment regarding the quality of student
writing, even at the tertiary level of education, indicate learners’ writing still demonstrates
problems of cohesion and coherence despite the unceasing teaching of basic grammatical
rules of the English language. I hope that these findings will lead to concerted steps being
taken by the necessary authorities to rectify this problem.

6.6 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE
RESEARCH

One of the limitations of the study is that essays for the corpus were sourced from three
Nigerian tertiary institutions due to financial and logistic reasons. Given the vastness of the
country, it is therefore suggested that further gathering of essays from more tertiary
institutions at different geographical locations is carried out. This will increase available data
of Nigerian student writing for more objective and verifiable analysis by different researchers
within and outside the country.
This study focused on comparative analysis of cohesion in the learners’ writing. Various grammatical and spelling errors were observed in the learners’ essays during analysis but were ignored because that was not the research focus. It is therefore suggested that corpus-based error analysis of various grammatical aspects is carried out on the Nigerian learners’ essays to identify and eradicate the observed grammatical and spelling errors.

Another limitation of this study is in the analysis of ellipsis, substitution and lexical cohesion. Due to time constraints, the researcher used samples of only 20,000 words for the manual analysis. More extensive samples should be analysed for their use of the above-mentioned cohesive devices, in order to arrive at a more comprehensive description of the devices in Nigerian learners’ writing.

A further suggested area of research is a comparative study of learners’ performance in the use of cohesion at the different levels of tertiary institution, i.e. first, second, third and fourth levels of tertiary education. This might give more insight on how and when to tackle the identified underdevelopment in the learners’ use of cohesive devices.

The longitudinal development of cohesive devices at the various tertiary levels could also be investigated. Understanding differences between the types of cohesive devices and the quality of use over the period of their tertiary education may help to better explain the learners’ writing proficiency.

6.7 CONCLUDING REMARKS

The study set out to do a comparative analysis of the use of cohesive devices of Nigerian learners’ and their native speaker counterparts’ texts. The literature review showed limited study on cohesion in Nigerian learners’ texts and the limitations of the data used in the available studies. It was also observed that cohesion and coherence, despite their significant position in learners’ writing continues to receive little attention by teachers of English in Nigeria.
The analysis revealed significant differences in the use of particular cohesive devices in the two corpora and that the Nigerian learners show underdevelopment in their use of conjunctions and lexical reiteration. Conjunctions and lexical reiteration are the two major areas in which Nigerian learners significantly differ from their L1 counterparts. The analysis showed that the NLEC learners overuse some conjunctive elements and underuse the others. Lexical repetition is also overused by the learners as a referential cohesive device. These overused repetitions hinder the overall quality of the Nigerian learners’ essays.
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APPENDICES

APPENDIX A: GUIDELINES FOR DATA COLLECTION- NIGERIAN LEARNER ENGLISH CORPUS PROJECT

1. Briefly explain something about the research project. We are looking at the way in which English is used in Nigeria, and since the students (participants) are also users of English, we are also interested in their English. They must know that we are not targeting them, but are asking their help. They must also be assured of their anonymity.

2. The students must do three things:

2.1 Complete the biographical questionnaire.

♦ We need these data because the international project with which we want to link up, requires these.

♦ To interpret and compare data from different users of English in different settings, we need to know very well whom we are dealing with.

2.2 Sign the permission slip.

2.3 Write an essay.

♦ There are six topics, students can choose any one. They may agree with the formulation or disagree. They should be made aware that we care about their viewpoints, and do not want them to just agree with the topics as presently formulated.

3. After explaining the background to the students, help them to fill in the biographical questionnaire.

3.1 The little blocks with numbers on the right hand side of the pages are there for coding the data into a statistical program. Students need not worry about these, they can just ignore them.

3.2 Questions without blocks, which only have lines (like question 1, 11, 12, 17, 18) require students to write down information. The same applies to additional information for questions 4-10: if the relevant option is not available for a particular student, then he/she can write it down.

3.3 Questions with blocks and numbers require students to mark the appropriate number with a cross. The questions where this happens are 2-10, 13 and 16.
3.4 At questions 8-10, additional information about percentages and years are also required. Students must first make a cross in the block with the appropriate number, and then write the additional information down in the empty blocks.

3.5 At questions 14-15, only numbers are required, students must simply write down the number of years they have studied English as a subject at school and university respectively.

3.6 Question 19 requires students to write down the name of each language other than English and their first language next to the various numbers. They need not write down six languages, only as many others that they speak. It is important that they write them in decreasing order of proficiency, so please explain that to them.

4. Once the biographical information has been completed, students can start writing the essays. Please remind them again that they can choose any ONE topic, and they can agree or disagree with the viewpoint. The crucial issue is that we want them to argue a particular case.
Dear Student

You are requested to participate in a research project on English language in Nigeria. We as researchers try to gather examples of how Nigerian learners use English. In order to do so, we ask you to volunteer a bit of your time to help us. We would like you to do two things, to complete the questions in the questionnaires, and to write an essay. For your essay, you can choose any of the topics below, and write about 3 (three) pages on your chosen topic. You may argue against or in favour of the points of view.

Essay topics:

- Examinations are not true measures of students’ ability and should be abolished.
- Most university degrees are theoretical and do not prepare students for the real career world.
- Technology advancement is a curse rather than a blessing to our society.
- Gender equality has done more harm to the cause of women than good.
- The removal of oil subsidy will help improve the nation’s economy.
- Advertising: information or manipulation?

Thank you very much for your time and effort!

PLEASE COMPLETE THE FOLLOWING PERMISSION SLIP BY SIGNING IT

In order to use your essay for research purposes, we would like to ask your permission to do so. We will not divulge your name to other people, and this essay will not be taken into consideration for any of the marks that you obtain for your university courses this year. If you grant us permission to use your essay, please sign below, and write down the date.

_________________________  _______________________
I hereby give permission that my essay                               Date
may be used for research purposes.

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Biographical information of participants

1. Name and surname: ____________________________

2. Age

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3. Gender

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4. Nationality

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If other, please write down which country: ______________________

5. Your first language

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<td>Pidgin</td>
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<td>English</td>
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<td>Other</td>
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If other, please write down which language: ______________________

6. Your father’s first language

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<td>English</td>
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<td>Other</td>
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If other, please write down which language: ______________________
7. Your mother's first language

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<td>English</td>
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<td>Other</td>
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If other, please write down which language: ______________________  

(10)

8. Which of the following languages do you speak at home? Please mark yes and no in the appropriate blocks. Also try to guess the percentage of time that you speak each of these languages.

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<th>No</th>
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<td>8.3 Igbo</td>
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<td>8.4 Pidgin</td>
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<td>8.6 Other</td>
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If other, please write down which language: ______________________  

(11-38)

9. Which language(s) were used as medium of instruction at primary school? Please mark yes and no in the appropriate blocks, and write down the number of years that you had tuition in that language in the last column.

<table>
<thead>
<tr>
<th>Language</th>
<th>Yes</th>
<th>No</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1 Hausa</td>
<td>1</td>
<td>2</td>
<td></td>
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<tr>
<td>9.2 Yoruba</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9.3 Igbo</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9.4 Pidgin</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9.5 English</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9.6 Other</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

If other, please write down which language: ______________________  

(39-52)

10. Which language(s) were used as medium of instruction at secondary school? Please mark yes and no in the appropriate blocks, and write down the number of years that you had tuition in that language in the last column.

<table>
<thead>
<tr>
<th>Language</th>
<th>Yes</th>
<th>No</th>
<th>Years</th>
</tr>
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<tbody>
<tr>
<td>10.1 Hausa</td>
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<td>10.2 Yoruba</td>
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</tr>
<tr>
<td>10.3 Igbo</td>
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<td>2</td>
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<tr>
<td>10.4 Pidgin</td>
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<td>2</td>
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<tr>
<td>10.5 English</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>10.6 Other</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

If other, please write down which language: ______________________  

(53-66)
11. Current studies: ____________________________

12. Institution: ________________________________

13. Is English the medium of instruction at your institution?  
   | Yes | 1 |  
   | No  | 2 |  
   If no, please write down which language: ______________________

14. How many years did you have English as a subject at school?  

15. How many years did you have English as a subject at university?  

16. Did you ever stay in a country where most people speak English as a first language?  
   | Yes | 1 |  
   | No  | 2 |  
   If so, in which country? _____________________________

17. If so, for how many years? _____________________________

19. Apart from your first language and English, which other languages do you speak? List them in decreasing order of proficiency (write the one you speak best first, then the next one, and so forth).
   | 19.1 |  
   | 19.2 |  
   | 19.3 |  
   | 19.4 |  
   | 19.5 |  
   | 19.6 |  

(67-68)  
(69-70)  
(71)  
(72-73)  
(74)  
(75)  
(76-77)  
(78-79)  
(80-93)
APPENDIX C: EXTRACTION OF ELLIPSIS FROM LOCNESS

NOMINAL ELLIPSIS

Extract 48
The revolutionaries seem to justify their killing by the fact that, after taking the life of the Grand Duke, Kaliayev will pay with his own __ <ICLE-BR-SUR-0002.1> {the omission of the noun ‘life’ at the end of the sentence}

Extract 49
Camus argues that suicide could be contemplated as a way out of this situation, but __ passes a value judgement that human life is worth more than that. <ICLE-BR-SUR-0002.1> {the omission of the head noun ‘Camus’ or the appropriate pronoun in the second part of the sentence}

Extract 50
Clarence seeks absolutes, which in Camus' eyes are not possible or desirable for mankind, and therefore __ sees that everyone is guilty, without exception. …<ICLE-BR-SUR-0004.1> {the omission of head noun ‘Clarence’ or the appropriate pronoun in the second part of the sentence}

Extract 51
Camus felt completely misunderstood, and __ was at a time in his life... <ICLE-BR-SUR-0011.1> {the omission of head noun ‘Camus’ or the appropriate pronoun in the second part of the sentence}

Extract 52
Candide however does not seek to stay in El Dorado and __ leaves to travel back towards Europe in the company of Martin who epitomises pessimism. <ICLE-BR-SUR-0021.1> {the omission of head noun ‘Candide’ or the appropriate pronoun in the second part of the sentence}

Extract 53
De Gaulle chose the second interpretation and__quickly established... <ICLE-BR-SUR-0024.1> {the omission of head noun ‘Candide’ or the appropriate pronoun in the second part of the sentence}
Extract 54

The status of these schools is not necessarily due to the quality of the teaching they offer, but __ is based on the calibre of its students…<ICLE-BR-SUR-0018.1> {the omission of the pronoun ‘it’ in the second part of the sentence}

Extract 55

He starts off isolated in his middle-class background, he joins the Party but __ does not feel fulfilled nor does he really fit in as he doesn't like people. <ICLE-BR-SUR-0002.1> {the omission of the pronoun ‘he’ in the second part of the sentence}

Extract 56

When he first meets Louis and Olga, he takes them almost as role-models and so __ is doubly shocked that, after thinking they were ideological purists. <ICLE-BR-SUR-0002.1> {omission of the pronoun ‘he’ in the second part of the sentence}

Extract 57

He was not necessarily against Leibniz, Shaftesbury and Wolff even though he ridiculed their standardized terminology, but __ utterly opposed the perversions of this doctrine which offered the contrary. <ICLE-BR-SUR-0012.2> {the omission of the pronoun ‘he’ in the later part of the sentence}

Extract 58

… he did not recognize the essential nature of the human condition and __ was leading a life which on the outside was that of a 'do…<ICLE-BR-SUR-0004.1> {the omission of the pronoun ‘he’ in the later part of the sentence}

Extract 59

She is uncertain that their goals are the same and __ is concerned at the 'silence', which is perhaps linked to the 'bruit terrible' when Kaliayev is hanged. <ICLE-BR-SUR-0002.1> {the omission of the pronoun ‘she’ in the second part of the sentence}
VERBAL ELLIPSIS

Extract 60

Oreste feels abandoned by Jupiter though in fact it is he who has rejected Jupiter's authority and also ____ by Electre, who, unable to accept the responsibility of her role of accomplice in the murder of her mother. <ICLE-BR-SUR-0001.1> {omission of the lexical verb ‘abandoned’ in the later part of the sentence}
APPENDIX D: EXTRACTION OF ELLIPSIS FROM NLEC

NOMINAL ELLIPSIS

Extract 61

But is this thing really true? In most cases it is not, but the advertise and the publicity for it, makes us think it is__<NLEC-032> {the omission of the noun ‘true’ at the end of the sentence}

Extract 62

Apart from the computer crimes, ATM machines has also been manipulated by criminals and __ has resulted to many citizens losing their money. <NLEC-004> {the omission of the pronoun ‘it’ in the second part of the sentence}

Extract 63

Telecommunication can be called the major force in the advancement of technology and __ has transformed the globe. <NLEC-060> {the omission of the pronoun ‘it’ in the second part of the sentence}

Extract 64

Without technology the likes of Obafimi Awolowo, Chinua Chebe, Ajayi other and the host of others were able to achieve their dreams and __ wrote their names on the wall of history <NLEC-060> {the omission of the pronoun ‘they’ in the later part of the sentence}

Extract 65

The university degrees are theoretical and ___ do not prepare students for the real career world. <NLEC- 191> {the omission of the pronoun ‘they’ in the second part of the sentence}
APPENDIX E: EXTRACTION OF SUBSTITUTION FROM LOCNESS

NOMINAL SUBSTITUTION

Extract 72

Such perversions turned this philosophy of hope into one of despair. <ICLE-BR-SUR-0012.2> {‘one’ is used to substitute for the noun ‘philosophy’ earlier mentioned in the sentence}

Extract 73

The right to refuse life-support is an individual one, and one that should be considered by each and every individual. <ICLE-US-MQR-0029.1> {‘one’ in the two instances are used to substitute for the noun phrase ‘right’ earlier mentioned in the sentence}

Extract 74

I would not feel the same about a terminal illness or a fatal injury, one in which there was no hope or one in which I could not communicate with anyone. <ICLE-US-MQR-0029.1> {‘one’ in the two instances are used to substitute for the noun phrase ‘illness or injury’ earlier mentioned in the sentence}

VERBAL SUBSTITUTION

Extract 75

They do not take part in hypocrisy as the patricians do. <ICLE-BR-SUR-0011.1> {‘do’ is used to substitute for the verb ‘take part’ and the other elements in the clause earlier stated in the sentence}

Extract 76

France was … and could thus come to such biased conclusions as Montesquieu did. <ICLE-BR-SUR-0014.2> {‘do’ is used to substitute the verb ‘come’ plus the other elements in the clause earlier stated in the sentence}

Extract 77

Children have more time and use their time to watch television more than adults do. <ICLE-US-SCU-0010.2> {‘do’ is used to substitute the verb ‘watch’ plus the other elements in the clause earlier stated in the sentence}
APPENDIX F: EXTRACTION OF SUBSTITUTION FROM NLEC

NOMINAL SUBSTITUTION

Extract 78

The youth of olden days cannot be compared with the ones of this days. <NLEC-091> {‘one’ is used to substitute for the noun ‘youth’ earlier mentioned in the sentence}

CLAUSAL SUBSTITUTION

Extract 79

For example we tend to buy expensive things, just because we think more money equals better quality. But is this thing really true? In most cases it is not. <NLEC-032> {‘not’ indicates the negative form of the statement (fact) presented earlier, it acts as the clausal substitute presupposing the negative of the clause presented before it}

Extract 80

You have to be tested whether you know what you are doing or not. <NLEC-219> {‘not’ indicates the negative form of the statement (fact) presented earlier, it acts as the negative of the clausal substitute presupposing the entire clause ‘whether you know what you are doing’ presented before it}

Extract 81

Lecturers race through the syllabus regardless of whether students understand or not. <NLEC-241> {‘not’ indicates the negative form of the statement (fact) presented earlier, it acts as the negative form of the clausal substitute presupposing the entire clause ‘whether students understand’ presented earlier in the sentence}

Extract 82

In this global and digital age, one must be a computer literate, in other words anyone that is not computer literate is not qualified for job opportunities which is not supposed to be so. <NLEC-042> {‘so’ is used as a substitute which presupposes the whole of the clause ‘….one must be computer literate to qualify for job opportunities}

Extract 83

How to practice and speak the language so that it can become part and parcel of them which is not supposed to be so. <NLEC-062> {‘so’ is used as a clausal substitute which presupposes the whole of the clause ‘how to practice and speak the language’ earlier stated in the sentence as a fact}
Extract 84

Parents struggling to feed their children now find it more difficult to do so. <NLEC-081> {‘so’ is used as a substitute to presupposes the whole of the clause ‘parent struggling to feed their children’}

Extract 85

That is why I said the more this means of technology is a blessing, it’s the same way it a curse to our society. Because people have made it to be so. <NLEC-100> {‘so’ is used as a substitute to presupposes the whole of the clause ‘….the means technology is a blessing and in the same way a curse’}

Extract 86

Advanced learner’s dictionary define examination as a formal test of knowledge and ability… but computer base test is not so. <NLEC-221> {‘so’ is used as a substitute to presupposes the whole of the clause ‘examination as a formal test of knowledge and ability’}

Extract 87

In these process of investment the investor will still motivate other investor in other countries to invest in Nigeria just because of that subsidy removed and the high cost of their product will allow them to do so. <NLEC-410> {‘so’ is used as a substitute to presupposes the whole of the clause ‘investors from other countries to invest in Nigeria’}

Extract 88

They just shoulder with their spouse, at times, some women have to share the house chores with their spouse which is not supposed to be so. <NLEC-458> {‘so’ is used as a substitute to presupposes the whole of the clause ‘….some women have to share house chores with their spouse’}

302
<p>| Extract 101 | True/ truth, tragedy/ tragic/ tragically, hostile/hostility, tyrant/ tyranny, religion/religious, innocent/ innocence, guilt/guilty, revolt/ revolution, sympathy/ sympathize, die/ dead/ death, kill/ killed, marry/ married/ marriage, life, party | &lt;1CLE-BR-SUR-0001.1&gt; |
| Extract 102 | Revolt/ revolution/ revolutionaries, die/ death, justifies/ justified/ justifiable/ justification, allusion/ alluded, absurd/ absurdity, character/ characteristics, murder/ murdering, fail/ failure, life, bomb, killings, party, ideas | &lt;1CLE-BR-SUR-0002.1&gt; |
| Extract 103 | Guilt/ guilty, exist/ existence/ existentialist, one/ oneness, innocent/ innocently/ innocence, judge/ judging/ judgement/ judgmental, man/ mankind, meaning/meaningless/ meaninglessness, determine/ determinism/ determining/ predetermined, responsible/ responsibility, condemn/ condemnation, achieve/ achieving, attribute/ attributable, ambiguous/ ambiguity, criticize/ criticism | &lt;1CLE-BR-SUR-0004.1&gt; |
| Extract 104 | Britain/ British, Europe, market/ markets, currency, country, sovereignty | &lt;1CLE-BR-SUR-0007.3&gt; |
| Extract 105 | Fear/ afraid, free/ freedom, die/ dead/ death, human/ humanistic, revolt/ revolution/ revolutionary | &lt;1CLE-BR-SUR-0011.1&gt; |
| Extract 106 | Optimism/ optimistic, philosophy/ philosophical | &lt;1CLE-BR-SUR-0012.2&gt; |
| Extract 107 | Supreme/ supremacy, legislative/ legislation, laws, parliament, sovereignty, community | &lt;1CLE-BR-SUR-0015.3&gt; |
| Extract 108 | Educate/ education, university/ universities, graduates, career, higher education | &lt;1CLE-BR-SUR-0018.1&gt; |
| Extract 109 | philosophy/ philosophical, repulsed/ repulsive, explain/ explanation, Optimism, pessimism, suffering, human, dogmatic | &lt;1CLE-BR-SUR-0021.2&gt; |
| Extract 110 | President/ presidency/ presidentialism, constitution/ constitutional, successful/ successor, executive, power/ powers, political, parliament, sick/ sickness, party | &lt;1CLE-BR-SUR-0024.1&gt; |</p>
<table>
<thead>
<tr>
<th>Extract</th>
<th>Text</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>Extract 111</td>
<td>South/southern, flag, heritage, history, hate/hatred</td>
<td>&lt;ICLE-US-SCU-0001.2&gt;</td>
</tr>
<tr>
<td>Extract 113</td>
<td>Teenage/teenagers, sex/sexual/sexually, media, overrated</td>
<td>&lt;ICLE-US-SCU-0009.2&gt;</td>
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<tr>
<td>Extract 114</td>
<td>Read/reading, teach/teachers, libraries/librarians text, books, education, schools, freedom, speech</td>
<td>&lt;ICLE-US-SCU-0015.4&gt;</td>
</tr>
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<td>Extract 115</td>
<td>Advances/advancements, life/lives, death, physicians</td>
<td>&lt;ICLE-US-MQR-0029.1&gt;</td>
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<td>Extract</td>
<td>WORDS</td>
<td>SOURCE</td>
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<tr>
<td>Extract 116</td>
<td>Technology/ technologies, advancement, opportunities</td>
<td>&lt;NLEC-004&gt;</td>
</tr>
<tr>
<td>Extract 117</td>
<td>Technology/ technologically, advanced/ advancement, television, computer, improve/ improving, people, life</td>
<td>&lt;NLEC-012&gt;</td>
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<td>Extract 118</td>
<td>Communicate/ communication, technology, impact, human, people</td>
<td>&lt;NLEC-021&gt;</td>
</tr>
<tr>
<td>Extract 119</td>
<td>Advert/ advertise/ advertisement, manipulate/ manipulated manipulation, good/ goods, company/ companies, services, products, information</td>
<td>&lt;NLEC-032&gt;</td>
</tr>
<tr>
<td>Extract 120</td>
<td>Technology/ technology, advancement, people, society, curse</td>
<td>&lt;NLEC-042&gt;</td>
</tr>
<tr>
<td>Extract 121</td>
<td>Technology, advance/ advanced/ advancement, internet, machine</td>
<td>&lt;NLEC-045&gt;</td>
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<td>Extract 122</td>
<td>Exams/ examination/ examinations, test/ tests, students, semester, ability/ capability</td>
<td>&lt;NLEC-051&gt;</td>
</tr>
<tr>
<td>Extract 123</td>
<td>Technology/ technological, education/ educationally, telecommunication/ telecommunications, globe/ globally, advancement, internet, people, fraud</td>
<td>&lt;NLEC-060&gt;</td>
</tr>
<tr>
<td>Extract 124</td>
<td>University, student, graduate, lecturer/ lecturing, theoretical, career, future</td>
<td>&lt;NLEC-062&gt;</td>
</tr>
<tr>
<td>Extract 125</td>
<td>Exams/ examination, students, read/ reading, measure, lecturers, teachers, results</td>
<td>&lt;NLEC-067&gt;</td>
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<td>Extract 126</td>
<td>Subsidy, remove/ removal, improve/ improvement, fuel, nation, economy, government</td>
<td>&lt;NLEC-081&gt;</td>
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<td>Extract 127</td>
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<td>&lt;NLEC-091&gt;</td>
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<td>Extract 128</td>
<td>Technology, advancement, people, society</td>
<td>&lt;NLEC-094&gt;</td>
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<td>Extract 129</td>
<td>Technology, advancement, communication, transactions, internet</td>
<td>&lt;NLEC-100&gt;</td>
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<td>Extract 130</td>
<td>Technology, advancement, industry/industries, society</td>
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<td>Extract 131</td>
<td>Fuel, removal, individual, economy</td>
<td>&lt;NLEC-144&gt;</td>
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<td>Extract 132</td>
<td>Theory/theoretical, career, students, practical</td>
<td>&lt;NLEC-155&gt;</td>
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<td>Extract 133</td>
<td>Fuel, removal, government, subsidy, nation, economy</td>
<td>&lt;NLEC-159&gt;</td>
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<td>Extract 134</td>
<td>Equal/equality, woman/women, children, family</td>
<td>&lt;NLEC-175&gt;</td>
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<td>Extract 135</td>
<td>Fuel, removal/removing, subsidy/subsidies, government, nation</td>
<td>&lt;NLEC-177&gt;</td>
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<td>Extract 136</td>
<td>Fuel, removal/removing, subsidy, nation</td>
<td>&lt;NLEC-209&gt;</td>
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<td>Extract 137</td>
<td>Fuel, removal/removing, subsidy, nation, economy, transport/transportation</td>
<td>&lt;NLEC-212&gt;</td>
</tr>
<tr>
<td>Extract 138</td>
<td>examinations, knowledge, student</td>
<td>&lt;NLEC-219&gt;</td>
</tr>
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<td>Extract 139</td>
<td>Exam/examination, question</td>
<td>&lt;NLEC-221&gt;</td>
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<tr>
<td>Extract 140</td>
<td>University/Universities, teach/teaching, exams</td>
<td>&lt;NLEC-249&gt;</td>
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<td>Extract 141</td>
<td>Technology, advancement, society</td>
<td>&lt;NLEC-257&gt;</td>
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<tr>
<td>Extract 142</td>
<td>Exam, examination/examinations, student, ability, interview/interviewer/interviewed/interviewee</td>
<td>&lt;NLEC-282&gt;</td>
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<td>Extract 143</td>
<td>Fuel, remove/removal, subsidy, people, government</td>
<td>&lt;NLEC-289&gt;</td>
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<td>Extract 144</td>
<td>Female/feminine/feminist/feminism, women, men, child/children, important/importance</td>
<td>&lt;NLEC-291&gt;</td>
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<tr>
<td>Extract 145</td>
<td>Advertising/advertisement/advertised, Public/publicize, product/products</td>
<td>&lt;NLEC-311&gt;</td>
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<td>Extract 146</td>
<td>Fuel, remove/removal, subsidy, people, government, economy</td>
<td>&lt;NLEC-321&gt;</td>
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<td>Extract 147</td>
<td>Technology/technological, advancement, government/governance</td>
<td>&lt;NLEC-331&gt;</td>
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<td>Extract 148</td>
<td>Engineers/engineering, Professionals/professionalism, teach/teacher/teaching, practice/practical, nation, theory/theories/theoretical</td>
<td>&lt;NLEC-351&gt;</td>
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<td>Education/ educationist, country/ countries, university, government, system, corruption, graduates/ graduating</td>
<td>&lt;NLEC-375&gt;</td>
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<td>Extract 150</td>
<td>Educate / education / educational, exams / examination/ examine, fail / failure, pass/ passing, certificate, student</td>
<td>&lt;NLEC-391&gt;</td>
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<tr>
<td>Extract 151</td>
<td>Examination/ exams, pass, test, ability, students</td>
<td>&lt;NLEC-401&gt;</td>
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<tr>
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<td>Examination/ examined/ exams, graduate/ graduate, employed/ employment, students, ability</td>
<td>&lt;NLEC-407&gt;</td>
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<td>Extract 153</td>
<td>Fuel, remove/ removal, subsidy, nation, government, economy, product, investor/ investment</td>
<td>&lt;NLEC-410&gt;</td>
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<td>Extract 154</td>
<td>subsidy, remove/ removal, fuel, nation, government, money, supplier/ suppling</td>
<td>&lt;NLEC-411&gt;</td>
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<td>Extract 155</td>
<td>Economy/ economic, removal, fuel, subsidy, nation, resources, produce/ productivity, country/ countries, processes/ processing, agriculture/ agricultural/ agriculturist</td>
<td>&lt;NLEC-412&gt;</td>
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<td>Extract 156</td>
<td>Student, teacher/ teaching, examination/ examine</td>
<td>&lt;NLEC-427&gt;</td>
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<td>Extract 157</td>
<td>Technology/ technologically, advanced/ advancement, communication, information</td>
<td>&lt;NLEC-435&gt;</td>
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<td>Extract 158</td>
<td>Advertise / advertising / advertisement, communicate / communication, produces/ products</td>
<td>&lt;NLEC-451&gt;</td>
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<td>Extract 159</td>
<td>Gender, equality, man/ men, woman/ women</td>
<td>&lt;NLEC-458&gt;</td>
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<tr>
<td>Extract 160</td>
<td>University, students, theory/ theoretical, practical, experience</td>
<td>&lt;NLEC-468&gt;</td>
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APPENDIX I: TABLE 5.6: EXTRACTION TABLE FOR SYNONYMS FROM LOCNESS

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<tr>
<td>Extract 164</td>
<td>Murder &amp; kill, absurdity&amp; ridiculous &amp; pointless, save &amp; salvation, attain &amp; achieve, assassinating &amp; killing &amp; murdering, peasants &amp; poor</td>
<td>&lt;ICLE-BR-SUR-0002.1&gt;</td>
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<tr>
<td>Extract 165</td>
<td>Liberty &amp; freedom &amp; independence, reflects &amp; shows, futility &amp; absurdity, previous &amp; former, massacre &amp; killing, futile &amp;meaningless</td>
<td>&lt;ICLE-BR-SUR-0004.1&gt;</td>
</tr>
<tr>
<td>Extract 166</td>
<td>Obvious &amp; apparent, purchase &amp; buy, sovereignty &amp; power</td>
<td>&lt;ICLE-BR-SUR-0007.3&gt;</td>
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<tr>
<td>Extract 167</td>
<td>Artificial &amp; false, Actions &amp; deeds, Liberty &amp; freedom, Death &amp; mortality, Revolt &amp; protest</td>
<td>&lt;ICLE-BR-SUR-0011.1&gt;</td>
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<tr>
<td>Extract 168</td>
<td>Misery &amp; despair &amp; suffering, opposed &amp;hostile to</td>
<td>&lt;ICLE-BR-SUR-0012.2&gt;</td>
</tr>
<tr>
<td>Extract 169</td>
<td>Independence &amp; freedom, legislation &amp; laws</td>
<td>&lt;ICLE-BR-SUR-0015.3&gt;</td>
</tr>
<tr>
<td>Extract 170</td>
<td>Network &amp; system, career &amp; job</td>
<td>&lt;ICLE-BR-SUR-0018.1&gt;</td>
</tr>
<tr>
<td>Extract 171</td>
<td>Repulsed &amp; repugnant, rejected &amp; rebutted</td>
<td>&lt;ICLE-BR-SUR-0021.2&gt;</td>
</tr>
<tr>
<td>Extract 172</td>
<td>President &amp; Head of State, Republic &amp; country &amp; nation, Established &amp; create, amendment &amp; changes, influence &amp; power &amp; authority</td>
<td>&lt;ICLE-BR-SUR-0024.1&gt;</td>
</tr>
<tr>
<td>Extract 173</td>
<td>Symbol &amp; sign &amp; represent</td>
<td>&lt;ICLE-US-SCU-0001.2&gt;</td>
</tr>
<tr>
<td>Extract 174</td>
<td>Wet &amp; soak</td>
<td>&lt;ICLE-US-SCU-0009.2&gt;</td>
</tr>
<tr>
<td>Extract 175</td>
<td>Studying &amp; reading, ban &amp; prohibited, stop &amp;</td>
<td>&lt;ICLE-US-SCU-0015.4&gt;</td>
</tr>
<tr>
<td>restrain, danger &amp; threat</td>
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<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Extract 176</strong></td>
<td>Decision &amp; choice, terminal &amp; fatal, cost &amp; price</td>
<td>&lt;ICLE-US-MQR-0029.1&gt;</td>
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</tbody>
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## APPENDIX J: TABLE 5.7: EXTRACTION TABLE FOR SYNONYMS FROM NLEC

<table>
<thead>
<tr>
<th>Extract</th>
<th>WORDS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extract 177</td>
<td>Emergence &amp; development &amp; advancement, fraudulent &amp; illicit, salient &amp; important</td>
<td>&lt;NLEC-004&gt;</td>
</tr>
<tr>
<td>Extract 178</td>
<td>Development &amp; advancement, advanced &amp; improved</td>
<td>&lt;NLEC-012&gt;</td>
</tr>
<tr>
<td>Extract 179</td>
<td>Education &amp; teaching, discuss &amp; chat</td>
<td>&lt;NLEC-021&gt;</td>
</tr>
<tr>
<td>Extract 180</td>
<td>Benefit &amp; gain &amp; profit, advertising &amp; publicity</td>
<td>&lt;NLEC-032&gt;</td>
</tr>
<tr>
<td>Extract 181</td>
<td>Examination &amp; test</td>
<td>&lt;NLEC-051&gt;</td>
</tr>
<tr>
<td>Extract 182</td>
<td>Eradicated &amp; abolished, neglect &amp; overlook</td>
<td>&lt;NLEC-067&gt;</td>
</tr>
<tr>
<td>Extract 183</td>
<td>Price &amp; cost, amenities &amp; facilities, money &amp; funds</td>
<td>&lt;NLEC-081&gt;</td>
</tr>
<tr>
<td>Extract 184</td>
<td>Information &amp; message, trained &amp; educated</td>
<td>&lt;NLEC-091&gt;</td>
</tr>
<tr>
<td>Extract 185</td>
<td>Damage &amp; harm</td>
<td>&lt;NLEC-094&gt;</td>
</tr>
<tr>
<td>Extract 186</td>
<td>Development &amp; advancement</td>
<td>&lt;NLEC-100&gt;</td>
</tr>
<tr>
<td>Extract 187</td>
<td>Destroy &amp; harm</td>
<td>&lt;NLEC-125&gt;</td>
</tr>
<tr>
<td>Extract 188</td>
<td>Rate &amp; amount</td>
<td>&lt;NLEC-144&gt;</td>
</tr>
<tr>
<td>Extract 189</td>
<td>Career &amp; job, Improve &amp; develop</td>
<td>&lt;NLEC-155&gt;</td>
</tr>
<tr>
<td>Extract 190</td>
<td>Amount &amp; sum</td>
<td>&lt;NLEC-212&gt;</td>
</tr>
<tr>
<td>Extract 191</td>
<td>Examination &amp; test</td>
<td>&lt;NLEC-219&gt;</td>
</tr>
<tr>
<td>Extract 192</td>
<td>Inspection &amp; examination</td>
<td>&lt;NLEC-221&gt;</td>
</tr>
<tr>
<td>Extract 193</td>
<td>Cost &amp; price</td>
<td>&lt;NLEC-289&gt;</td>
</tr>
<tr>
<td>Extract 194</td>
<td>Children &amp; kid, Liberation &amp; freedom, important &amp; necessary</td>
<td>&lt;NLEC-291&gt;</td>
</tr>
<tr>
<td>Extract 195</td>
<td>Publicize &amp; advertise, awareness &amp; knowledge &amp; information</td>
<td>&lt;NLEC-311&gt;</td>
</tr>
<tr>
<td>Extract 196</td>
<td>Country &amp; nation, Consumer &amp; buyer</td>
<td>&lt;NLEC-321&gt;</td>
</tr>
<tr>
<td>Extract 197</td>
<td>Advancement &amp; development</td>
<td>&lt;NLEC-331&gt;</td>
</tr>
<tr>
<td>Extract 198</td>
<td>Knowledge &amp; information, (government) ministries &amp; parastatals &amp; departments</td>
<td>&lt;NLEC-351&gt;</td>
</tr>
<tr>
<td>Extract 199</td>
<td>Growth &amp; development, facilities &amp; equipment, recruited &amp; employed</td>
<td>&lt;NLEC-375&gt;</td>
</tr>
<tr>
<td>Extract 200</td>
<td>Examination &amp; test, Methods &amp; techniques</td>
<td>&lt;NLEC-391&gt;</td>
</tr>
<tr>
<td>Extract 201</td>
<td>Score &amp; marks, examination &amp; test</td>
<td>&lt;NLEC-401&gt;</td>
</tr>
<tr>
<td>Extract 202</td>
<td>Anxiety &amp; tension</td>
<td>&lt;NLEC-407&gt;</td>
</tr>
<tr>
<td>Extract 203</td>
<td>Advancement &amp; improvement &amp; development</td>
<td>&lt;NLEC-411&gt;</td>
</tr>
<tr>
<td>Extract 204</td>
<td>Test &amp; examine, capability &amp; ability</td>
<td>&lt;NLEC-427&gt;</td>
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<tr>
<td>Extract 205</td>
<td>Access &amp; get</td>
<td>&lt;NLEC-435&gt;</td>
</tr>
<tr>
<td>Extract 206</td>
<td>Informing &amp; enlighten</td>
<td>&lt;NLEC-451&gt;</td>
</tr>
<tr>
<td>Extract 207</td>
<td>Spouse &amp; husband</td>
<td>&lt;NLEC-458&gt;</td>
</tr>
<tr>
<td>Extract 208</td>
<td>Knowledge &amp; experience</td>
<td>&lt;NLEC-468&gt;</td>
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### APPENDIX K: TABLE 5.9: EXTRACTION TABLE FOR SUPERORDINATES FROM LOCNESS

<table>
<thead>
<tr>
<th>Extract 211</th>
<th>WORDS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crimes- killings, murder</td>
<td>1CLE-BR-SUR-0002.1&gt;</td>
<td></td>
</tr>
<tr>
<td>Extract 212</td>
<td>Religion- Christianity</td>
<td>&lt;ICLE-BR-SUR-0004.1&gt;</td>
</tr>
<tr>
<td>Extract 213</td>
<td>Continent- Europe, Britain Currency- pound / pence</td>
<td>&lt;ICLE-BR-SUR-0007.3&gt;</td>
</tr>
<tr>
<td>Extract 214</td>
<td>Europe- United Kingdom United kingdom- England, Scotland, Wales, North Ireland</td>
<td>&lt;ICLE-BR-SUR-0015.3&gt;</td>
</tr>
<tr>
<td>Extract 215</td>
<td>Qualifications-degrees, diplomas. Schools- university</td>
<td>&lt;ICLE-BR-SUR-0018.1&gt;</td>
</tr>
<tr>
<td>Extract 216</td>
<td>Government- President, Prime Minister, National Assembly. Country- France, America, Algeria, Germany, China, Canada</td>
<td>&lt;ICLE-BR-SUR-0024.1&gt;</td>
</tr>
<tr>
<td>Extract 217</td>
<td>Media- television, radio, magazines. Body-head, hair</td>
<td>&lt;ICLE-US-SCU-0009.2&gt;</td>
</tr>
<tr>
<td>Extract 218</td>
<td>Technologies- computer, mobile phones, space satellites, ATM</td>
<td>&lt;NLEC-004&gt;</td>
</tr>
<tr>
<td>Extract 219</td>
<td>Electronic gadgets- mobile phones, television, computer</td>
<td>&lt;NLEC-012&gt;</td>
</tr>
<tr>
<td>Extract 221</td>
<td>Technology- cars, computer, satellites, GSM, ATM</td>
<td>&lt;NLEC-042&gt;</td>
</tr>
<tr>
<td>Extract 222</td>
<td>Technology- telephones, internet, ATM</td>
<td>&lt;NLEC-045&gt;</td>
</tr>
<tr>
<td>Extract 223</td>
<td>School- university</td>
<td>&lt;NLEC-055&gt;</td>
</tr>
<tr>
<td>Extract 224</td>
<td>Technology- internet, phones</td>
<td>&lt;NLEC-60&gt;</td>
</tr>
<tr>
<td>Extract 225</td>
<td>Technology- mobile phone</td>
<td>&lt;NLEC-091&gt;</td>
</tr>
<tr>
<td>Extract 226</td>
<td>Social vices- killing, robbery, stealing, prostitution, raping</td>
<td>&lt;NLEC-094&gt;</td>
</tr>
<tr>
<td>Extract 227</td>
<td>Technology- laptop, internet, mobile phones</td>
<td>&lt;NLEC-100&gt;</td>
</tr>
<tr>
<td>Extract 228</td>
<td>Social vices- robbery, theft, prostitution, pornography. Social Amenities- electricity, education, pipe borne water,</td>
<td>&lt;NLEC-125&gt;</td>
</tr>
<tr>
<td>Extract</td>
<td>Content</td>
<td>Reference</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Extract 229</td>
<td>Fuel- petrol</td>
<td>&lt;NLEC-144&gt;</td>
</tr>
<tr>
<td></td>
<td>School- university</td>
<td>&lt;NLEC-155&gt;</td>
</tr>
<tr>
<td>Extract 230</td>
<td>Gender- male, female, men, women. School- primary, tertiary institution.</td>
<td>&lt;NLEC-175&gt;</td>
</tr>
<tr>
<td>Extract 231</td>
<td>Fuel- petrol, diesel, kerosene</td>
<td>&lt;NLEC-177&gt;</td>
</tr>
<tr>
<td>Extract 232</td>
<td>Technology- computer</td>
<td>&lt;NLEC-257&gt;</td>
</tr>
<tr>
<td>Extract 233</td>
<td>Gender- male, female, men, women</td>
<td>&lt;NLEC-291&gt;</td>
</tr>
<tr>
<td>Extract 234</td>
<td>Social networks- Facebook, Blackberry chat, 2go</td>
<td>&lt;NLEC-331&gt;</td>
</tr>
<tr>
<td>Extract 235</td>
<td>Building materials- cement, sand, blocks, paint. School- secondary, university. Country- Japan, China, Germany, South Korea</td>
<td>&lt;NLEC-351&gt;</td>
</tr>
<tr>
<td>Extract 236</td>
<td>Technology- computer, calculator</td>
<td>&lt;NLEC-407&gt;</td>
</tr>
<tr>
<td>Extract 237</td>
<td>Infrastructure- schools, roads, bridges. School- primary, secondary, university. Nation- Nigeria, China</td>
<td>&lt;NLEC-410&gt;</td>
</tr>
<tr>
<td>Extract 238</td>
<td>Technologies- computers, mobile phones, televisions, satellite, air conditions. Automobiles- cars, bus</td>
<td>&lt;NLEC-435&gt;</td>
</tr>
<tr>
<td>Extract 239</td>
<td>Gender- men, women. Spouse- husband, wife</td>
<td>&lt;NLEC-458&gt;</td>
</tr>
<tr>
<td>Extract 240</td>
<td>School- university polytechnic,</td>
<td>&lt;NLEC-468&gt;</td>
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### APPENDIX M: TABLE 5.13: EXTRACTION TABLE FOR COLLOCATION FROM LOCNESS

<table>
<thead>
<tr>
<th>COLLOCATIONS</th>
<th>FREQUENCY</th>
<th>NORMALIZED FREQUENCY</th>
<th>NO. OF TEXTS</th>
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<tbody>
<tr>
<td>at the end</td>
<td>17</td>
<td>85</td>
<td>4</td>
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<tr>
<td>in order to</td>
<td>13</td>
<td>65</td>
<td>4</td>
</tr>
<tr>
<td>the end of</td>
<td>12</td>
<td>60</td>
<td>4</td>
</tr>
<tr>
<td>the fact that</td>
<td>12</td>
<td>60</td>
<td>4</td>
</tr>
<tr>
<td>end of the</td>
<td>11</td>
<td>55</td>
<td>6</td>
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<tr>
<td>that he is</td>
<td>8</td>
<td>46</td>
<td>4</td>
</tr>
<tr>
<td>it is not</td>
<td>7</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td>way of life</td>
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<td>35</td>
<td>1</td>
</tr>
<tr>
<td>fact that he</td>
<td>6</td>
<td>30</td>
<td>3</td>
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<td>nature of the</td>
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<td>30</td>
<td>3</td>
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<tr>
<td>of the world</td>
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<td>30</td>
<td>3</td>
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<tr>
<td>On the other</td>
<td>6</td>
<td>30</td>
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<tr>
<td>To accept the</td>
<td>6</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>To the party</td>
<td>6</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>According to the</td>
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<td>For his own</td>
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<td>He has no</td>
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</tr>
<tr>
<td>He is not</td>
<td>5</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Is unable to</td>
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<td>25</td>
<td>3</td>
</tr>
<tr>
<td>It is a</td>
<td>5</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Of the party</td>
<td>5</td>
<td>25</td>
<td>3</td>
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<tr>
<td>Seems to be</td>
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<td>25</td>
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<tr>
<td>The absurdity of</td>
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<td>3</td>
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<td>25</td>
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</tr>
<tr>
<td>The human condition</td>
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<td>The power to</td>
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<td></td>
<td></td>
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<tr>
<td>There is no</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>To be the</td>
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### APPENDIX N: TABLE 5.14: EXTRACTION TABLE FOR COLLOCATION FROM NLEC

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<th>COLLOCATION</th>
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<th>NO OF TEXTS</th>
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<tbody>
<tr>
<td>A lot of</td>
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<tr>
<td>And should be</td>
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<td>80</td>
<td>10</td>
</tr>
<tr>
<td>In order to</td>
<td>16</td>
<td>80</td>
<td>9</td>
</tr>
<tr>
<td>In the sense</td>
<td>13</td>
<td>65</td>
<td>8</td>
</tr>
<tr>
<td>The sense that Noun Phrase</td>
<td>13</td>
<td>65</td>
<td>8</td>
</tr>
<tr>
<td>Will help improve</td>
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<td>10</td>
</tr>
<tr>
<td>In the world</td>
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<td>50</td>
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</tr>
<tr>
<td>They are not</td>
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<td>6</td>
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<td>The cause of</td>
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<td>35</td>
<td>5</td>
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<td>There is no</td>
<td>7</td>
<td>35</td>
<td>4</td>
</tr>
<tr>
<td>To be in</td>
<td>7</td>
<td>35</td>
<td>4</td>
</tr>
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<td>A means of</td>
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<td>4</td>
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<tr>
<td>As a means</td>
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<tr>
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<tr>
<td>At the end</td>
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<td>5</td>
</tr>
<tr>
<td>Be able to</td>
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<td>30</td>
<td>4</td>
</tr>
<tr>
<td>In the country</td>
<td>6</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>In the society</td>
<td>6</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>That is the</td>
<td>6</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>The end of</td>
<td>6</td>
<td>30</td>
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<tr>
<td>The issue of</td>
<td>6</td>
<td>30</td>
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</tr>
<tr>
<td>Which is not</td>
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<td>30</td>
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</tr>
<tr>
<td>Will like to</td>
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<td>30</td>
<td>5</td>
</tr>
<tr>
<td>-------------------</td>
<td>---</td>
<td>-----</td>
<td>---</td>
</tr>
<tr>
<td>You want to</td>
<td>6</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>And this will</td>
<td>5</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Because it is</td>
<td>5</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>Because they are</td>
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<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Do not have</td>
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<td>25</td>
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</tr>
<tr>
<td>End of the</td>
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<td>25</td>
<td>4</td>
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<tr>
<td>If it is</td>
<td>5</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>if there is con</td>
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<td>25</td>
<td>4</td>
</tr>
<tr>
<td>In our society</td>
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<td>In the nation</td>
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<tr>
<td>Nation at large</td>
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<td>5</td>
</tr>
<tr>
<td>Should not be</td>
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<td>25</td>
<td>5</td>
</tr>
<tr>
<td>So as to</td>
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<td>25</td>
<td>5</td>
</tr>
<tr>
<td>Suppose to be</td>
<td>5</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Supposed to be</td>
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<td>25</td>
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</tr>
<tr>
<td>That is why</td>
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<td>25</td>
<td>4</td>
</tr>
<tr>
<td>The application of</td>
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<td>25</td>
<td>5</td>
</tr>
<tr>
<td>The use of</td>
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