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THE STRUCTURE OF THE NOUN PHRASE IN THE NARRATIVE WRITING OF STUDENTS OF GHANAIAN COLLEGES OF EDUCATION

BY

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Thesis submitted to the Department of English of the Faculty of Arts, College of Humanities and Legal Studies, University of Cape Coast, in partial fulfillment for the requirements for the award of Master of Philosophy degree in English Language

FEBRUARY 2022

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature ………………………. Date……………………….

Name: Clara Ofosua Frempong

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature……………… Date……………………….

Name: Prof. Kwabena Sarfo Sarfo-Kantankah

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ABSTRACT

While the past few decades have witnessed a proliferation of studies on students' writing, texts written by students of colleges of education remain largely underexplored. The purpose of this study was to investigate the use of noun phrases (NPs) in texts written by students in colleges of education (CoEs) in Ghana. A total of 318 texts produced by Levels 100, 200 and 300 students from three colleges of education in Ghana were selected and analysed based on Krashen's acquisition theory, Monitor Model Theory (1982), Kinneavy's discourse theory (1971) and Quirk, Greenbaum, Leech, and Svartvik's (1985) analytical framework on NPs. The study found that both simple and complex noun phrases were utilised by students. Findings from the investigation indicated that even though Level 300 students used few complex noun phrases compared to Levels 100 and 200 students, the Level 300 students were more syntactically complex. The results from the one-way ANOVA and its post hoc analysis showed a significant difference between Levels 100 and 300 students as well as between Levels 200 and 300 students in their use of complex noun phrases. Overall, Level 300 students significantly used more complex NPs than students in the other levels. It is recommended that other syntactic complexity analyser tools on the same topic such as Biber Tagger (1999), Coh-Metrix (2014) other than Lu (2011) L2SCA could be employed to assess complexity in future studies to confirm or refute findings of this study. Additionally, I recommend that in further studies, lexico-grammatical features such as relative clauses, prepositional phrases, and nominal clauses, should be analysed to assess complexity since academic language is a multifaceted entity which may be researched in various fields like SLA, Applies Linguistics and Language Testing.

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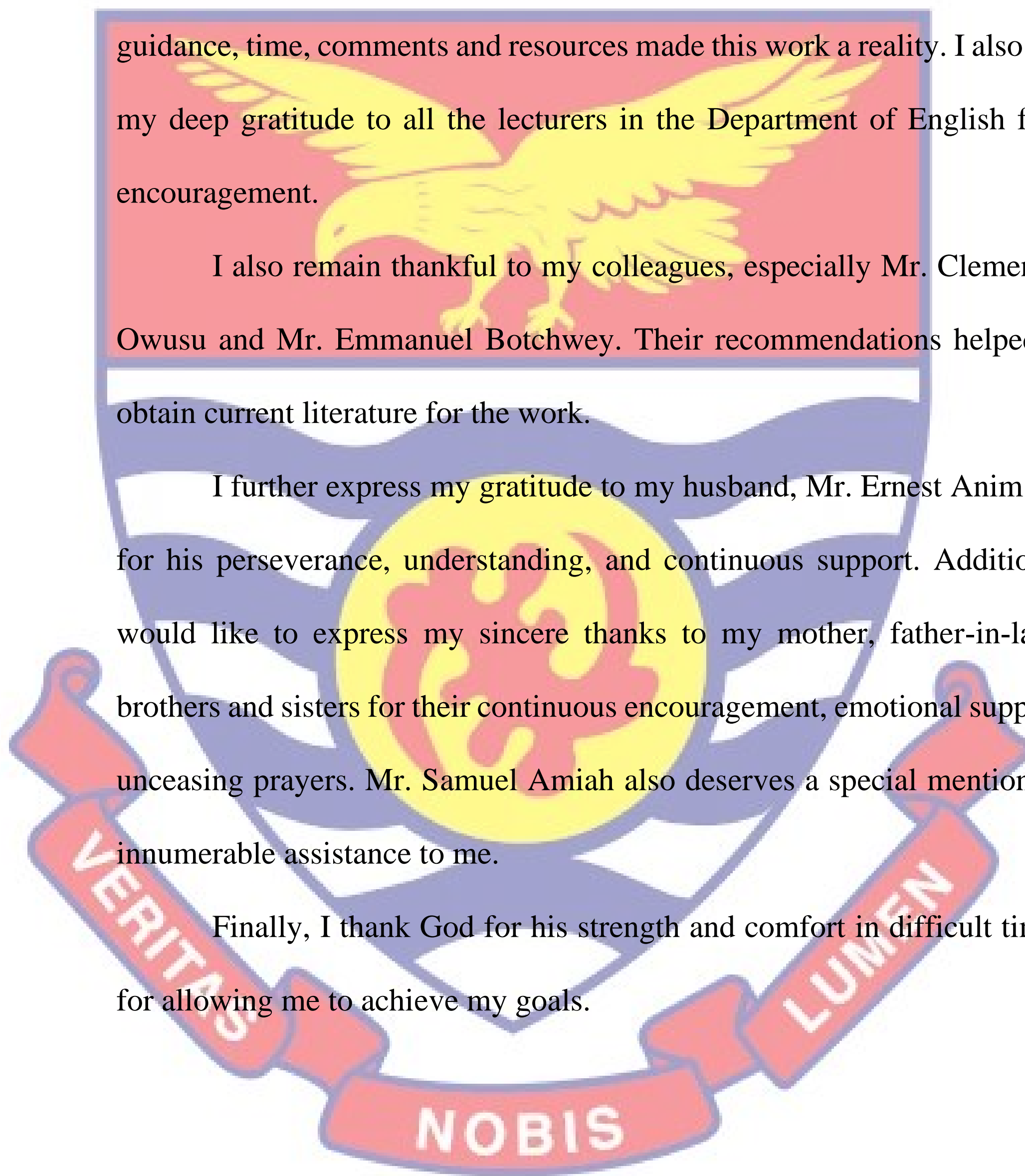

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DEDICATION

To my lovely family

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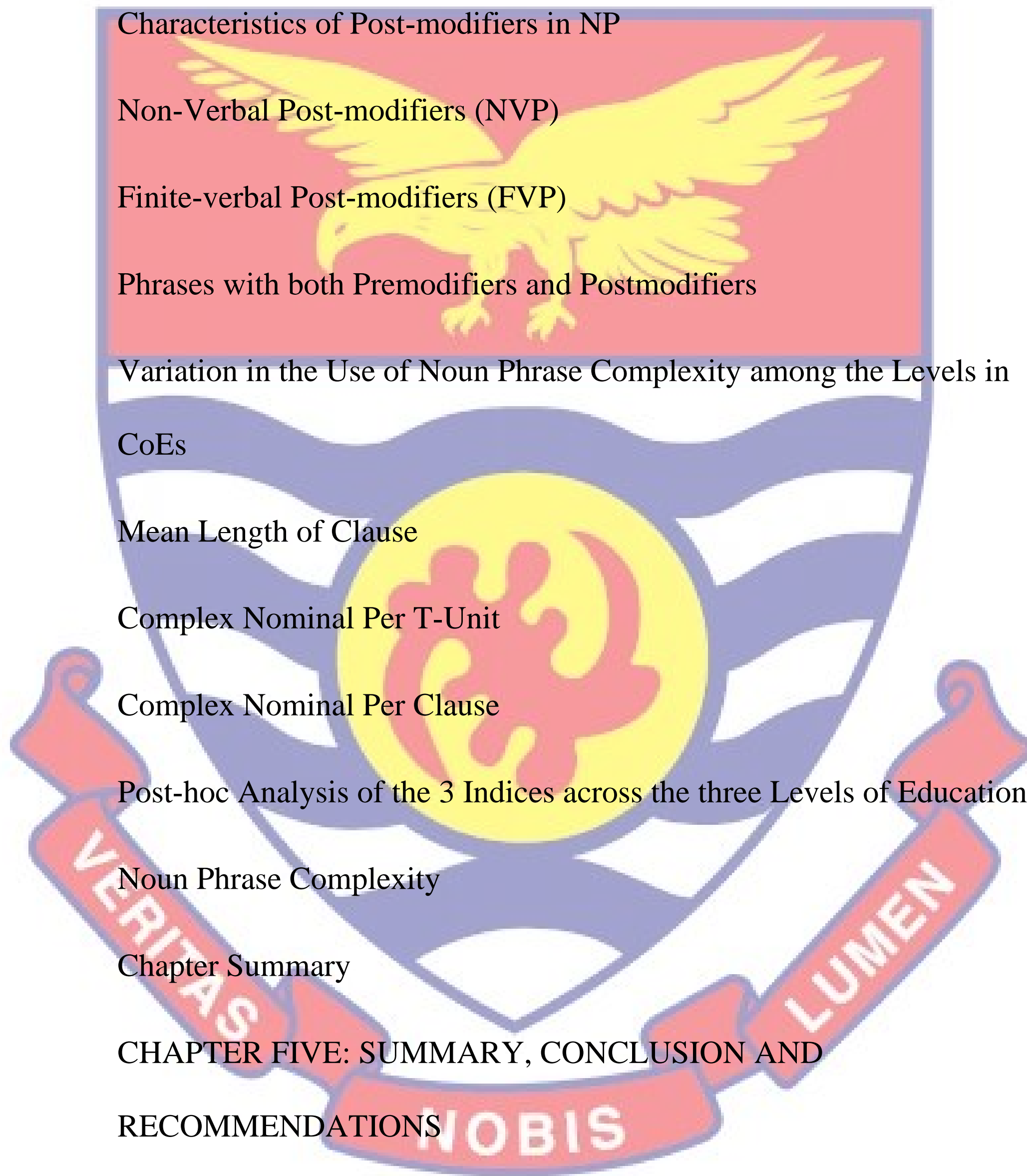

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LIST OF ACRONYMS

AdjP	Adjective Phrase
AdvP	Adverb Phrase
ANOVA	Analysis of Variance
ASHBA	Ashanti and Brong Ahafo Zone
ATRACOE	Accra College of Education
BNC	British National Corpus
CENTWEST	Central and West Region Zone
COCAE	Corpus of Contemporary American English
CoEs	Colleges of Education
CNPs	Complex Noun Phrases
CN/C	Complex Nominal per Clause
CN/T	Complex Nominal per T-Units
EAGAR	Eastern and Greater Accra Zone
EFL	English as a Foreign Language
ESL	English as a Second Language
FVPs	Finite Verbal Postmodifiers
GCAO	General Conditions for Account Opening
ICT	Information and Communications Technology
IMRD	Introduction, Methods, Results, Discussions
L2	Second Language
L2SCA	L2 Syntactic Complexity Analyzer
MA	Master of Arts
MLC	Mean Length of Clause
MICUSP	Michigan Corpus of Upper- Level Students Papers

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NFVPs	non-finite verbal postmodifiers and
NGs	Noun Groups
NRZ	Northern Region Zone
NP	Noun Phrase
NPs in App	Noun Phrases in Apposition
NVPs	Non-verbal Postmodifiers
PCE	Presbyterian College of Education
PWCE	Presbyterian Women College of Education
R P A	Reflexive Pronouns in Apposition
RME	Religious and Moral Education
SLA	Second Language Acquisition
TESOL	Teaching English to Speakers of Other Languages
UCC	University of Cape Coast
VRZ	Volta Region Zone

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CHAPTER ONE

INTRODUCTION

Introduction

This chapter provides general background information, with the aim of introducing the study. Specifically, this chapter provides the background to the study, statement of the problem, objectives of the study, research questions, significance of the study, scope of the study, and organisation of the study.

Background to the Study

The development of students' literacy skills is crucial for their future functioning in the world (Matthiessen, 2015; World Bank, 2018) especially, the writing skill. Students' writing skills is essential for their participation in the academic discourse community. The acquisition of writing proficiency is a vital element of students' success at advanced academic levels, such as universities and colleges, where specialised linguistic knowledge (which is shaped by situational variables such as discipline, genre, and level) is imperative to achieving proficiency (Gardner, Nesi & Biber, 2018; Hyland, 2002; Krashen, 1982; Zhu, 2004). Ortega (2003) and Wolfe-Quintero, Inagaki and Kim (1998) believe that writers advance in their use of language if they are able to produce fluently accurate and increasingly complex language.

As second language learners acquire and use grammatical structures in production, L2 writers demonstrate their acquisition powers of language and intellect that develop their independence in decisions about writing. This has led to several studies on language use to demonstrate L2 learners' progress and use of academic language. In recent times, studies on grammatical complexity have received substantial attention in various fields such as Applied Linguistics,

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Applied Linguistics, Second Language Acquisition, English for Specific Purposes, Second Language Writing, and Language Testing (Bulté & Housen, 2012). While some studies conducted on L2 learners' writings have found underdevelopment of grammatical elements (Agor, 2018; Bamigbola, 2015; Liu & Li, 2016), others have found L2 learners' writings grammatically complex (Elliott, 2019; Liu &Li, 2016; Obeng, 2012).

However, in the area of Second Language Acquisition, the applied linguistics area most concerned with grammatical complexity (Pallotti, 2015), there had been considerable concentration on grammatical complexity. This construct is usually characterized as the degree range, variety and diversity of grammatical structures employed in language production and the level or amount of sophistication, elaboration or depth of these structures (Bulte & Housen, 2014; Lu & Ai, 2015; Ortega 2003; Wolfe-Quintero et al., 1998).

Therefore, it is believed that, L2 learners should know the structures most appropriately used in production (speaking and writing) as well as the importance and purposes of their usage since they need to produce them in order to engage and succeed in the academic communities. So, the underlying assumption for both first language (L1) and second language (L2) speakers and writers lies in the pairing of complexity and language development is that higher proficiency speakers/writers in relevance to L2 or more advanced speakers/writers in relation to the case of L1 use more complex language and produce more complex texts.

So far, several studies have shown that the more learners' English proficiency develops, the more they tend to rely not only on economical and concise but complex feature at the phrasal level. And grammatical complexity

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has amassed a great deal of attention in writing development research because it is viewed as "an index of language development and progress" (Bulte & Housen, 2014, p. 43; Crossley & McNamara, 2014; Ortega, 2003). Writing quality is also one of the indices that differentiates students of different proficiency and syntactic complexity is one of the components used in determining language development (Wang & Slater, 2016).

However, Larsen-Freeman (1997) believes that the learning of linguistic items is not a linear process as learners "do not master one item and then move on to another" (p. 151). And that complexity values appear to increase as learners progress through developmental sequences between-subject and within-subject variation in frequently reported by researchers (Vyatkina, 2012). The assumption of easy transfer and acquisition of complexity in L1 to L2 is discarded by some researchers in the field of SLA, which has been the applied linguistics area most concerned with grammatical complexity (Pallotti, 2015).

There is, therefore, evidence in studies conducted by Biber, Gray and Poonpon (2011) and Lu (2011) that complexity is increasingly constructed in the noun phrase (NP) as writers develop along an academic path. Many scholars such as Biber et al. (2011) and Norris and Ortega (2009) in Applied Linguistics have recently argued that grammatical complexity has basically been analysed by clausal features (e.g., subordinate clauses), and it is necessary to look at grammatical complexity at both the clausal and phrasal levels (Biber et al., 2011; Norris & Ortega, 2009). Based on these, there were recommendations for more research in areas of syntactic complexity of the NP in students' writing (Biber et al., 2011; Lu, 2011). Knowledge about the use of the NP, particularly

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the complex NP, is important for student writers as they work to acquire the language features of academic writing.

Furthermore, the NP is one of the common linguistic features in the English language. Among the essential features that distinguish the academic register from others is the frequent use of the complex NP, which consists of a head noun as well as premodifiers and postmodifiers (Biber & Gray, 2010; De Haan, 1989). In line with this, Vannestal (2004) has asserted that the NP is a stylistically sensitive linguistic structure that allows great complexity when one is expressing the NP in context. The stylistic nature of the NP is of great interest when a text analysis focuses on the complexity of NPs. The structure of the English NP has been experiencing dramatic historical change over the past three centuries, resulting in an increase in the use of NPs in some academic disciplines (Biber & Conrad, 2009).

Over the past few decades, the syntax of the NP has attracted the attention of many scholars (e.g., Biber et al. 2011; Liu & Li, 2016; Lu, 2011). Studies of the NP from a semantic perspective follow the functionalist approach to language usage, which argues that the meaning of a grammatical structure largely depends on the context of use (Bates & MacWhinney, 1979; Halliday & Matthiessen, 2004). The NP serves a communicative function in written texts, as it is used to describe entities. Semantically, NPs are regarded as those aspects of our experience that we retain as entities. These aspects of our experience reflect the realities of human experience including mental, emotional, spiritual and physical characteristics of human life. According to Downing and Locke (2006), the term "entity" not only refers to people, objects, places, institutions, and other "collectives", but also refers to actions, abstractions, qualities, and

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behaviours. Naming an entity involves adding information about it to indicate how we conceptualize it.

Downing and Locke (2006) indicated that NPs have been studied in terms of their structure, types, functions, and their use in texts. For instance, Biber, Johansson, Leech, Conrad, and Finegan (1999) have noted the important role of NPs in language. In support of this, Vannestal (2004) further explains that NPs specify who and what the text is about. Vannestal, therefore, concludes that the NP is a stylistic linguistic structure because it allows great complexity, plays an important role when expressing oneself, and is of great interest when analysing a text.

Elliott (2019) has stated that it is imperative for student writers of the English language to know how to use complex NPs. To add to this, Biber et al. (2011) have posited that the ability to use complex NPs by L2 learners follows a process: high frequency of premodification (semantic complexity) to postmodification (syntactic complexity) (Liu &Li, 2016; Obeng, 2012; Wang & Beckett, 2017). In support of this assertion, Biber et al. (2011) have explained that student writers move from conversation-like clausal elaboration to the use of complex NPs. Hence, students' writing is supposed to have more NP-related structures as their literacy improves (Liu & Li, 2016). Thus, NP complexity can be deemed to be an indicator of advanced literacy (Elliot, 2019; Liu & Li, 2016). And the criteria used in measuring the complexity of NPs have also been found to distinguish students of different proficiency levels.

Therefore, as the colleges of education in Ghana have acquired tertiary status, there is the need to study their language use especially in writing. Most importantly since studies on L2 learners' writings are moving to phrases and

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grammatical complexity (Biber et al., 2011; Lu, 2011; Norris & Ortega, 2009). Apparently, students are expected to acquire and use academic language in writing any academic discourses. These aspects of academic writing should not be ignored in CoEs. It is also necessary to study the language development of students in CoEs through the use of NPs in narrative texts. Consequently, the measurement of complex NPs will uncover the grammatical complexity of students at CoEs in Ghana as well as variations in the use of complex NPs among the levels. Again, the comparison among students at different levels will either attest or refute Krashen's (1982) and Halliday's (Halliday, 1994; Halliday & Matthiessen, 2004) assertion that if an account in a text seems complex, it is because the grammatical structure is complex and this complexity is progressive. Hence, the quality and complexity of a text is as a result of the writer giving a complex content using complex grammatical structures.

Statement of the Problem

The features of academic prose are not acquired naturally (Biber et al., 2011). Efficient and increased use of clauses, phrases, and the various word forms makes writing quality. Over the years, the study of the grammatical knowledge in students' writings, with particular attention to the NP has become an interesting arena of linguistics. Studies on NPs have been done among native and non-native speakers (e.g., Afful, 2015; Biber et al., 1999; Obeng, 2012; Sharndama, 2015). Most studies have focused on the NP in professional genres (Afful, 2015; Sharndama, 2015), expert writing (Adebileje, 2016; Hutter, 2015; Liu & Li, 2016) and students' writing (Elliot, 2019; Liu & Li, 2016; Obeng, 2012; Wang & Beckett, 2017). These scholars studied the NPs at various levels, including the pre-modification level (Afful, 2015; Hussein, 2011), post-

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modification level (Liu & Lu, 2016; Sharndama, 2015), or both (Elliott, 2019; Wang & Beckett, 2017). Some of these studies examined the types of NP structures in students' writing to determine gender (Obeng, 2012) and disciplinary variations (Elliott, 2019; Liu & Li, 2016; Suarez, 2013; Wang & Beckett, 2017).

In Ghana, studies on students' writing have largely been on the general performance of students, grammatical structures or errors in students' writing (e.g., Gborsong et al., 2015; Agor, 2018; Owu-Ewie & William, 2017; Salakpi, 2020; Tabiri, 2019; Tabiri et al., 2019). Thus, most of these studies on students' writing have focused on students' grammatical errors to determine students' linguistic knowledge and progress. However, the grammatical structures which constitute the main essays, which are the key elements in essays, have not been thoroughly examined. Moreover, it appears that not much has been done on the level of complexity and variation of the NP usage. A linguistic study of CoEs students' narrative writing to understand how students' language varies by level is also essential in writing development (Kinneavy, 1971).

Interestingly, subordinate-based measures cannot adequately capture the development of syntactic complexity of noun phrases expected in advanced student writing (Biber, Gray & Poonpon, 2011). Hence, a call for more research in the area of noun phrases (Lu, 2011). The nature of this study varies from the rest of studies on noun phrases in the field of SLA, as I utilised the noun phrases (NPs) as a grammatical resource to determine the quality and complexity of students' writing and how students vary in their use of the complex noun phrase. The use of the grammatical structures in context has been noted to be problematic to students. Whereas students' identification of these grammatical structures is

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effective when these grammatical structures are isolated from context, it is equally important for students to master their usage in context. Because of the challenges involved in acquiring these skills, it is essential to understand the grammatical structures that characterise CoEs students' writing.

Objectives of the Study

This study adds to literature on the nature of NPs, types of complex NPs, and NP forms used by students in CoEs in Ghana in their writing.

The study was guided by the following objectives:

1. To identify the features of the NP structures predominantly frequent in the writings of students in CoEs in Ghana.
2. To examine the variation in the use of the complex NP structures among Levels 100,200 and 300 students in CoEs in Ghana.

Research Questions

The following are the research questions that the study sought to answer:

1. Which features of the NP structural types are predominantly frequent in the writings of students in CoEs in Ghana?
2. What is the variation in the use of complex NP structures among Levels 100, 200, and 300 students in the CoEs in Ghana?

Significance of the Study

The study is significant in the following ways:

1. The study adds to the existing literature of investigations into grammatical features of advanced ESL/EFL writing progress at the CoEs.
2. The findings are supposed to support existing literature on the level of complexity of the writings of non-native/ L2 writers (Biber et al., 2011;

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Elliott, 2019; Liu & Li, 2016; Obeng, 2012) and to further confirm that complexity is an indicator of proficiency and an index of language development and progress (Biber et al., 2011; Krashen, 1982).

3. The study will contribute to the scholarship on specific grammatical features, which are the NP structural types, mostly used by students in Ghanaian CoEs to present information to their readers and listeners. Also, it will indicate the linguistic variation by showing how the academic levels influences the use of complex noun phrase in writing.
4. The findings will pave way for other genre types like narrative to be added to existing literature on syntactic complexity apart from argumentative genre (Blair & Crump, 1984; Beers & Nagy, 2009).
5. The research findings will make information available for English language pedagogy and curriculum development. Thus, the findings of the study will serve as a useful resource for the development of curriculum for CoEs in Ghana.

Scope of the Study

For a study of this kind, it is critical to set boundaries to ensure a manageable scope. The study is limited to written texts, particularly narrative written texts written by students of the selected CoEs: Presbyterian College of Education, Presbyterian Women's College of Education, and Accra College of Education. The choice of narrative writing is based on three reasons. First, Traugott and Pratt (1980) definition of narration as "essentially a way of linguistically representing past experience whether real or imagined" (Traugott & Pratt, 1980, p. 248). Also, for effective exploration of both informational and fictional content to allow a representation of all features of the noun phrase, the

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narrative text unlike the other types: argumentative, expository or descriptive texts, is the choice for this study since the style and logic of the mode is not the focus but the informative aspect of the narrative writing (Biber & Conrad, 2009; Kinneavy, 1971).

Second, narrative text allows the syntactic information acquired by writers to be studied. Hence, since the study situated within the field of SLA (Krashen, 1982; Palloti, 2015), it is concerned with second language learners' acquisition and use of grammatical structures. Specifically, the study draws upon the conceptualization of language acquisition theory (Krashen, 1982). Thus, narrative text could be used to study the type of language acquired and used by L2 learners (Kinneavy, 1971). Third, given that learning and acquisition of linguistic items is not a linear process and that complexity values appear to increase as learners' progresses through developmental sequences between – subject and within – subject variation (Larsen-Freeman, 1997; Vyatkina, 2012), research on students writing literacy with increase in NP structures and variations in the use of complex NPs has been the focus of most studies (Biber et al., 2011; Elliott, 2019; Liu & Li, 2016; Norris & Ortega, 2009; Obeng, 2012).

NPs in texts come in two distinct dimensions: structural and semantic (Halliday & Matthiessen, 2004). The study focuses on the structural types of NPs present in the narrative writing of these students and to also examine the variation in the use of complex NP structures among Levels 100, 200, and 300 students of the selected CoEs. The scope of the study covers CoEs in Ghana because there has been an underdeveloped gap in the literature on studies of language use among student-teachers in Ghana.

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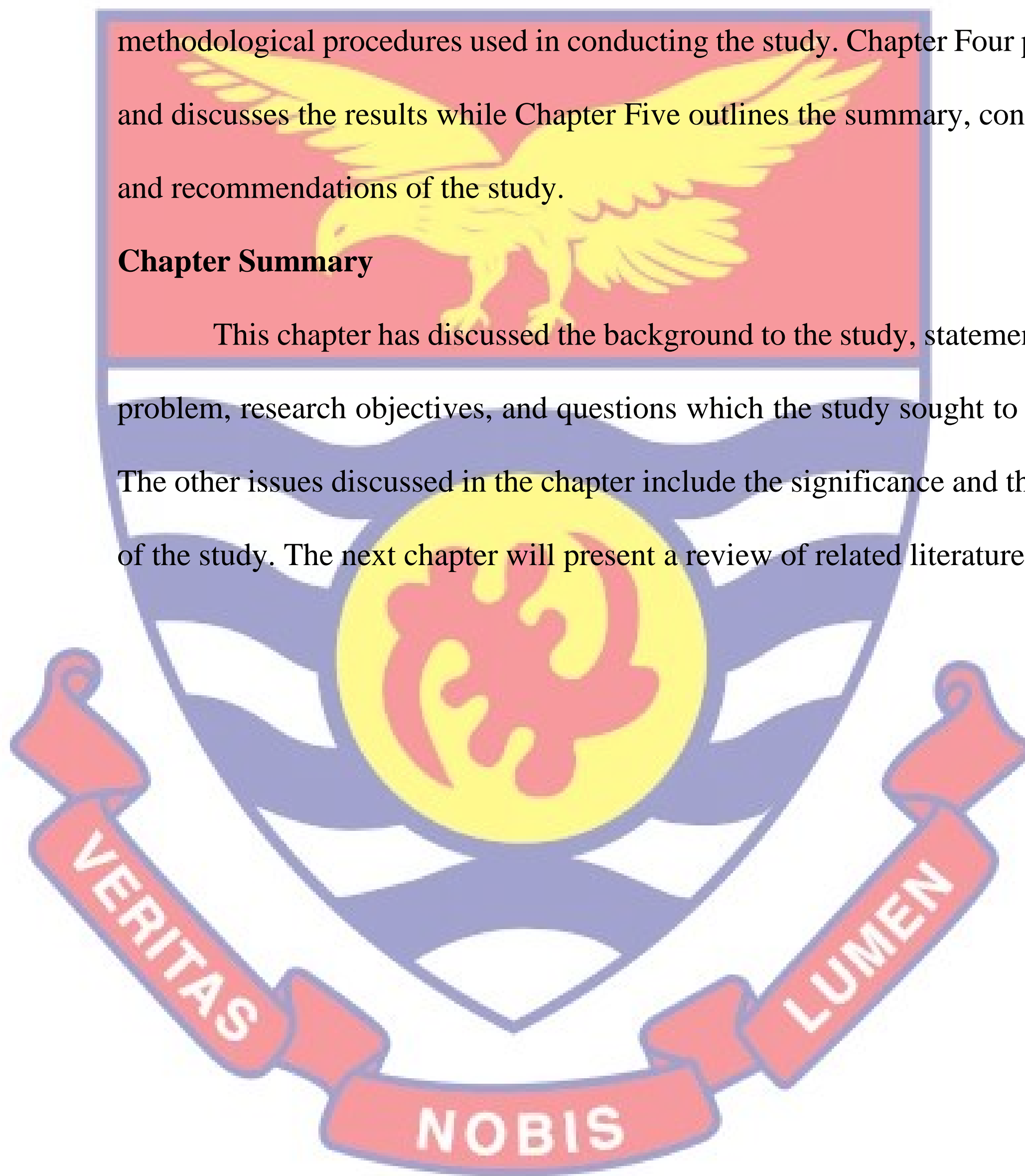
Organisation of the Study

The thesis has been organised into five chapters. Chapter One consists of the background to the study, statement of the study, objectives, research questions, significance of the study, scope of the study, and organisation of the study. Chapter Two reviews related literature. Chapter Three presents the methodological procedures used in conducting the study. Chapter Four presents and discusses the results while Chapter Five outlines the summary, conclusion, and recommendations of the study.

Chapter Summary

This chapter has discussed the background to the study, statement of the problem, research objectives, and questions which the study sought to answer. The other issues discussed in the chapter include the significance and the scope of the study. The next chapter will present a review of related literature.



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CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

The review of literature related to the research topic. This includes a theoretical review, a conceptual framework, and research on the structure of noun phrases in written texts. This review is imperative since it combines essential information from the study's domains. The reason for reviewing these studies is to provide the conceptual context in which the results of this study can be understood and interpreted.

Theoretical Review

To understand and interprete the results of this study, the theoretical constructs for this study are: the Theories of Second Language Acquisition (Krashen, 1982) and the Discourse Theory (Kinneavy, 1971).

Theories of Second Language Acquisition

Language development of L2 speakers involves both the acquisition and the learning processes. The two have been described by Krashen (1982) as independent systems of second and foreign language performance. Now, what has become widely used among language teachers and students is the preference of the term second language acquisition (SLA) as a generic reference to developing language among non-native speakers. SLA refers to "the acquisition of a language beyond the native language" (Gass & Selinker, 2008, p. 1). Typically, this additional language is named the second language (L2).

There is still a debate among some scholars about whether SLA should be considered an independent field since it has influenced the various disciplines of Linguistics and Psychology (such as Psycholinguists, Sociolinguistics, and

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Social Psychology) and Education. Currently, even Anthropology and Sociology have come to inform SLA as a field with diverse perspectives. Different theories from within Linguistics, Psychology, and Sociology have attempted to account for the emergence of SLA. However, this study opposes Grass and Selinker's (2008) view that SLA is an aspect of Linguistics since it is a language that can be studied and developed. The study considers SLA as an independent field of study.

Historically, SLA is full of different theories, each of which describes the process of language acquisition from a unique perspective. An analytical review of language acquisition traced back to history revealed that with the development of a new theory, researchers make a conscious effort to prove that the complex process of language learning is correct. Therefore, each theory should explain the previous problems of language learning. However, these theories cannot fully prove that this complicated process is right. Typical examples of these theories include Chomsky's (1966) universal grammar, Skinner's (1948) behaviourism, Swain's (1985) production hypothesis, and Long's (1981) interaction hypothesis.

The insights gained from these previous theories make us understand that there is no "one suitable for all" theory, method, or pedagogy to justify language acquisition's complexity, dynamics, and unpredictability (Mendívil-Giró, 2018). Nevertheless, there is still the fact that these different theories contribute to a new understanding of this language acquisition process. For example, Mirzaee and Rahimi (2017) pointed out that the language learning process is too complicated, involves many aspects, and cannot be embodied by a comprehensive prescription that cannot adapt to individual needs. Krashen's

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(1982) Second Language Acquisition theory is a language theory that has gained wide attention and acceptance in second language teaching and research. Krashen's (1982) second language acquisition theory is often referred to as the monitor theory.

Krashen' (1982) Monitor Model Theory, which is the focus for this study, is similar to any scientific theory since it reflects the set of hypotheses or generalisations consistent with experimental data that predict new data. The Monitor Model Theory will be discussed based on the ideas that contributed to the conception of the theory, explanation of the theory, and its hypotheses. These ideas are the acquisition/learning hypothesis, monitor hypothesis, affective filter, natural order hypothesis, and comprehensible hypothesis. Also, there will be a discussion on the objectives of the hypotheses, criticisms of the hypothesis, and the reason for adopting it for this study.

The Formulation of the Theory

It is believed that previous ones inspire most theories. Lightbown and Spada (2006) definitely said that the monitor model was influenced by Chomsky's (1957) first language acquisition research. Chomsky's (1957) innate theory assumes that all languages are inborn and possess universal principles. According to Lightbown and Spada (2006), these principles are part of every child's universal grammar. In addition, Ellis (as cited in Khasinah, 2014) believes that any reservations protect not all languages, and these reservations are specified as parameters of a language.

Chomsky (1957) condemns the behaviourists' views of language acquisition in his research, with the idea that "habit formation" does not reinforce language learning in children or adult learners. Somewhat, these

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children have the inborn ability to learn language subconsciously. Therefore, due to the children's ability to learn language in an environment with insufficient input, these children must master a grammatically correct language and assume the creativity of that language.

Similarly in situations where the caregiver uses simplified language to talk to the child, for example, using a single word or even repeated sounds made by the child, the child will still learn the language perfectly (De Bot, Lowie, & Verspoor, 2005). Although Chomsky believes that input is necessary, it must be available to enable the children to verify the principles and parameters given by the language acquisition device (LAD), thereby enhancing the acquisition process (Chomsky, 1957). It must be concluded that some of the ideas presented above have laid the foundation for the study of SLA. Following this basis, it is necessary to elaborate on the monitor model.

The Monitor Model Theory

This theory greatly influenced second language research in the 1980s. Krashen (1982), an expert of language acquisition and development theories, initiates the monitor model. The emergence of his theory was a reaction to the behaviourist theory, when methodologies based on behaviourism had lost their credibility (Lightbow & Spada, 2006). The monitor model assumes that language learning comes with the understanding of language. To Krashen (as cited in De Bot et al., 2005, p. 35), “meaningful input and communication with that language” makes language learning successful. The monitor model comprises five interrelated hypotheses: the acquisition-learning hypothesis, the natural order hypothesis, the affective filter hypothesis, the monitor hypothesis, and the input hypothesis.

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The Acquisition-Learning Hypothesis

The distinction is the most fundamental of the entire hypothesis. It states that knowledge of a second language is developed in "two distinct and independent ways" (Krashen, 1982, p. 10). The first method is to acquire a language close to the learning capacity cycle of infants in their L1 (mother tongue). The learning of language is a latent activity. Learners barely notice that they have been learning a language, but they just know that they interact with a language. Language ability or language rules can also be obtained subconsciously. Although the learner unknowingly violates some grammatical rules, the sentences they construct sound correct or feel correct (Krashen, 1982). Krashen (1982) stated the second form is language learning. Learning relates to the second language learner's conscious knowledge: understanding the guidelines, being aware of them, and having the ability to communicate using them. However, Krashen assumes that acquisition is necessary to acquire appropriate abilities, whereas learning is less necessary and unintended. Hence, the terms should also stay separate.

The Natural Order Hypothesis

The Natural Order Hypothesis provides the most exciting discovery in language acquisition research, namely that the acquisition of grammatical structures proceeds in a predictable order (Krashen, 1982; Wilson, 2000). Krashen (1982) claims that learners of a particular language learn these grammatical structures in this predictable natural order. Although the difference between the same learner's learning is not always wholly. There are statistical similarities (Krashen & Terrel, 1983). For instance, children at the initial stage leave some grammatical morphemes such as "is", "the", "in", and

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"to", generating lexical morphemes only to produce phrases like "man and "room" instead of "the man" and "my room" when they begin to acquire them, and they acquire them in a certain order. However, auxiliary and copular verbs are likely to be received later in the first language than in the second language.

The Affective Filter Hypothesis

The Affective Filter Hypothesis clarifies the relationship between "affective factors and the process of second language acquisition" (Krashen, 1982, p. 30). Dulay and Burt (1977) proposed the concept of "emotional filter" related to affective variables and theoretical work and other assumptions in the field of SLA.

Studies in SLA reviewed by Krashen (1982) confirmed the progress in SLA by affective variables. These studies classified motivation, self-confidence, and anxiety as attitudinal factors that enhance the successful acquisition of a second language. Therefore, the affective filter indicates that the strength or level of the acquirers' affective filter is different, clarifying the connection between the affective variable and the second language acquisition process. In addition to finding less input, acquirers with weak attitudes towards SLA will also have better emotional filters. Therefore, even if they understand the effectiveness, the input will not enter the portion of the brain used to acquire language. In contrast, Krashen and Terrell (1983) believe that when the filter is "activated" (such as, conscious, nervous, unmotivated), second language acquisition may be hindered.

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A review of the SLA theory places importance on *acquisition* rather than *learning*. Hence, to acquire language, two conditions must be met: (a) comprehensible input $i + 1$, which structures a bit beyond the acquirer's current level and (b) a low or weak affective filter to allow input "in".

The Monitor Hypothesis

The Monitor Hypothesis aims to use acquisition and learning in a specified manner. The acquisition is able to initiate our discourse in a second language, which is responsible for our fluency. Learning functions as an editor or supervisor. Learning affects the changes in discourse after being produced by the learned system. This is evident in speech or writing or after self-correction. Conscious learnings function as monitors, possibly to alter the performance of an acquired system. It is a system used to obtain normal speech ability (Krashen, 1982).

However, Gregg (1984) suggested that second language performers can use conscious roles only if the following three conditions are met:

1. Performers of the second language need enough space to think and utilise rational rules effectively. Since conversation does not allow enough time for thinking and rules, writing does.
2. For effective utilisation of the monitor, performers must also focus on form or consider correctness.
3. It is primary to understand the rules. Linguistics teaches us that language structure is incredibly complex and claims to explain only certain features of the most common language. Therefore, students are introduced to a limited portion of the language's entire grammar, and students with more excellent IQ do not learn every rule they are taught.

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Krashen and Terrell (1983) revealed that learners should also know the right use of tense, plural rules, structure of language, and articles (such as "a" and "the").

However, the use of a range of monitors may vary from person to person. Conscious monitors can explain individual differences in adult second language acquisition and performance. Research conducted by Krashen (1982) proposed three basic types of performers:

1. **Monitor over-users:** These people have been trying to monitor their output with conscious knowledge of the second language. Performers may hesitate in tone, usually correct themselves when speaking, and pay too much attention to the correctness they cannot speak fluently. The excessive use of grammar may be the history of the performer's exposure to the second language. Due to only grammatical type instructions, the performer may rely on learning. Performers can only feel safe when they are monitoring. Therefore, their speech is hesitant and not fluent.
2. **Monitor under-users:** According to Krashen (1982), these are performers who consciously learn knowledge or performers who are generally not affected by mistakes. They rarely use conscious rules in speech or writing.
3. Ultimately, "optimal users" correctly use their monitors (Mitchell & Myles, 2004). As a complement to their acquired ability, they use their learning power. Most of the optimal users who have not entirely learned their second language often make slight errors in their speeches and may use the grammar of consciousness effectively, so they sometimes have the impression of becoming native speakers. They can make up some of

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the gaps through conscious learning, but not all of them, because they can make up for the incomplete acquisition.

The Input Hypothesis

The Input Hypothesis relates to the acquisition, not learning. Therefore, it is both theoretical and practical and responds to language acquisition. In the monitor model, the acquisition is fundamental, and learning is incidental; hence, methodologies should be aimed at acquisition. Also, the natural order hypothesis explains how an acquirer transitions through stages.

The *Input* Hypothesis claims that a necessary condition to move from stage *I* to stage *i + 1*, where to "understand", implies that the acquirer focuses on the meaning and not the form of the message. With this hypothesis, acquisition only occurs when we understand that language has a structure "a little beyond" a present stage. One must use more than their linguistic ability to grasp the language that includes structures that are not already acquired. In addition to language skills, we need to use context, our understanding of the world, and information outside of our language to understand our language. The assumption of Hatch (1978) on the pedagogical approach in second and foreign language is to first learn structures, then practice using them in communication, and fluency is developed; this is contrasted by the input hypothesis, which is based on the assumption that we acquire by "going for meaning" and then follow it up to acquire the structure.

It must be reiterated that the Input Hypothesis is the central claim of Krashen's (1982) theory, for which reason other researchers sometimes name the entire theory as input hypothesis. It is based on these claims:

1. First, students *acquire*, not *learn, a* second language.

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2. Its methodology describes that when learners receive second language information that is just one step above their current degree of linguistic maturity, they progress in a "natural order": $i + 1$, where "understanding" means that the learner reflects on the semanticity and not the structure of the language.
3. The third part of the claim to the hypothesis is that if the input is successful, $i+1$ will be provided automatically.
4. The final claim is that the best way to teach, speak, or acquire any productive skills is to provide comprehensible input. The stages of acquiring speech are somewhat different for different people. This, therefore, means that accuracy will develop over time as the acquirer hears and understands input and that production ability emerges, not taught directly.

This hypothesis is supported by evidence that learners imitate caretakers' more straightforward speech and do not attempt to teach language (Krashen, 1982). However, this begins with the child's current level of linguistic competence. Research conducted by Clark and Clark (1977) concluded that complexity was increased as the child progressed. In follow-up research conducted by and Newport, Gleitman and Gleitman (1977), it was reported that the relationship between input complexity and measures of the learner's linguistic competence was found to be minimal. It was also reported that input provided for the children by caregivers involves some already acquired forms, including the ones not given and that the child may not be ready for it yet.

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Criticism of the Monitor Model Theory

The Monitor Model Theory has been criticised by some researchers, just as Krashen (1982) also criticised the behaviourist theory. Gregg (1984) criticised the acquisition-learning hypothesis because learning can become acquisition. He supported his criticism with evidence from research he conducted by using examples of drilling Japanese gerundive forms, where no input was provided but, in the end, learners could generate structures without an error. He claimed that with no meaningful input, learning can be acquired through drills. Both claims: learning can become acquisition; with the absence of significant inputs, learning can be acquisition through, to the researcher, are very true on the basis that learning can sometimes precede acquisition. However, when learning is not realised as acquisition, it may be influenced by the first language (L1), output, or content taught but forgotten. Krashen (1982) believes that "adults have two distinct and independent ways of developing competence in a second language" (Krashen, as cited in Gregg, 1984, p. 79). Here, Krashen prioritises *acquisition,* where learning is seen as a secondary matter. The acquisition helps the individual to perform in a second language.

The Monitor Hypothesis is highly criticised even by Krashen's (1982) own hypothesis through his position, thus, by the distinction in the Acquisition-Learning Hypothesis. Krashen (1982) believes that the learning system can only be used as a monitoring role. McLaughin (1987) argues that the monitor aims to access our performance, and it is through this, the individual learns. So then, the monitor does not play any role in learners' competence. McLaughin again criticised Krashen's assertion that in terms of time, speakers are limited to reflecting on their speech's structure and its modification in details. This, he

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believes, should rather delay our speech with lots of intervals (Mitchell & Myles, 2004). The conclusion to Mitchell and Myles's (2004) discussion is that additional time does not affect the monitor used, making it vague.

On the Input Hypothesis, Krashen (1982) states that to understand anything, one depends on the relevant background knowledge of the world. However, Krashen fails to demonstrate whether the command is transmitted (learned) or acquired. Also, the comprehensible input, which he defines as *i + 1* (structures a bit beyond the acquirer's current level) as vague by White (1987). White argues that it may be difficult for instructors to perceive that level, and only learners may know their current level of knowledge. Learners may not be able to comprehend knowledge "they have not acquired as yet" (Gregg, 1984, p. 87).

Despite these criticisms by researchers and the timing of the emergence of Monitor Model Theory, Krashen's (1982) (as cited in McLaughlin, 1987), I believe his research is still valuable for linguistic studies in language acquisition and learning and, by extension, attempts to support its assumptions with research findings from several domains. Though McLaughin (1987) and Gregg's (1984) criticisms are valid, this study is the only concern in using both acquired and learned grammatical structures of the noun phrase. Again, Krashen's (1982) theory remains systematic and useful in language acquisition and learning. So, for effective study of linguistic resources in the second language in the area of SLA, Krashen's Monitor Model Theory (1982) cannot be ignored.

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Application of the Input Hypothesis to the Present Study

The present study is situated in the Input Hypothesis in Krashen's (1982) Monitor Model acquisition theory. Though the Monitor Hypothesis is a complementary principle to the *Input* Hypothesis, the *Monitor* Hypothesis is aligned with learning while acquisition only occurs in the input hypothesis, where learners convert learned rules into acquired rules; this process is referred to as internalisation. The *Monitor* Hypothesis proves that learning cannot be acquired and that our comprehension of rules does not account for our proficiency and initiation of utterances. This makes the input hypothesis ideal for the present study. Students in CoEs in Ghana have been exposed to the second language (English language) and can be considered to be advanced learners (Cohen & Robbins, 1976).

The Input Hypothesis is grounded in how students acquire a second language. It provides clarification that learners advance from "i + 1" when receiving input in a second language, which is a step higher than the current level of language ability (Krashen, 1982). Krashen (1982) provides $i+1$ as a formula to explain the point of learning a language. Hence, to receive "comprehensible input," there must be a movement from 'i' to '1'.

As second language learners acquire and use grammatical structures in a natural order in production, second language writers demonstrate their acquisition powers of language and intellect that develop their independence in decisions about writing. However, several scholars like Warriner (1988) and Kinneavy (1971) made assumption that qualities of a good writing remain essentially the same no matter the mode or purpose of writing. Though there are

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emerging modern discourse theories that overlap in interesting and useful ways, the purpose of the study on writing espouses Kinneavy's discourse theory.

Theory of Discourse

Kinneavy (1971) distinguishes four modes of discourse – independent of aim – by their approach to reality. These modes traditionally are named description, narration, exposition and argumentation. Most writings can be grouped as: technical characterized in professional fields and technical fields, and expository characterized in more digressive, creative and artistic in academic settings. Though these types of writings are restrictive, Mills and Walter (1970) opine that the restriction is about the field of content but not about the matters of purpose, logic, organization and style and these types of writing: technical and expository are organized around theory of mode (Harris, 2016; Kinneavy, 1971).

However, the writing mode are distinct in their logic and style so that we can refer to them as referential discourse and some persuasive. Thus, Kinneavy (1971) argues that modes are important if they are the means by which one attempts to accomplish a given purpose. Kinneavy (1971) identifies four rhetorical purposes of discourse or writing models and states that, "both a theory of language and a theory of discourse…should be crowned with a viable framework of the uses (or purposes) of language" (Kinneavy, 1971 p. 38). First, the aim of referential discourse which includes scientific, exploratory and informative discourse is to designate and reproduce reality. This discourse type is concerned with such qualities as factuality, comprehensiveness and careful use of inductive and deductive reasoning. The focus is on the subject at hand. Second, expressive discourse primarily expresses the thoughts, feelings or

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beliefs of the encoder or of a social group which the writer represents. Third, literacy discourse aims, create language structures worthy or contemplation in their own right but not to discover truth, induce change or display the writer's own attitudes or ideas. Forth, persuasive discourse aims primarily to elicit from its audience a specific action or emotion or conviction (Kinneavy, 1971).

Kinneavy's theory is essential to studies on acquisition and use of language in L2 learners' writings since it provides the intellectual depth that many writing courses lack. So, we look at students' writings of simply as prescriptions and proscriptions. Proscriptions here is interpreted as the type of language used for the purpose of a mode of writing. Persuasive or argumentative models are assumed to show some greater linguistic complexity (Crowhurst, 1978; Lu, 2011) though discourse knowledge in relation to genre (e.g., narrative, descriptive, argumentative and expository) provides students strategies on how to produce better texts (Bereiter & Scardamalia, 1987). Most studies have found argument genre to have the highest syntactic complexity scores compared to descriptive or narrative genres (Beers & Nagy, 2009; Blair & Crump, 1984). Others found expository as complex (Ravid & Berman, 2010) and descriptive (Beers & Nagy, 2011; Blair & Crump, 1984; Crowhurst & Piche, 1979). This pave way for the choice of narrative in this study since language use and syntactic complexity could be explored in any type of genre. Though most studies have proven the argumentative mode as enabling writers to produce highest syntactic complexity since writers are required to well-research, provide accurate, detailed and current information to convince listeners or readers. However, others have studied complexity in different genres like descriptive and expository genres. Hence, this study hopes to explore

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the narrative mode to add to existing literature on complexity in narrative. Besides, Kinneavy's theory on discourse stipulates the information in a writing mode plays a crucial role aside the models.

Information is conveyed in three ways: syntactically (by structure), semantically (by meanings of words) and pragmatically (in real, not ideal situation) (Kinneavy, 1971). However, analysing NPs in students writing in narration with a referential discourse purpose, requires syntactic information. Here, the focus is not on the format of narration but the information that the format – considered as syntactical structures – convey. Instead of reducing formats to the requirements of a mindless dogmatism, we identify them as creators of certain expectations in the reader and as carriers of certain information about the writers and his or her intentions for a given piece of writing (Kinneavy, as cited in Harris, 2016).

Therefore, to underscore the NP structures acquired and used by advanced students in their narrative writing and to know how significant these students increase and vary in their linguistic complexity to demonstrate grammatical progression and fluency in the second language acquisition, this study can be considered to be rooted in Krashen's (1982) input hypothesis and Kinneavy's (1971) discourse theory . Also, as students move from one academic level to a higher one, it is expected that they would have gone through more internalisation (conversion of learned rules to acquired rules) and as such would be more likely than not to use more complex structures in their NPs in any given genre.

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The English Noun Phrase

The noun phrase plays a vital role in language because of its referential specification, i.e., "specify who and what the text is about" (Biber et al., 1999, p. 232). In furtherance to this statement is a significant conclusion made by Vannestal (2004) that there are patterned differences in the structure of complex NPs between her two corpora and that the NP is a stylistically sensitive linguistic structure. Since noun phrases allow such incredible complexity and play an important part when expressing oneself, they are of great interest when analysing a text. Due to that, to understand the results of this research, the concept of the NP ought to be clarified. This section, therefore, reviews the literature on the English NP.

A noun is essential to every linguistic system. Nouns form a significant part of every language. The noun serves significantly as a source to derive meaning from any sentence (Algeo, 1995). The primary syntactic role of the noun is to head the NP. De Haan (1989) also defined the English NP as a series of words. These words are grammatically part of an internal structure, including determiners, modifiers, and heads. While the head is obligatory, the other elements are optional. Moreover, Quirk, Greenbaum, Leech, and Svartvik (1972) identify noun phrases as structures that are commonly used as subjects, objects, and complements in sentences.

Biber et al. (1999) have noted that the NPs play essential parts in language because of their referential specification. According to the authors, Biber, Johansson, Leech, Conrad and Finegan (1999), what noun phrases "specify is simply demonstrated if we leave out all noun phrases from a text and leave out all other elements except the noun phrases" (Biber et al., 1999, p. 232).

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Thus, in a text, who and what the text is about to depend on the presence of the noun element. Also, we need the presence of other factors apart from the noun phrase to comprehend the text wholly. So, if the noun element and other linguistic resources are eliminated, it will become challenging to identify who and what is being related in a text.

Downing and Locke (2006) refer to the NP as a nominal group; that is, “the aspects of our experience that we consider to be entities.” "Entity", as a term, relates to tangible things, such as people, objects, places, institutions, and other “collectives,” and also includes actions (such as swim, laugh, ironing), abstraction (cognitive experience), quality (beauty, speed), emotions (anger, excitement), phenomena (thunder, success), etc. These definitions and explanations support the role of nouns or noun phrases in context.

Quirk et al. (1985) describe the noun phrase in detail from the point of view of morphology and syntax. The English noun phrase may have different functions in a sentence. Biber and Conrad (2009) state that, for three hundred years, the structures of noun phrases have experienced dramatic alteration in English. They continue that informational written registers have steadily evolved to use more complex noun phrases than fiction, which has remained constant in its use of simple noun phrases by the twentieth century. They further emphasised that noun phrases allow such great complexity and play such an important part when expressing oneself. Hence, NPs are of great interest when analysing students' writings and finding out how the various levels vary and use complex noun phrases.

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Vannestal (2004) concluded that the NP is a stylistically sensitive linguistic structure that allows great complexity when one uses it. This is prominent and of great interest when analysing texts where writers are to express themselves to demonstrate how complex they are in the use of an NP in a written text. The comparison among writers at different levels will either attest or refute Halliday's (Halliday, 1994; Halliday & Matthiessen, 2004) assertion that if an account in a text seems complex, this is because the grammatical structure is complex.

According to Quirk et al. (1985), there are two types of noun phrases. There are simple NP and complex NP. 'Simple', in this sense, is defined by Quirk et al. (1985) as a noun with or without modification, e.g., *Ama* and *the man* as used in the sentences, *Ama is a Ghanaian; Mr Anim* has *children,* where *Ama* and *Mr Anim,* as simple noun phrases. *Ama* stands alone without any modifier while *man* has a modifier *the*; *Ama,* and *the man* function as the subject. 'Complex' is explained by Quirk et al. (1985) as all other noun phrases having multiple modifications of two or more adjective premodifiers or prepositional phrase postmodifiers, e.g., the most beautiful *girl* in the school is Ama. Where *most* and *beautiful* premodifies *Ama* while *in the school* postmodifies *Ama*.

Aarts (1971) also groups the noun phrase into 'light' and 'heavy' noun phrases. These 'light' and 'heavy' dimensions parallel the 'simple' and 'complex' types of noun phrases used by Quirk et al. (1985). This thesis will be using Quirk et al.'s (1985) NP structure as it is shared among many researchers, and their terminology will fit into the description of NPs in this work. I explained

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the simple noun phrase in the ensuing paragraph, followed by the complex noun phrase.

The simple noun phrase, otherwise known as the basic NP structure. The simple NP can comprise a single element, usually a noun, pronoun, and occasionally adjectives, and can stand as the head of the NP (Radford, 1988). In addition, a determiner is usually required, and its role is defined by its relation to the item it determines. In other words, the simple NP comprises pronouns, numerals, or nouns with articles (indefinite, definite, or zero) or nouns with premodifiers (Quirk et al., 1985; Van Lam, 2004). The premodifiers consist of closed-system items and open-system items which precede the headword. The closed class items include pre-determiners, determiners, and post-determiners. Pre-determiners include quantifiers (e.g., both, little, all), multipliers (single, double, triple), and fractions (half, one-third, two-fifth). The determiners include articles (a, an, the), possessives (my, his, Fati's), and demonstratives (this, that, these). Post-determiners are cardinal numbers (one, two, three), ordinal numbers (first, second, third), and general ordinals (next, another, last). The open class words include adjectives, participles, genitives, nouns, adverbs, and clause/sentence.

In the following sentences, the italicised sections are examples of simple NPs:

1. *Kofi* is a student
2. *The boy* is *a student.*

In example (1) above, Kofi, a proper noun, carries no determiner. Thus, it stands alone as an NP, functioning as the sentence's subject. In example (2), the noun "boy" together with the article "the" constitutes the noun phrase. The same

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applies to the noun phrase "a student" in the same example. Here, "a", an article, precedes "student", a noun. Here, "the" and "a" function as determiners modifying the respective nouns and the resulting structures are simple noun phrases. From the examples above, in Example 1, *Kofi*, the subject of the sentence is a noun phrase with a single word being a proper noun. In Example 2, *the boy*, also the subject of the sentence is a simple noun phrase with a determiner *the* and an ordinary noun *boy*. These are some structures of simple noun phrases consisting of a single word or a determiner and a common noun.

Furthermore, the complex NP should, at least, consist of these elements: an article (definite, indefinite or zero) or other closed items, a modifier (a premodifier and a postmodifier), and head noun (Quirk et al., 1985). Below are examples:

1. *The little boy from Ghana* lives in Miami.
2. *The editorial section of the Daily Graphic* presents interesting stories.

In example (3), the italicised structure is a complex NP. In this structure, "the" is the determiner, "little" is the premodifier, "boy" is the head word, while "from Ghana" is the postmodifier. Similarly, in the italicised NP in example (4), the article, "the", functions as a determiner, the adjective "editorial", functions as the premodifier, "section" is the head word and the prepositional phrase, "of the *Daily Graphic*", functions as the postmodifier.

It is argued that the complexity of an NP relates to the number of components that are added to the head noun; the more arguments are added, the more complex the structure becomes (Biber & Gray, 2010). Notwithstanding, Varantola (1984) stressed that the sheer length of either pre-modification or post-modification is not a very reliable indication of complexity. Her argument

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was on the basis that short and packed pre-modification might be more complex since the reader must possess a significant amount of inferential capability than a lengthy but straightforward relative clause in post-modification.

Contributing to the ongoing argument on complex NP structures, I believe that students should be more explicit in describing the head noun to reduce vagueness. Length at the level of CoEs is not much relevant to complexity, but students' ability to use fluently correct modifiers to describe the head noun and explore both premodifiers and postmodifiers in ones writings, most especially by focusing on the text type.

The Structure of the Complex Noun Phrase

The structure of the NP has been discussed by some writers (Biber et al., 1999; Leech & Svartvik, 1975; Quirk & Greenbaum, 1973; Quirk et al., 1985). Quirk and Greenbaum (1973) identify three components of a complex NP: the head word, the premodifiers, and the postmodifiers. However, Biber et al. (1999), Leech and Svartvik (1975), and Quirk et al. (1985) have identified four components, considering the determiner as a separate element: the determiner, premodifier, headword, and postmodifier. However, I adopted the point of view of Quirk et al. (1985) because even though other writers have three components, they identify four components with the determiner seen as not part of the premodifier. The treatment of the determiner as distinct from the premodifier does not affect the work since for the analysis on variation, the premodifiers and the postmodifiers will be used. This is because the determiners and the head nouns do not lend themselves to variations. Thus, following Quirk et al. (1985), I consider the complex noun phrase as comprising an obligatory head and

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modifications comprising a determiner (det), a premodifier (premod), and a postmodifier (postmod).

The Head

Halliday and Matthiessen (2004) describe the 'thing' head semantically as the core component of the nominal group. The head is either a common noun (e.g., *orange, pen, table*), proper noun (e.g., *Kofi, Ansah, Accra*), pronoun (e.g., *he, she, it*), or adjective (e.g., *poor, rich, disabled*). To Quirk et al. (1985), the 'head' is pivotal among other constituents and controls concord with sentential parts. Below are some examples in italics:

1. The beautiful *dress* in the hanger is very expensive.
2. The beautiful *dresses* on the hanger are very expensive.

In example (5) above, the head noun, *dress*, can syntactically realise the function of the entire noun phrase since it is central. Here, it determines the concord with the verb. Thus, since "dress" is singular, the verb is singular ("is"). Similarly, in Example (6), the complex noun phrase is underlined. The italicised word, "dresses", is the headword in the structure since it can replace the entire structure and agrees with the verb in terms of number. Thus, since "dresses" is plural, the verb is in its plural form, "are" (Halliday & Mathiesen, 2004).

Corpus research has revealed that distinctive head types reveal different usage patterns. The position of the NP head could be filled with words from different word classes, which in phrase level are parsed as headword of an NP. They are pronouns, adjectives, determiners, and the existential *there* (Quirk et al., 1985). Pronoun heads are persistent in conversation, while more complex noun phrases mostly appear in written registers (Biber et al., 1999). Moreover, noun heads are predominant in objective and predicative cases, whereas

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pronoun heads are frequently used as subjects. This links up with the thematic structure since pronouns are often used as themes of clauses for disseminating information, whereas more complex noun phrases are adopted to offer fresh information (Biber et al., 1999).

The Determiners

A determiner is a word that specifies, identifies, or quantifies a noun phrase (Quirk & Greenbaum, 1990; Quirk et al., 1972). They include the pre-determiners, i.e., all the items that can precede any central determiner, including zero articles, in a noun phrase, e.g., *all, both, double* (Quirk et al., 1985). There are also the central determiners which include demonstratives, possessives, articles, wh-determiners, negative determiners, etc. (Quirk & Greenbaum, 1990). Examples of central determiners include *those*, *those*, *this*, *some,* etc. The post-determiners also follow the major determiners but precede the premodifiers and they include ordinals and quantifiers (Quirk & Greenbaum, 1990). Examples include *many, few, and several:*

1. He bought *all of* the new office cabinets.
2. I admire *her* looks.
3. The *first three* planes were American.

In Example (7) *all of* preceded the central determiner *the*, Example (8) *her* indicating possessive is central determiner and Example (9) *first three* is post-determiner indicating the order of the American plane.

Pre-Modification

According to Quirk et al. (1985), the premodifier comprises all items placed before the head other than the determinative phrase and nouns. Premodifiers are usually adjectives, as shown in the examples below:

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4. The *handsome* boy is here.

5. The *red* car belongs to my father.

In example (10), the underlined structure is the complex noun phrase. Here, the adjective, "handsome", is the premodifier, as it immediately precedes the head word. Similarly, the adjective, "red", used in example (11) is the premodifier, as it finds itself between the determiner (i.e., "the") and the headword ("car").

The pre-modification can be simple or complex. It is simple when it is made up of only one element, as shown in the following examples:

6. The *ugly* dog is dead.

7. The *intelligent* student is dead.

In examples (12) and (13), the underlined structures are the complex noun phrases in focus and the italicised words are the simple premodifiers. In example (12), the adjective, "ugly", constitutes a simple pre-modification, since it is the only word that is found in the premodifier position. Similarly, "intelligent", as used in example (13), constitutes a simple pre-modification, since it is made up of only one word.

The pre-modification is complex when it comprises more than one element as exemplified below:

8. The *dedicated bank* manager works for Fidelity Bank.

In Example (14) above, the underlined structure is the complex noun phrase, while the structure in italics constitutes the complex pre-modification. Here, the noun, “bank”, is modifying the noun “manager,” which is also modified by the adjective “dedicated.” Thus, the two words, "dedicated" and "manager", fill the premodifier position, making it a complex pre-modification.

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Sometimes, the complex pre-modification can result in ambiguity (Quirk et al., 1985), as shown in the example below:

15. The baking powder container

a) The [baking powder] container

b) The [baking [powder container]

Essentially, the ambiguity results from the modifier closer to the headword and its relationship with the first modifier, on the one hand, and the headword, on the other hand. Thus, in example (15) above, it is unclear whether "powder" relates more with "baking" or with "container". This creates ambiguity since each interpretation seems logical. Quirk et al.'s(1985) statement of complex pre-modification resulting is ambiguity is supported by Biber and Gray (2010) who believe that the simple pre-modification makes information before the head condensed lexically and informationally removing any vagueness that may cause ambiguity.

There have been attempts to generalise the acceptable or the preferred ordering of premodifiers in NPs with multiple modifications (Huddleston, 1988; Obeng, 2012). For instance, Quirk et al. (1985) provided rules for the hierarchy of premodifiers. The rules are divided into the territory between the determinative and the head into four pre-modification zones as: (a) Zone I: Precentral, (b) Zone II: Central, (c) Zone III: Postcentral, and (d) Zone IV: Prehead. They based their explanation of these zones on the four features considered to be the characteristics of adjectives. Zone I is the first in their ordering, and elements that can occupy the precentral position are the non-gradable adjectives which are typically intensifiers, such as emphasisers (e.g.,

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certain, definite, plain, sheer), amplifiers (e.g., *absolute, entire, extreme, perfect, total*), and downtoners (e.g., feeble, slight).

The second zone, central, comes after the precentral position. It has elements such as the central, gradable adjectives, i.e., the 'most adjectival items' which satisfy all four specifications of adjectival status. Examples include *big, funny, intelligent, keen, powerful, slow and thick*. Central adjectives, according to Quirk et al. (1985), admit intensifiers (e.g., over brilliant student), comparison (e.g., He is more brilliant than Akua) and alternative predicative position (e.g., He was more brilliant than now). The central adjectives function to qualify or distinguish and consequently, they structure contrary to each other such as *big/small, hot/cold, and soft/hard*. They are usually basic and include non-derived and derived adjectives, either deverbal (like *interesting, interested*, and *hesitant*) or denominal (like *angry, rainy*, and *peaceful*).

The Zone III, post central, which comes after the central slot, includes specific and colour adjectives. See examples below:

16. the *retired* teacher
17. a *working* theory
18. the *blue* shirt
19. a *yellow* undergarment

The italicised words in examples (16) – (19) are post-central adjectives. These adjectives are not central in the sense that they do not have all the features of adjectives. Hence, they are usually non-gradable and cannot be intensified.

The final slot for the pre-modification is Zone IV, pre-head. This slot includes the 'least adjectival and most nominal' premodifiers. They have (a) adjectives with proper nouns which refer to country, city, or style, (e.g.,

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American Gothic), (b) other denominal adjectives which relate to nouns, often with the meaning ‘consisting of’, ‘involving’ or ‘relating to’ (e.g., *annual, economic, medical, social, political, rural*), and (c) nouns that modify other nouns (e.g., *tourist* attraction, *Yorkshire* women, *university* student).

Adjectives at pre-head are usually not central but peripheral adjectives. Thus, they do not generally admit intensifiers, comparison, or the predicative position. Also, they cannot usually be coordinated, as shown below:

20. a. The Ghana national labour

b. *The Ghana and national labour

As illustrated in example (20) above, the pre-head adjectives do not allow coordination. In this example, *Ghana* and *national* are the pre-head adjectives. Example (20a) makes sense, but example (20b) is grammatically incorrect since coordination is not allowed in pre-head adjectives. Table 1 below summarises the sequential arrangement of premodifiers in a complex noun phrase.

Table 1: Sequences of Premodifiers

Determiner	**Premodifiers**				**Head**
	Zone I	**Zone II**	**Zone III**	**Zone IV**	
	Precentral	Central	Post Central	Pre-head	
All, the, a	Numerous	Splendid	Costly	London	Attraction
		Certain	Grey	Beach	Tower
				Gothic	
				Church	

Quirk et al. (1985) emphasised a principle of premodifier ordering. These preferences correspond to the "natural" order of recursive qualifications. Trying to explain the preference for premodifiers involves rhythm (for example, short items before long items); ordinary items before rare items; restrictive

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before non-restrictive items. They also proposed a principle to explain all premodifiers: subjective/objective polarity-modifiers related to noun phrases' (relative) inherent properties. Generally, the factually acknowledged and noticeable ones are put closer to the head and preceded by a modifier related to relative opinion, which is imposed on the head by the observer, rather than visual observation, and can only be approached subjectively. Therefore, writers or speakers can order pre-modification semantically according to their communicative intentions.

Post-Modification

The unit follows the head, giving additional information about the headword. It may pinpoint the antecedent or provide extra information. Find examples below:

21. The student *who bought the books* (specifies)

22. The man *with three children* (adds supplementary information).

In Example (21), the structure *that bought the books* is a relative clause that serves as a postmodifier to the student's head word by specifying the noun modified. Similarly, the prepositional phrase, *with three children*, post-modifies *man* in Example (22), giving further information about it.

Biber et al. (1999) identify two types of structural post-modification: phrasal and clausal post modifiers. The phrasal modifiers, as identified also by Quirk et al. (1985), include prepositional phrases (PP), adjective phrases (Adj. p), adverb phrases (AdvP), noun phrases in apposition (NP in App), and reflexive pronouns in apposition (Ref A).

The prepositional phrase (PP) is the commonest type of postmodifiers across all registers in English. It relates to more explicit modifiers. The full

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range of prepositions includes complex and straightforward proposition: *to, on, from, on board, in case, of beyond, before, by, pending further*. *Of* is by far the most widely used preposition because of the variety of functions it performs (Quirk et al., 1985). The examples below illustrate NPs with prepositional modifiers. The PPs have been italicised.

23. The boy *in the school uniform*

24. The man *with three children*

In Example (23), *in the school uniform* serves as a prepositional phrase that post-modifies the noun, *boy*. Similarly, in Example (24), *with three children,* which is a prepositional phrase, post-modifies *man,* which is the headword of the noun phrase.

According to Biber et al. (1999), “an adjective phrase constitutes a nominal postmodifier when it follows the head noun instead of preceding it" (p. 519). An adjective performing post-modification occurs in particular environments: (a) with indefinite pronoun heads, (b) with certain adjectives (e.g., *available*); (c) in certain fixed expressions (e.g., notary *public*), and (d) when the AdjP is heavy (e.g., a strong but much mightier than the one you have). The examples below illustrate an NP with a post-modifying AdjP italicised.

25. Something *good* is going to happen today

26. The secretary *general* is dead.

In Example (25), “something good” is a noun phrase. In this noun phrase, the adjective “good” follows the pronoun it modifies (i.e., *something*), thereby post-modifying it. The same explanation applies to Example (26) where the adjective, 'general', post-modifies the noun, 'secretary', which is the headword of the noun phrase, 'the secretary general.

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Noun phrases in apposition differ from all other types of postmodifiers because they have equivalent status with the head noun phrase. The sentences below have the noun phrases in apposition italicised:

27. Nana Akuffo Addo, *the president*, is pleased

28. Billy, *the dog*, is my pet.

In Example (27), 'Nana Akuffo Addo' is the head noun phrase and 'the president' is its appositive. Similarly, in Example (28), 'Billy' is the noun and 'the dog' is the appositive. In each example, the appositive is equivalent to the noun and can replace it. Quirk et al. (1985) differentiated between a noun phrase with its relative clause and apposition; the latter, *apposition,* primarily is a relationship between two noun phrases unlike the relative clauses where a relative pronoun occurs as a clausal element. Thus, whereas an appositive structure can replace the head noun phrase, a relative clause cannot replace the noun it post-modifies.

Adverb phrases can act as postmodifiers to denote time position or time duration after the head noun. See examples below:

29. The meeting *yesterday* was delayed by two hours.

30. He arrived the day *before.*

In Example (29), *yesterday*'s adverb post-modifies the noun, *meeting*. Similarly, *before*, an adverb, post-modifies the noun*, day,* in Example (30). In each of these examples, the adverbs denote time relations.

Finite and non-finite clauses are the postmodifiers in focus (Biber et al., 1999). Quirk et al. (1985) state that the finite clause is explicit. This was further explained by Quirk and Greenbaum (1990) that the explicitness of the finite relative clause is partly for the specifying ability of its relativiser. "It is capable

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of (a) showing agreement with the head, and (b) indicating its status as an element in the relative clause structure" (Quirk & Greenbaum, 1990, p. 366); (c) the head noun can take on different grammatical roles in the matrix clause (Biber et al., 1999). Post-modification by finite clause comes in two major types: appositive clauses and relative clauses. The appositive clause resembles the restrictive relative clause but they differ in some sense (Quirk et al., 1985). The particle is not an element in the clause structure, as it may function as subject, object, etc. in relative clauses. The example below shows an appositive clause:

31. The fact *that he is here* makes me happy.

In Example (31) above, the finite clause, *that he is happy*, serves as an appositive to the noun phrase, *the fact*. Thus, it can function in place of the noun phrase, resulting in the structure, *That he is here makes me happy*.

Relative clauses, on the other hand, post-modify an NP by adding some more information about the phrase. Quirk et al. (1985) see this as attributive adjectives where relative pronouns introduce the clause: *wh*-items (*who, whose, which, where, when* and *why*), and one non-wh-item, *that* (Biber et al., 1999, p. 608). The relative pronouns, which Biber et al. (1999) refer to as the "relativiser", can be omitted and termed as "zero relativiser". Below are sentences with the relative clauses italicised:

32. Life is a stage that everyone mounts.

33. The woman *who came here* is a witch.

The structures in italics in Examples (32) and (33) above are relative clauses. In Example (32), the relative clause post-modifies the noun, *stage*. Similarly, the relative clause in Example (33) post-modifies the noun, *woman.*

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There are two basic types of relative clauses: restrictive or defining and non-restrictive of the non-defining relative clause. A restrictive or defining relative clause is a relative clause that delimit or restrict the potential referent of the head noun. Non-restrictive or non-defining relative clauses are relative clauses that give additional information to the decoder about an already identified entity (Comrie, 1989). Thus, non-restrictive relative clauses normally provide additional information about proper nouns.

34. The man *who came here yesterday* has travelled.
35. Accra, *which is the capital city of Ghana*, remains the cleanest city in Africa.

The relative clauses are the italicised structures in Examples (34) and (35) above. In Example (34), the structure is a defining relative clause needed to specify the referent of the modified noun (i.e., *man*). On the other hand, Accra is a proper noun with a definite referent. Hence, the relative clause is not needed to specify its referent. Conclusively, the relative clause in Example (34) is a defining relative clause, whereas the one in Example (35) is a non-defining relative clause. The final type of nominal postmodifiers is the class of non-finite postmodifiers. The non-finite forms can be -ing clauses, -ed clauses, and -to-infinitive clauses (Biber et al., 1999). The -ing and -ed non-finite clauses are called participial clauses. The to-infinitive clause has both active and passive forms. Below are examples of non-finite postmodifier clauses:

36. **to-infinitive clauses:** The movie *to watch at night* is Black Panther.
37. **-ing clause:** The children *sleeping in the lobby* look tired.
38. **-ed/en clause:** The food *given to the boy* is more hygienic.

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Examples (36)-(38) illustrate non-finite clauses for post-modification within the noun phrase. In Example (36), the to-infinitive clause, *to watch at night*, post-modifies the noun, *movie.* Also, in Example (37), *sleeping in the lobby*, which is an -ing clause, post-modifies *children* and in Example (38), the -en clause post-modifies the noun, *food*.

Measuring Complexity in Noun Phrases

Syntactic complexity, also known as syntactic maturity, of texts, is associated with combining sentence components, mostly clauses. This becomes more proficient with age, and it is understood as a sign of maturity in a language (Beers & Nagy, 2009; Ortega, 2003).

There are several ways of measuring the complexity of modifiers in the NP. They include using an inferential statistical tools (Lu, 2010; 2011) or descriptively when the head has either a premodifier, postmodifier or both (Quirk et al., 1985). This study explores Jucker (1992) and Quirk et al.'s (1985) propositions which they termed as concatenated modifiers. They explain this as when noun phrases can be modified by one or several individual modifiers, and this can be established by looking at the number of noun phrases in each sample to find out which ones have just one, two, or more modifiers. They are called concatenated modifiers if a single head is modified by so many modifiers (premodifiers or postmodifiers). See an example below:

39. After the first expose *of the Ghana Port and Harbor officers for defrauding importers*, Anas has attracted the sympathy of the international communities.

From the sentence above, the modifiers (*of the officers*, *at the Ghana Port and Harbor*, *for defrauding importers*) modify one head noun, *expose*.

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On the contrary, an NP can also be modified by modifiers containing NPs which are themselves modified. This is referred to as embedded modifiers (Jucker, 1992; Quirk et al., 1985). An example is given below:

40. He is *the son of the man who visited us.*

Here, the modifier *of the man who visited us*, contains the noun, *man*, which is, in turn, modified by the relative clause, *who visited us*.

Another way of analysing the complexity of NP modification is to establish the level of concatenating and embedding modifiers that occur in the sample. Concatenated modifiers are two or more modifiers found in a noun phrase (NP) that modify the same head noun (Jucker, 1992; Quirk et al., 1985). The complexity of the concatenated modifier has been grouped into levels: Level 1 is when the head is modified by one modifier and mono modifiers are cater*ing for that;* Level 2 is when two modifiers modify the same head noun; Level 3 occurs when three modifiers modify the same head noun, and Level 4 occurs when four or more modifiers modify the head noun. For example:

41. Announcement *from government to the people*

42. The *interesting* game *organised by SRC for the students*

43. *Serious* roles *in the home performed by some men* which *are very helpful to women*

Examples (41), (42), and (43) illustrate the NPs with concatenated modifiers at Levels 2, 3, and 4 respectively. In Example (41), the head noun, *Announcement,* is modified by these modifiers: *government; to the people*. That is an example of concatenated modifies at Level 2.

In an embedded modifier, an NP is considered to be in Level 1 if the NP modifiers are the head of a clause argument. Thus, an embedded modification

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occurs when the modifiers in the structure do not modify the headword except one. Hence, if one of the noun modifiers does not modify the head noun, it is said to be at Level 1. Also, if a noun head is modified by only one modifier directly while the other two modifiers do not modify the head but the other modifiers in the clause, it is at Level 2. Only one modifies the head noun directly at Level 3, out of the four modifiers. Then at Level 4, only one modifier modifies the head; four or more modifiers do not modify the head directly but other modifiers in the clause. For example:

44. The joy <u>of eating lunch</u> *prepared by the matron*.

45. The task <u>of gathering information</u> *bothering on issues of democracy.*

46. The support <u>to parents</u> *who cannot pay for their wards who have sicknesses that cost high*.

In Example (44), the head noun, *joy*, is modified by only *of eating lunch*. The embedded modifier, *prepared by the matron,* is rather modifying the modifier, *of eating lunch*. This type of embedded modifier is at Level 1. Also, in example (45), the head noun, *task,* is modified by *of gathering information*. The embedded modifiers (*bothering on issues* and *of democracy)* are rather modifying the modifier, *of gathering information*. This type of embedded modifiers is at Level 2. Example (46) has only the modifier, *to parents,* modifying the head noun, *support*. The embedded modifiers (*who cannot pay for their wards, who have sicknesses that cost high*) are somewhat modifying *to parents* instead of the head noun, *support.* This type of embedded modifiers is at Level 3.

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In the present study, the NP structures were sampled to identify the various types in order to measure their complexity. The L2 syntactic complexity analyser (L2SCA) developed by Lu (2010) was used to compute three measures of overall NP complexity for each text for Level 100, Level 200, and Level 300 students using Quirk et al.'s (1985) structure of complex NPs. The three measures include a length-based metric of NP complexity, mean length of clause (MLC), and two specific NP complexity metrics: number of complex nominals per clause (CN/C) and number of complex nominals per T-Units (CN/T).

Previous Studies on the English Noun Phrase

To provide readers with the necessary inputs concerning the NPs and grammatical complexity, it is then necessary to have more descriptive studies on NPs. First and foremost, it seems crucial to have studies on published expert writing (Afful, 2015; Sharndama, 2015; Satya, 2017) and on academic writings (Hutter, 2015; Rysava, 2012; Suarez, 2013), as it is equally important to have studies that investigate students' writing on NPs (Bamigbola, 2015; Elliott, 2019; Liu & Li, 2016; Obeng , 2012; Wang & Beckett , 2017; Zabala, 2004) and on studies conducted on students' writings in Ghana (Agor, 2018; Owie & Williams, 2017; Salakpi, 2020; Tabiri et al., 2019; Tabiri, 2019).

On professional texts, Satya (2017) did a systemic functional grammar analysis of the nominal group features used in Bank Mandiri General Conditions for Account Opening (GCAO) for 2016 in Indonesia. The purpose of the research was to investigate the features of nominal groups used in GCAO. The data used consisted of 18 articles. It was concluded in the study that the nominal group structures analysed consisted of five elements: the Deictic, the Epithet,

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the Classifier, the Thing, and the Qualifier. The most dominant pattern found in the account opening was the Thing plus the Qualifier. As the study revealed, GCAO was made up of simple nominal group constructions, in general, to make it easier for customers to understand.

On the use of the noun phrase in professional texts is a research conducted by Afful (2015). Afful did a diachronic study of the NP structure in Ghanaian Newspaper editorials by dwelling on Quirk et al.'s (1985) framework on NP complexities. Using a mixed approach design, he studied editorials from the *Daily Graphic* by studying nine editorials published in 1988, 1998, and 2008. In his findings, he found a gradual increase in "head" of prepositional structures in Ghanaian editorials. Also, the "Determiner + Head" has been the most preferred structure of pre-modification in editorials. So, Afful recommends more linguistic studies in the media.

Sharndama (2015) also performed a qualitative study in Tarabu State by comparing the structure of the nominal group as used in professional and in popularised legal texts. He concluded that there was no significant variation displayed in the NPs in the two categories of texts. The review of professional texts has revealed how experts make use of NP types with little or no significant difference between different genres (Sharndam, 2015) and how professional texts increase in the use of features of NPs annually (Afful, 2015). However, their choices of NP types depend on the types of genres, mainly for organizational purposes (Satya, 2017). These studies on professional texts have gone to strengthen the need for L2 learners most especially at the advanced levels to make use of NPs in their writings for future purposes.

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On academic writings, Rysava (2012) did a descriptive study of the NP in English by focusing on its forms, function, and distribution in texts by analysing the constituents of a typical NP in pre-modification and post-modification. The study compared an original English text to its official Czech translation to find as many noun phrases as possible. Using Quirk et al.'s (1985) framework of the NP structure, Rysava revealed the similarities and differences in both languages by reading (newspapers, fiction, advertisement etc.) and listening (radio, films, and series, everyday conversation with native speakers, etc.) from two corpora: the British National Corpus (BNC) and the Corpus of Contemporary American English (COCAE). The study analysed texts to determine whether there were more frequent patterns that were more likely to be repeated and what head nouns were possible to be pre- or post-modified by a quotational compound. The study showed less frequent possibilities of pre- and post-modification of a noun phrase. Hence, the researcher developed an intervention for employing these structures in utterances/texts. The study recommended more interventions to promote the use the types of NPs in the writings.

Hutter (2015) conducted a corpus-based analysis of noun modification on research articles in Applied Linguistics and Language Teaching on academic texts. He explored the connection between article sections (Introduction, Methods, Results, Discussions [IMRD]) and the use of five types of noun modifications: relative clauses, -ing clause, postmodifiers, premodifying nouns, and attributive adjectives using the intersection of genre and register analysis. First, he looked at the frequency of these types of noun modification was compared across IMRD sections. Second, he used a hand-coded analysis of the

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structure and structural patterns of a sample of NPs through IMRD sections from the fields of applied linguistics and language teaching.

Hutter's (2015) study was based on previous studies that had found noun modification to be common and complex in academic writing. Hence, there was a need for the researcher to perform descriptive research of how noun modification functions within research articles. He found that noun modification was not evenly distributed across IMRD sections. The study also revealed no significant difference between sections for relative clauses, -ing clause postmodifiers, or -ed clause modifiers. The noun phrase structures across IMRD sections showed that common noun modification patterns such as premodifying noun only or attributive adjective with prepositional phase postmodifiers were primarily consistent across sections. Noun phrase structures including pre-/post- or no modification recorded differences across these sections. The study also recommended for more descriptive research of how noun modification functions within research articles.

Similarly, on academic writing, Suarez (2013) carried out a descriptive study on NPs, their elements, and their syntactic function in the clause. The researcher analysed abstracts of science texts in English. The aim of the study was to investigate the NP in the English language, particularly in academic texts. The study was based on the theoretical background of Downing and Locke (2006) and Halliday and Mathiessen (2004). The five selected scientific abstracts were analysed and grouped based on their complexity in the presence of non-head elements (determiner, premodifier, and postmodifier) and according to their structural roles (subject, direct object, and completive in prepositional groups). The samples were taken from the *Canadian Journal of*

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Chemistry, *Chemistry Science* (a British journal), and *the Journal of American Chemistry Society*. The results from this study indicated that the common structure was the one with the head, pre- or postmodifier, and the determiner was optional. Suarez also found that NPs functioning as direct object displayed a more complex structure when compared to the NPs realising subject. Review on academic texts have also uncover the need for more interventions to promote more use of NPs in written or speech genres by second language learners as recommended by some researchers (Hutter, 2015; Rysava, 2012; Suarez, 2013).

For the past decades, issues about students' writings have received much attention from many researchers in language teaching worldwide. This could be based on recommendations provided by researchers on professional and academic writings' findings. NPs have also been studied in students' writings from both native and non-native writers. Wang and Beckett (2017) did a comparative study of NP use in Chinese EFL students' writing with proficient language users. The study explored the use of NPs by having two different groups of participants perform the same task to make the two datasets more comparable. The data source for the study was the "personal statement," a type of document required as part of the admission requirement for further learning by many universities. Fifteen personal statements were collected from nine relevant universities. The data collected were coded using the VAM Corpus Tool, 2013 version developed by Micky 'O' Donnell for coding.

The results from the study indicated that the two groups under study did show a statistical difference in terms of their use of noun modifiers. Compared with skilled writers, the study found that Chinese EFL students tended to use more modifiers, including qualifiers, numbers, and hypernyms. The use of

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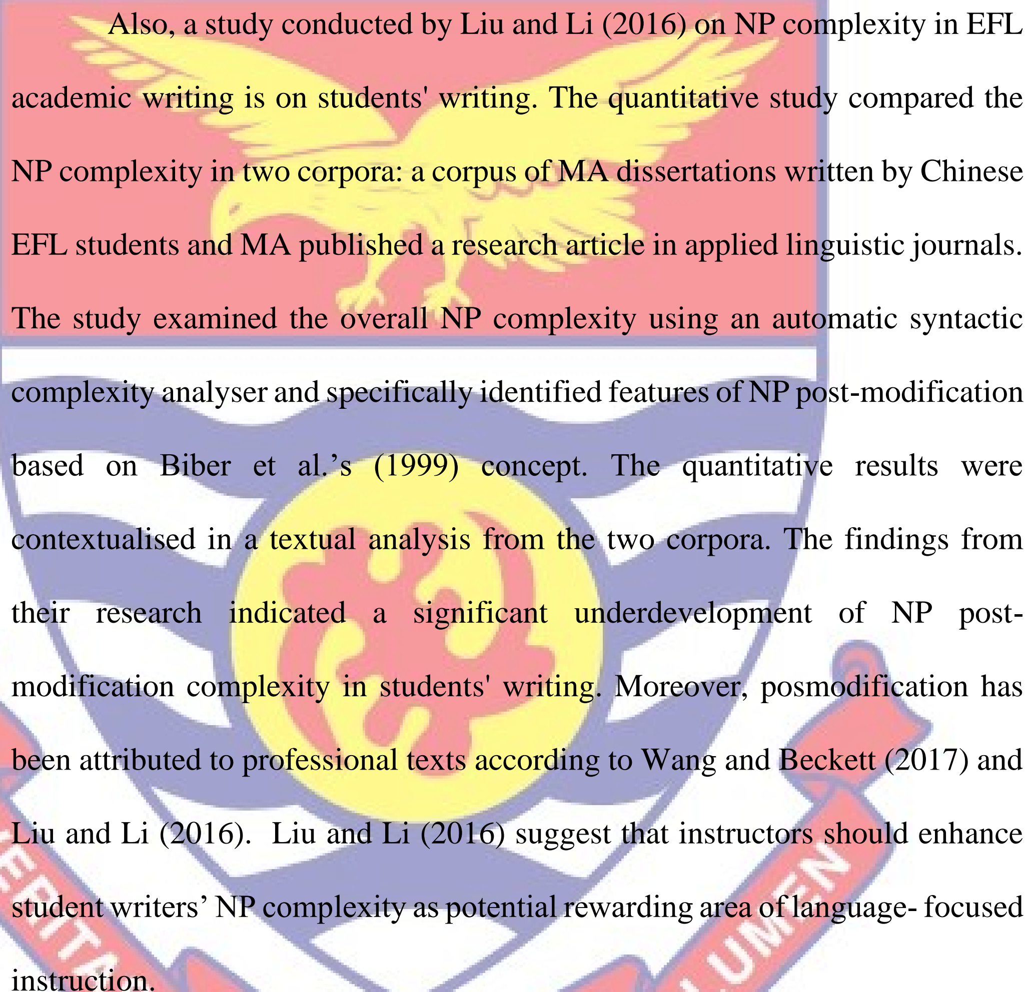
prepositional modifiers is the most obvious difference. Therefore, the research supports the following hypothesis: language learners first learn to use premodifiers and then use qualifiers/postmodifiers. The study recommended more studies on the features of NPs in students' writings and compare to professional texts.



Also, a study conducted by Liu and Li (2016) on NP complexity in EFL academic writing is on students' writing. The quantitative study compared the NP complexity in two corpora: a corpus of MA dissertations written by Chinese EFL students and MA published a research article in applied linguistic journals. The study examined the overall NP complexity using an automatic syntactic complexity analyser and specifically identified features of NP post-modification based on Biber et al.'s (1999) concept. The quantitative results were contextualised in a textual analysis from the two corpora. The findings from their research indicated a significant underdevelopment of NP post-modification complexity in students' writing. Moreover, posmodification has been attributed to professional texts according to Wang and Beckett (2017) and Liu and Li (2016). Liu and Li (2016) suggest that instructors should enhance student writers' NP complexity as potential rewarding area of language- focused instruction.

Also, Bamigbola (2015) examined the complex sequence of English NPs. The study used insights from different grammar theories to clarify some aspects of the NP that pose problems for English as second language (ESL) learners. Bamigbola selected complex NPs from passages in textbooks, articles in magazines and newspapers, and students' essays. Findings from this research indicated that the complex ordering had a significant impact on any discourse.

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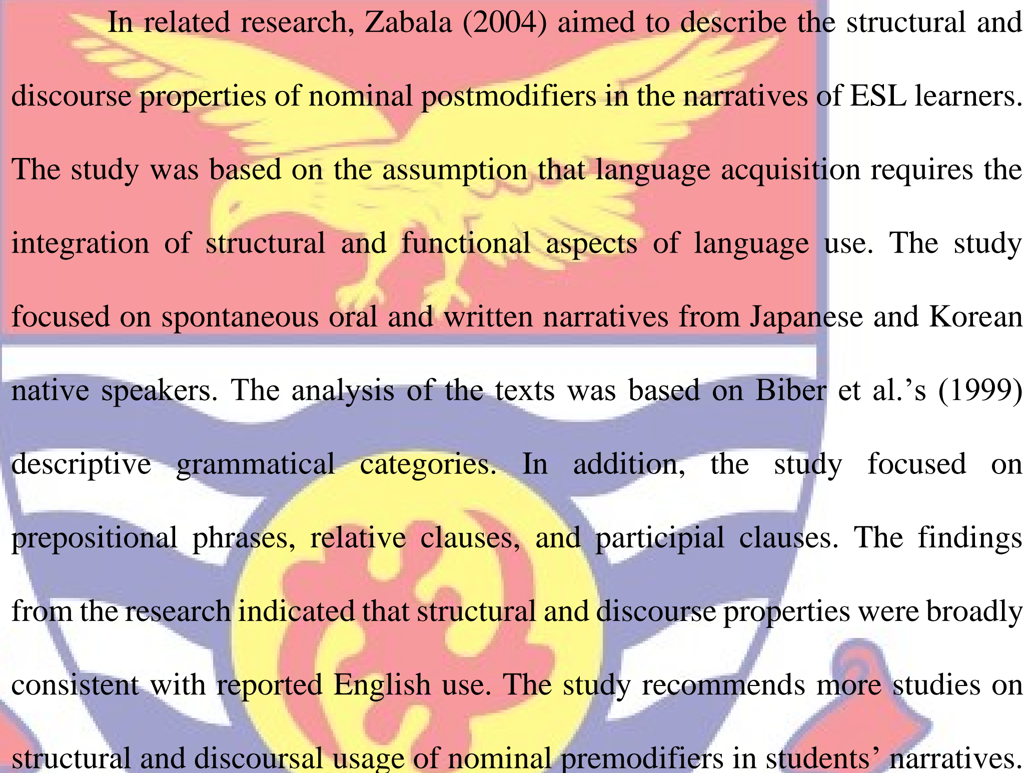
Many. Many of the difficulties that users of English as a second language were faced with had to do with the lack of adequate understanding of the structure and usage of NPs. Bamigbola suggests a functional approach to study the nominal group to help L2 learners to have a better understanding of its structures.



In related research, Zabala (2004) aimed to describe the structural and discourse properties of nominal postmodifiers in the narratives of ESL learners. The study was based on the assumption that language acquisition requires the integration of structural and functional aspects of language use. The study focused on spontaneous oral and written narratives from Japanese and Korean native speakers. The analysis of the texts was based on Biber et al.'s (1999) descriptive grammatical categories. In addition, the study focused on prepositional phrases, relative clauses, and participial clauses. The findings from the research indicated that structural and discourse properties were broadly consistent with reported English use. The study recommends more studies on structural and discoursal usage of nominal premodifiers in students' narratives.

Obeng (2012) explored gender variation in complex NPs in the writings of students of the University of Cape Coast (UCC). The study was based on a corpus of four hundred examination scripts collected from hundred undergraduate students in a Communicative Skills course in the 2009/2010 academic year. Obeng concluded that the female students dominated in using concatenated modifiers while the male students dominated in the use of embedded modifiers. In terms of numbers, the female students used more complex NPs than the male students, but the male students dominated in terms of the degree of complexity. In addition, male students used more postmodifiers

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while female students conquered in premodifiers. Obeng recommends studies on gender variation in the use of NPs in spoken language and also stress on the need to discover how the various courses have influence on students' writings.

Elliott (2019) analysed nouns across disciplines. He analysed the Michigan Corpus of Upper-Level Students Papers (MCUSPs). The texts were drawn from four advanced levels of post-secondary education including a senior year of undergraduate and first, second, and third years of graduate study. He aimed to level out which students began to approach professional disciplinary norms. The MICUSP includes seven paper types (argumentative essay, creative writing, critique/evaluation, proposal, report and response paper), representing a variety of academic genres within the broader register of academic writing. With AntConc (Anthony, 2014) and based on the conceptual framework of Biber et al. (1999), the corpus was analysed. The results showed changes in the writing of senior students based on the subject. The results support efforts to develop complexity in students' writing (Biber et al., 2011) and suggest that high-level students' writing may become a more accessible model for less proficient writers because of their advanced level.

Evidence from studies done so far on NPs supports that nominal complexity is an indicator of academic writing maturity (Biber et al., 2011). Recommendations by these researchers were that studies on NPs should not only be on the structural types but on the functional usage of the NPs (Bamigbola, 2015; Wang & Beckett, 2017; Zabala, 2004). Also, there is the need to compare students' writings whether among natives and non-natives or students' writings to professional texts to see whether students especially at the advanced levels are increasing in complexity. This means that English as second

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language learners (ESLs) should go through the developmental progression process in terms of NP complexity (Elliott, 2019; Liu & Li, 2016; Obeng, 2012). Again, these studies have demonstrated that there is the need to study students' writings to look at how students use the structural and functional types of the NP and compare the grammatical complexity existing among disciplines, levels and gender. In fact, with the exception of Obeng (2012), who studied gender variation in the use of NPs in students' writing at the University of Cape Coast, most of these studies were not done is Ghana, leaving content and context gaps to be field by the present study.

However, in Ghana, most studies on students' writings have looked at students' overall performance on content, mechanical accuracy, organisation and errors in expressions. Agor (2018) investigates English Intra-sentence writing challenges of undergraduate students in Public education institutions using five hundred (500) essays written by 200 undergraduates in four tertiary institutions between the years 2015-2017 as his data. In all, 50 students (25 males and 25 females) represented each institution. Using questionnaire, he investigated the personal and linguistic background of the respondents and the short test was used to probe the English intra-sentence writing problem areas during lecture time. The researcher explored two data analysis techniques: test item analysis and tables to analyse responses supplied by respondents and statistical procedures under Quirk et al. (1985) theoretical framework. He found that final-year graduate students studying English as a major or a combined subject in tertiary institutions in Ghana have varied degree of familiarities with Intra-Sentence Writing issues.

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Tabiri (2019) also examines ESL Students' problems in the organisation of lexico-grammatical resources in text creation. He employed Dane's theoretical framework of thematic progression – Textual meta-function for assessing organisation of information in text on 15 compositions written by Form three students in the Sunyani Senior High School. The study employed the documentation method on the essays of Form 3 Students of Sunyani Senior High School in 2015-2016 academic year. Students were made to select one essay topic from different topics and were required to write full essays as required in their final examination. The study revealed that ESL students face problems of proper thematic progression, which results in disunity in the development of a paragraph and involvement sentences within paragraphs.

Salakpi (2020) also investigated the paragraphing challenges in essays of student-teachers with Mount Mary College of Education as a case study. The study employed quantitative approach with a sample size of 757 students in Levels 100 and 200. Using the Essay Analytical Framework (EAF) of Owusu (2012), written texts and interviews were administered on students and their essays. The study found that most of the student-teachers encountered myriads of challenges in paragraphing the introductory, the body and the concluding paragraphs.

Owu-Ewie and William (2017) investigates the lexical and grammatical errors of students in three purposively selected Senior High Schools situated in the rural communities in the Ajumako – Enyan District in the Central Region of Ghana. They sampled a corpus of essay writings of one fifty (150): 88 females and 62 males in the second year class. These essays were analysed basing on the Error Analysis (Corder, 1975). Students were given three essay topics and

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each was expected to write between 200 and 250 words on two of the topics as the data for the study. The study revealed that the lexical errors in the students' writing were due to homophone problems and semantic lexical errors. The grammatical errors identified were agreement, tense, singular – plural (number), prepositional, and article errors. The study also found that the most frequently committed grammatical error was tense errors followed by agreement errors.

Tabiri, Adentwi-Hayford and Danquah (2019) also conducted a descriptive qualitative study to identify and explain the punctuation problems discernible in the students' written essays. They used a sample size of ten purposive sampled essays written by form three students in their final year of Sunyani Senior High School. Three essay topics were directly taken from the English past questions which students were asked to select one essay question from the three different topics. The essays were analysed using the process theory by Arndt (1991) and Hedges (1998).The study found that students have problems with the use of comma, which is the commonest and the most abused punctuation. Then, again, there was the problem of capitalisation, discoursal and lexical. Another problem discernible in the students' written essays is the apostrophe, as the students confuse the contracted form of the verb with the third person possessive.

Although these studies on students' writings looked at some aspects of grammar and linguistic resources in Ghanaian students' writings under different academic levels: pre-tertiary and tertiary, emerging studies on students writings are drifting to NP structures and grammatical complexity as recommended by studies reviewed above leaving gaps to be filled in Ghana. Though, Obeng (2012) has looked at NPs in students' writings, he focused on the variable,

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gender while this study focused on level. Also, while Obeng (2012) used a different analytical tool, Chi-Square, this study employs Lu (2010) L2SCA as the tool for the quantitative data. This leaves context and analytical gaps to be filled by the present study.

The studies reviewed in this section made use of written registers with different theoretical and conceptual frameworks. This study concentrates on the narrative written texts of advanced student writers at the colleges of education in Ghana similar to the genre used by Zabala (2004) though he added spoken narratives. The narrative texts were analysed by looking at the noun phrase as a linguistic choice based on Quirk et al. (1985) to describe the structures that are frequent in the texts of students in CoEs in Ghana. In the end, the research examined the variation in the use of complex NPs among the levels in CoEs, leading to their grammatical complexity.

Chapter Summary

The chapter reviewed theories on language acquisition and linguistic concepts used in the study and some previous studies on the current topic. The chapter highlighted on Monitor Model Theory by Krashen (1982) and Kinneavy’s discourse theories as its theoretical framework. The chapter also reviewed some conceptual (Biber et al., 1999; Downing & Locke, 2006; Quirk et al., 1985) and empirical literature on the English NP in expert texts (Afful, 2015; Satya, 2017; Sharndama, 2015), academic (Hussein, 2011; Hutter, 2015; Rysava, 2012; Suarez, 2013) and students’ writings (Bamigbola, 2015; Elliott, 2019; Liu & Li, 2016; Obeng, 2007; Wang & Beckett , 2017; Zabala, 2004) including studies on students’ writing done in Ghana (Agor, 2018; Owie & Williams, 2017; Salakpi, 2020;Tabiri et al., 2019; Tabiri, 2019) .

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CHAPTER THREE

METHODOLOGY

Introduction

This chapter describes the methods and procedures used in conducting the research. The chapter is organised under the following sub-headings: research design, population, the profile of the colleges under study, sample and sampling techniques, instruments used, analytical framework, validity and reliability of the data, sources of data and data collection method, and data analysis procedure.

Research Design

A descriptive quantitative design was used as the study's design to collect data from teacher trainees to establish the noun phrase structure. Leedy and Ormrod (2001) and Williams (2011) describe quantitative research as quantifying and analysing variables in order to get results. Expatiating on this definition, Babbie (2010) describes quantitative research methods as explaining of an issue or phenomenon through gathering data, measurements and statistical, mathematical, or numerical analysis of data obtained through polls, questionnaires, and surveys, as well as the alteration of pre-existing statistical data using computational tools, according to Babbie (2010). Also, quantitative research gathers numerical data and generalises it across groups of people or describes a specific phenomenon.

There are several approaches to conducting quantitative research. The approaches fall under two categories: experimental and non-experimental research designs. The types of designs include descriptive design, correlational design, quasi-experimental design and experimental design. However, this

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study employs the descriptive design to objectively present status of the phenomenon or variables and does not require any hypothesis for initiation. Descriptive design describes and interpret the current status of individuals, settings, conditions or events (Mertler, 2014). In the descriptive study, the researcher is simply studying the phenomenon of interest as it exists naturally, no attempt to manipulate individuals, conditions or events (Mertler, 2014).

The structure of the final written report includes an introduction, literature and theory, methods, findings, and commentary. It is thus appropriate for this study since it intends to determine teacher trainees' noun phrase structures by assessing the noun phrase structures in the trainees' narrative essays using the Lu L2SCA (2010). Furthermore, no factors would be manipulated in the investigation.

Specifically, the nature of the study was descriptive, and it made use of both explorative and explanatory techniques. The explorative approach investigates the NPs used in general, whereas the explanatory method aims to explain the variation in the complex NPs. The explanatory questions of 'which' and 'how' were asked to ascertain what pertained in the texts of students of these three levels (L100, L200, and L300) in the colleges of education in Ghana whereas the 'what' question was asked to explain these phenomena. The 'what', 'how', and 'which' questions were posed to allow the researcher to explore, describe, and explain the phenomenon under study.

Population

Polit and Hungler (1999) refer to population as the group the researcher would like the study results to be generalised. In the present study, the population was based on written texts obtained from three thousand one hundred

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and ninety-two (3,192) students, so the target population for the study was 3,192 students. The written texts of these students were assessable; therefore, the assessable population was 3,192 (composed of L100s, L200s, and L300s) in three colleges of education in Eastern and Greater Accra Regions (EAGAR), namely, Presbyterian College of Education (PCE henceforth), Presbyterian Women College of Education (PWCE henceforth) and Accra College of Education (ATRACOE). A summary of the population is presented in Table 1:

Table 2: Population of the Study

College	Level 100	Level 200	Level 300	Total
PCE	494	429	553	1476
PWCE	232	295	241	768
ATRACOE	324	311	313	948
Total	**1,050**	**1,035**	**1,107**	**3,192**

Profile of the Various Zones of Colleges Under Study

Currently, there are 46 colleges of education in Ghana. These colleges have been zoned as Eastern and Greater Accra Regions (EAGAR ZONE), Volta Region (VOLTA ZONE), Northern Region (NORTHERN ZONE), Ashanti and Brong Ahafo Region (ASHBA ZONE), and Central Region and West Region (CENTWEST ZONE). The EAGAR zone was randomly selected. The target population for the study was Levels 100,200 and 300 of the randomly selected CoEs in the EAGAR zone: PCE, PWCE, and ATRACO, making three 3,192 students.

Below is a map showing the colleges selected for the study

Map of Ghana

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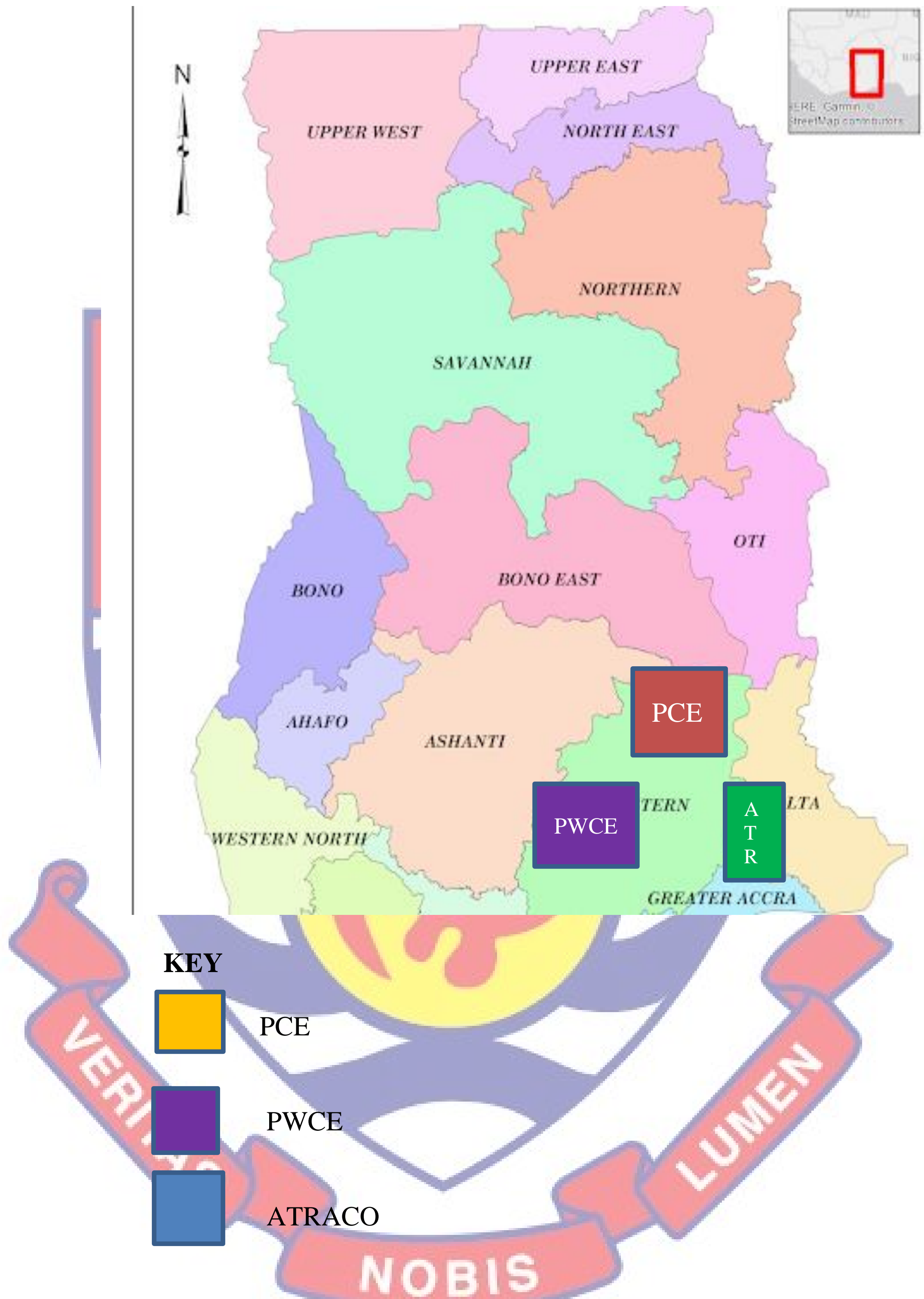

Figure 1: A map showing the colleges selected for the study

Map of Ghana

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A Profile of the Selected Colleges of Education in the EAGAR Zone

Figure 2: A picture showing the front view of PCE

First, years ago, PCE was believed to possess enviable and profound academic excellence among the other colleges since its establishment in 1848, according to reports from the Institute of Education, University of Cape Coast. Besides, it was the first college in Ghana, which has earned it the slogan "Mother of Our Schools". PCE was established on 3rd July 1848. It was the first to be selected as a co-educational teacher training college in Akropong in Akuapem District of the Eastern Region of Ghana. It has gone through a series of previous names, including the Scottish Mission Training College, Basel Mission Seminary, and Presbyterian Training College. It was the first institution of higher education in Ghana, which was founded by the Basel Mission for teacher-catechist for the Presbyterian Church of the Gold Coast. It currently has a population of 1,476 students. Therefore, the population of the college was 1,476 students. Courses offered include Primary Education, Visual Arts, Home Economics, English Literature, RME, Social Studies, Mathematics, ICT-Science, ICT-Mathematics, and Technical (Field Data, 2019).

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Figure 3: A picture showing the PWCE

Secondly, the selection of PWCE is welcoming since it satisfies one of the pillars of education on gender inclusivity as expounded by stakeholders to meet international standards on equity, inclusivity, and equality. Moreover, PWCE has feminine characteristics that will make the sample representative enough. PWCE is the only women's college in the EAGAR zone which is located at Aburi. The Basel Missionaries established the college in 1928. The school started with two pioneer students, but now, it has a population of about 768 students. Courses offered include Primary Education, English Language and Literature, and Home Economics.

VERITAS LUMEN NOBIS

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Figure 4: A picture of ATRACO

Finally, the selection of ATRACOE makes the population fair and a good representation of the zone to include Greater Accra Region. ATRACOE is located in the Greater Accra Region. Besides, it was the first public college in the region. ATRACOE was established in 1962 in a one-storey building at Accra New Town as a government teacher training college. The college was founded as a day training college with 19 students and eight staff members. The college was relocated to its present site at East Legon in 1985, and it became a boarding institution in 2001. It is a mixed school and has a population of about 948 students. Courses offered include Primary Education, English Language, and Early Childhood Education.

Sample and Sampling Techniques

The sampling procedure for this study involved several stages. The first stage was using the natural zoning of the various colleges of education as

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clusters. The clusters of colleges of education in Ghana include EAGAR, VOLTA, NORTHERN, ASHBA, and CENTWEST Zones. The EAGAR zone was randomly selected for further sampling out of these clusters. To achieve this, the names of the zones were written on separate slip of papers. The slips were put into a box and then one selection was done to select one zone, EAGAR zone.

Furthermore, PCE, PWCE, and ATRACOE were randomly selected within the EAGAR zone. Thus, the names of colleges under the EAGAR zone was written on separate slips. These slips containing the names of the colleges were put into a container, and three colleges were then picked in turns. Since each college of education is stratified into the three levels: Level 100, Level 200, and Level 300, there was no need for further grouping. With 3,192 students, I used 318 narrative texts written by students of the selected CoEs for the study. Krejcie and Morgan (1970) (as cited in Cohen, Manion & Morrison, 2000) suggest that a sample size of 346 for a population of 3500 is appropriate. Therefore, I stayed within the sample size recommended by Krejcie and Morgan to have the proper representation for the entire population. Hence, 10% of the total population of each level for each college was used as the sample (e.g., PCE level 100: 10/100x494= 49 for the sample). Simple random sampling was used to select the scripts. Therefore, 147 of the 318 writing samples were selected for Level 300, 77 of the 318 narrative texts were selected for Level 200 and 94 of the 318 narrative texts were selected for Level 100 students. The sum total of the various samples of the different levels for a college then became the total sample size for that college, and this is representative enough, as suggested by Krejecie and Morgan (1970). A multi-stage sampling approach was used to

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select the 318 narrative texts. Sarantakos (1998) points out that this involves using more than one sampling technique to choose your respondents. Two main sampling methods (purpose and simple random sampling) were employed at different stages of the study to obtain the required texts.

The narrative text on “The Memorable Event I have Witnessed in College" of not more than 200 words was selected through purposive sampling. The narrative text was selected to enable students to explore the simple and complex NP types in the narrative text, which has informational and fictional contents (Traugott & Pratt, 1980; Biber & Conrad, 2009). The reason for the choice of purposive sampling is its potential in answering the research questions; simple random sampling might have resulted in settling on scripts of a lesser number of words and texts that did not focus on the memorable events in college and that would not have helped in dealing with the specific research questions explored in the study.

The simple random sample technique was used to select the 318 narrative writing from each level in the selected colleges. Since the narrative texts written by students did not bear the names of students but only their levels, I grouped them into various levels. Essays that were less than two hundred words were excluded from the sampling. Simple random sampling selected the 318 narrative texts from the three levels. Thus, the narrative text of each level was numerically labelled on separate pieces of paper. These papers were put in a container and then picked out in turn without looking into the box until the required numbers were picked. This procedure was used to select the narrative texts for each level. Finally, the narrative texts of students whose chosen numbers were selected for the analysis. Hence, the analysis was based on the

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first two hundred words of the narrative text. This also was to ensure equality in the length of text. The sample for the study was 318 written scripts from students from the selected CoEs. Table 3 presents a summary of the sample for the study.

Table 3: Sample for the Study

College	Level 100	Level 200	Level 300	Total
PCE	49	43	55	147
PWCE	23	30	24	77
ATRACOE	32	31	31	94
Total	**104**	**104**	**110**	**318**

From Table 3, the sample for PCE, Akropong was 147 written texts. This comprised 49 written texts from Level 100 students, 43 written scripts from Level 200 students, and 55 written scripts from Level 300 students. Also, the sample for PWCE, Aburi was 77 written texts made up of 23 written texts from Level 100 students, 30 written texts from Level 200 students, and 24 written texts from Level 300 students. Finally, the sample for ATRACOE, Accra was 94 written texts, made up of 32 written texts from Level 100 students, 31 written texts from Level 200 students, and 31 written texts from Level 300 students.

Thus, a total of 147 written texts out of the total 1,476 students from PCE, Akropong; 77 written texts out of the total 768 students from PWCE, Aburi; and 94 written texts out of the total 948 students from ATRACOE, Accra were used. Samples of 147, 77, and 94 written texts from PCE, PWCE, and ATRACOE students, respectively, were representative. This is in line with the argument of Alreck and Settle (1985) that a sample size of at least 10% of a population is representative enough to obtain adequate confidence. They

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postulate that the greater the dispersion or variance in the population, the larger the sample must be to provide estimation, precision, and vice-versa.

Instruments Used

Data collection instruments refer to devices used to collect data (Seaman, 1991). The data on which the study was based were written texts from students in Levels 100, 200, and 300 in the 2018/2019 academic year. I settled on the written narrative text since it is the most common genre that students can easily relate their experience to. Also, a narrative text is the most suitable genre to study the use of syntax, discourse, and pragmatics in any particular language and culture (Biber & Conrad, 2009). To Kalimuttu (2016), narratives provide essential information regarding the narrator's linguistic competence and pragmatic sensitivity.

This form of genre, narrative, is embedded in the first-semester first-year course content for students in colleges of education in Ghana. The students in the CoEs are asked to write narrative texts either as class work or at the end of the semester to recount their experiences in the college.

Validity and Reliability of the Data

To ensure the integrity and quality of a measurement instrument in a research, Kimberlin and Winsterstein (2008) believe that the pre-requisites lie on validity and reliability. Validity and reliability increase transparency and decrease opportunities to insert researcher bias, most especially in qualitative research (Singh, 2014).

A research study must actually answer the question it was intended to answer. Therefore, the validity of the research results must be accurate. Fraenkel and Wallen (2009) refer to validity as the appropriateness, meaningfulness,

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correctness, and usefulness of the inferences a researcher makes based on the data collected. Therefore, a research study is valid when it accurately answers the questions it was intended to answer. This must be seen throughout the research study process. Validity examines the truthfulness of the quality of the research process and the accuracy of the results.

On the other hand, reliability refers to the consistency of scores or answers from one administration of an instrument to another and one set of items to another (Fraental & Wallen, 2009). Researchers use several procedures to ensure that the inferences they draw based on the data they collected are valid and reliable. To ensure reliability and validity of the data analysis in this study, at least four strategies for ensuring accuracy in research projects, as suggested by Shenton (2004) and Gravetter and Forzano (2006), were adopted at different stages of the project.

First, one of the strategies to achieve reliability and validity in a study is to ensure both internal and external validity to achieve reliable results. Internal validity caters for extraneous variables like different timing and environment of both levels of students. The change in time and place will not threaten the validity and reliability of the results since the researcher created a situation near each environment to avoid confounding variables. Also, I ensured no systematic difference in the general environment from one treatment condition to another to ensure internal validity. The groups of students in each college were confined in the classroom to write a given text under the researcher's supervision. Students spent one-hour writing on a given topic of not more than 200 words.

Second, after permission was granted through an introductory letter from the university, students were briefed on the intention for the text and why

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they needed to feel free since the results were not going to be used against them. However, the students were made to write their levels on the paper to enable the researcher to group the data gathered.

On measurement, to ensure validity and reliability, an inferential statistical tool, the syntactic complexity analyser by Lu (2010) was employed. For objectivity in results, the L2SCA was used to record results objectively unlike the human rater which may incur some subjectivity. However, feeding the analyser with the writing inputs was seriously done through peer supervision to ensure that all data is entered accurately for each level. Peer scrutiny of the research project is another strategy used to achieve reliability and validity in this study. It involves allowing colleagues, peers and academics to scrutinise the project and offer corrections and suggestions (Shenton 2004).

The fourth strategy to achieve reliability and validity is the use of random sampling procedure, since it negates chances of the researcher being biased in the selection of student writers. According to Preece (1997), random sampling helps to ensure that any "unknown influences" are distributed evenly within the sample. As explained in Chapter Three, random sampling was employed to select the student writers.

Lastly, to ensure reliability and validity, there were frequent debriefing sessions between the researcher and her supervisors. This exercise widened the perceptions of the researcher as the supervisor brought to bear his experiences and conceptions. Such collaborative sessions discussed alternative approaches, reshaping some ideas, and correcting flaws in the proposed course of action.

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Sources of Data and Data Collection Method

The study made use of primary data. Primary data were collected through the written narrative texts based on a given topic in the randomly selected colleges in the EAGAR zone.

Data Analysis Procedure

This section discusses the procedures followed in conducting the analysis.

Essentially, the analysis involved two steps. In the first step, I relied solely on content analysis to analyse the narrative texts in order to identify the NPs. Any technique for making inferences by systematically and objectively identifying special characteristics of messages is seen as content analysis (Holsti, 1969). As a research tool, the content analysis focuses on the actual content and internal features of texts. It is used to determine the presence of certain words, concepts, themes, phrases, characters, or sentences within texts or sets of texts and to quantify their presence in an objective manner (Palmquist, as cited in Obeng, 2012).

As an objective, systematic, quantitative, and qualitative description of the manifest content of language, content analysis can compare group differences in content and identify the language trends of an individual, group, or institution. Again, it helps the analyst look directly at language via texts or transcript and, therefore, get at the central aspect of social interaction and statistically analyse the coded form of the text (Berelson, 1952). Due to this fact, content analysis is used in many fields, ranging from marketing and media studies to literature and rhetoric, ethnography and cultural studies, gender and

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age issues, sociology and political science, psychology and cognitive science, etc.

In the present study, the choice of content analysis was informed by the study's nature, scope, and focus. Basically, the choice of content analysis was necessitated by the research design (descriptive survey), which sought to explore, describe, and explain the NP structures in students' written texts. Therefore, the study decided on the level of analysis (noun phrase) and stuck with the pre-defined set of categories of the type of NP structure as stated by Quirk et al. (1985).

The second step involved quantitative analysis of the data. The study was a descriptive survey in which quantitative analysis was used. All quantitative data analyses were done using frequencies, percentages, and mean. These were used for the analysis to answer questions about the differences and similarities in the use of NPs between the students in the colleges of education. Thus, the study examined the scripts collected and coded them for the occurrences of the various structural types of the NPs. Three methods were employed in the analysis of the data collected. First, the relative frequency percentage (RFP) was used to determine the percentage of occurrences of each of the structural types of the NPs in each level's corpus:

The formula used to find the RFP is $\frac{the\ Total\ number\ of\ NP\ type\ used}{Total\ Number\ of\ Nominal\ group} \times 100$

Second, I determined whether or not there were some differences in the use of the pre-modified head type from the descriptive data. The noun groups were divided into four degrees of complexity: head, pre-modifier, post-modifier, and post-modified head.

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Third, to answer the second research question, an automatic computational tool was employed to calculate the NP complexity structures present in students' written texts. The study used the L2 syntactic complexity analyser (L2SCA) developed by Lu (2010) to automatically compute three measures of overall NP complexity for each text in the corpora.

Analytical Procedure (Lu, 2010)

Lu (2010) L2 Syntactic Complexity Analyzer was used to compute three overall noun phrase complexity measures for each text in the three data (from Levels: 100, 200 & 300). The three measures include a length-based metric of NP Complexity – mean length of clause (MLC), and two specific NP Complexity metrics – number of complex nominal per clause (CN/C) and number of Complex nominal per-T-Unit (CN/T). The analyzer consists of five types of syntactic complexity measure (altogether 14 measures): length of the production unit, sentence complexity, subordination, coordination and particular structures. Since students at the CoEs are advanced writers/Learners, the data had few linguistic problems in terms of grammatical errors, hence, the system's ability to produce meaningful results.

Therefore, each text in the three data were put into the analyzer. The analyzer processed the individual text for each data and saved in a folder. The inputs consisted of plain text without any form of annotation. The L2SCA segments the input text into individual sentences tokenized and part-of-speech (POS) tagged using parser. The parsing process generates a sequence of parse trees. The L2SCA asks Tregex (Levy & Andrews, 2006) to retrieve and count the production units and syntactic structures according to Tregex patterns

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manually defined for the units and systems. Then, the L2SCA calculates the fourteen syntactic complexity indices based on the counts by Tregex.

Lu (2010) reported a degree of system-annotator reliability for identifying the production units and syntactic structures involving the fourteen measures, with frequency (F) – scores ranging from 830 for complex nominal to 1000 for sentences. The complexity scores computed by the annotators and the system also achieved a strong correlation ranging from 834 for CP/C to 1000 for MLS. According to Lu (2010, p. 483), "Complex nominal comprise (i) nouns plus adjective, possessive, prepositional phrase, relative clause, participle or appositive, (ii) nominal clauses and (iii) gerunds and infinitives in subject position". For this study, the first component has relevance for complex noun phrases.

After calculating the three measures for each text in the three data, the results of the three measures were sent to ANOVA for statistical analysis. The Post-Hoc analysis using Games – Howell test was employed to find significant differences in the three measures between the three data from Levels 100, 200 and 300 at an alpha level of 0.05.

Potential Limitations of the Study

Although there were several steps to maximise the reliability and validity of the measurement used in this study, there were still some potential limitations associated with the design. One of such challenges is the single topic used for all students. This rather controlled students on content instead of allowing them to explore various topics to make their own choice. In my view, extraneous circumstances may have prevented some students from performing

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their best just as variables such as motivation and interest may have contributed to the anticipated use of NP structures in writings.

Again, timed forty-five minutes conditions may have produced anxiety for some students (Kroll, 1990) which was also beyond my control since most of the data were collected during teaching periods. Hence, in order not to take much time of students and tutors, it may have produced some anxiety on students to finish their write-ups within the stipulated time.

Furthermore, there were potential limitations associated with the accuracy of data collection, entry and analyses because of the multiple procedures used: coding, content analyses for the feature of a noun phrase, typing and analyses of both descriptive and inferential results. Although such limitations were catered for by carefully reading and matching typed documents with students' written texts to represent a true data collected, this act reduced but did not totally eliminate the limitations of accuracy of data collection. Colleagues were employed to double-check data collection and entry on discipline and inferential data collection. It could also not be ruled out that occasional errors may have occurred due to the complex dual nature of this research study data analysis.

Finally, text size could be another limitation because students' production of writing under timed conditions yielded texts that varied in word length but did not exceed 200 words. Students' writing did not have two words or were not selected for the study.

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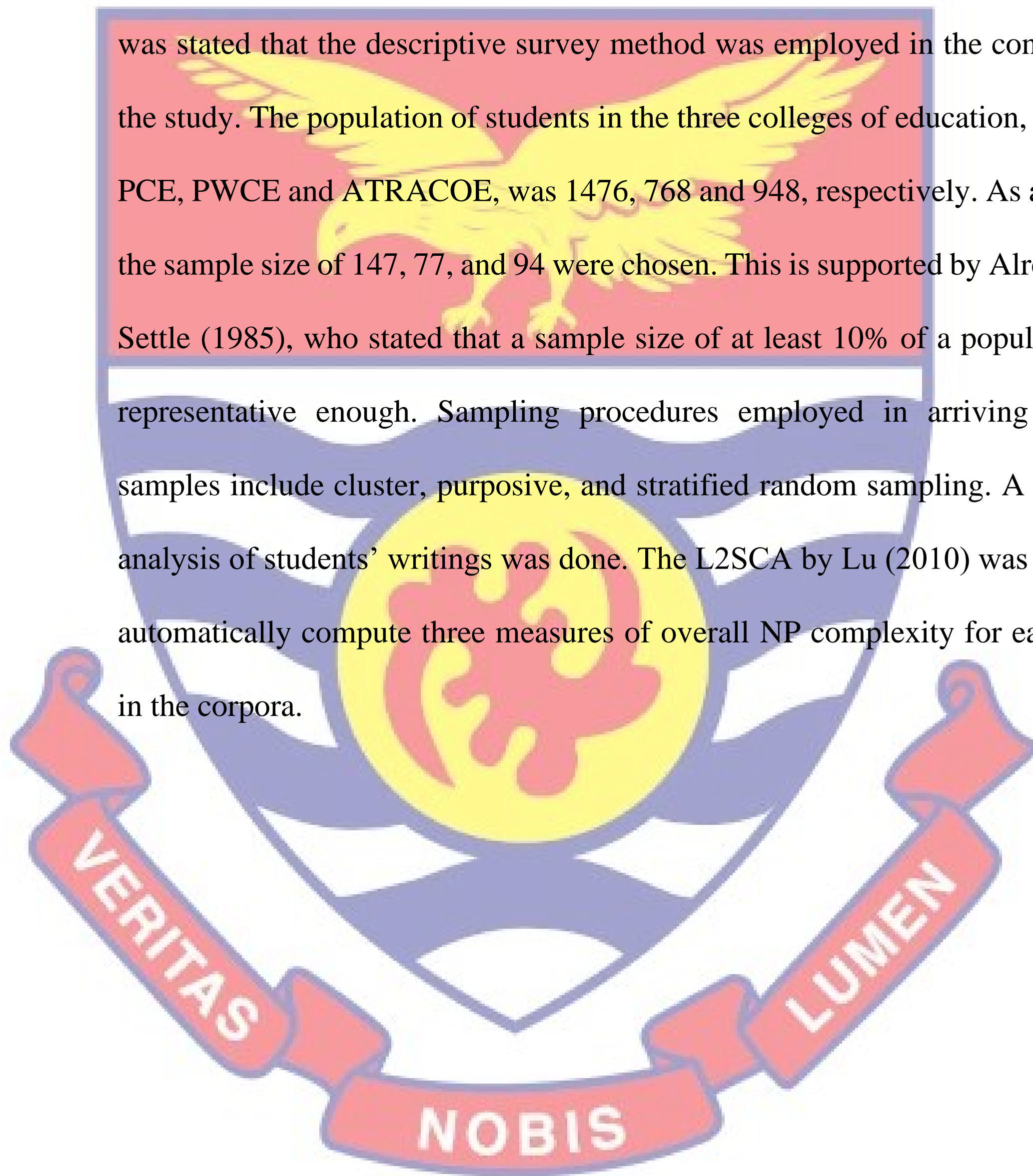
Chapter Summary

The methods and procedures used in conducting the study were discussed in this chapter. The discussion covered issues like the research design, population and profile of the colleges selected, sampling procedure and size, sources of data and data collection method, and the data analysis procedure. It was stated that the descriptive survey method was employed in the conduct of the study. The population of students in the three colleges of education, namely PCE, PWCE and ATRACOE, was 1476, 768 and 948, respectively. As a result, the sample size of 147, 77, and 94 were chosen. This is supported by Alreck and Settle (1985), who stated that a sample size of at least 10% of a population is representative enough. Sampling procedures employed in arriving at the samples include cluster, purposive, and stratified random sampling. A content analysis of students' writings was done. The L2SCA by Lu (2010) was used to automatically compute three measures of overall NP complexity for each text in the corpora.



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CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This study examines the structure of NPs in texts written by students of colleges of education in Ghana. This chapter presents the results and discussion. This discussion of results is aligned with the research questions. The chapter is made up of three sections. The first two sections of the chapter provide answers to the two research questions, and the final section of the chapter provides a summary of the chapter.

The NP Structural Types in Students' Writings

This section of the data analysis and discussion answers the first research question. The goal of the first research question was to determine which structural types of the NP were present in the texts of students in the CoEs in Ghana. According to De Haan (1989), syntactically, the English NP is a constituent with an internal structure containing a determiner, a modifier, and a head. However, based on Quirk et al.'s (1985) framework, the structure of the NP may be either simple or complex. According to Quirk et al., Simple NP is a noun phrase with or without modification. Those without modification include pronouns, proper nouns, non-count nouns, and plural nouns. The modifications are the determiners: definite, indefinite, zero determiner, demonstratives, indefinite pronouns, numbers, cardinal and ordinal, quantifiers and possessive determiners (Biber et al., 1999; Swan, 2005). The complex noun phrase type consists of at least an article (definite, indefinite, or zero) or noun with other closed-system items, a modifier (either premodifier or postmodifier), and an

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obligatory head (Quirk et al., 1985). Table 4 summarises the results on the types of noun phrases present in narrative texts of college students.

Table 4: The Frequency of the Types of Noun Phrase

Level	Simple NP	Complex NP	Total NP
Simple frequency			
Level 100	425 (28.0)	1088(72.0)	1513
Level 200	967 (46.0)	1130 (54.0)	2097
Level 300	517(32.0)	1097 (68.0)	1614
Relative frequency			
Level 100	425 (22.0)	1088 (33.0)	1513
Level 200	967 (51.0)	1130 (34.0)	2097
Level 300	517 (27.0)	1097 (33.0)	1614
Total	1909 (37.0)	3315 (63.0)	5224 (100.0)

Table 4 summarises results on the types of noun phrases present in texts of college students. The results for the simple frequency showed that out of the total 5,224 noun phrases (NPs) identified in the writings, 1,909 (37%) NPs were simple. This result contradicts studies on professional texts, which had no significant difference in NP types from corpus (Sharndama, 2015) but corroborated with findings from Obeng (2012) that there were differences in use with NP structural types with complex NPs dominating in students' writings.

In addition, the results showed that the noun phrases identified from the writings of Level 100, Level 200, and Level 300 students were 1,513 (29.0%), 2,097 (40.0%), and 1,614 (31.0%), respectively.

On the relative frequency of the simple noun phrase, the Level 100 students produced 425(22%), Level 200 students produced 967 (51%), and Level 300 students produced 517(27%). For complex NPs, Level 100 students

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produced 1,088 (33%), Level 200 students produced 1,130 (34%), and Level 300 students produced 1,097(33%).

Table 4, therefore, reveals that students combine both simple and complex noun phrases in their writings. The result agrees with Hillier (2004) and Akinlotan and Housen (2017), who believe that a combination of both simple and complex NPs could determine structural complexity. Some scholars like Norris and Ortega (2009), Beers and Nagy (2009), Hunt (1977) and Lu (2010; 2011) believe that syntactic complexity is one of the three indices of second language development including accuracy and fluency. Others like Beers and Nagy (2009) and Hunt (1977) have measured overall writing development of first and second language writing research to indicate linguistic maturity in academic literacy development.

Generally, observing from the relative frequency perspective, one may be tempted to conclude that Level 200s are more complex since they frequently use complex NPs (34.0%). Thus, the writings of Level 200s had the highest number of complex NPs. However, a critical look at the simple frequency tells that the Level 100s (72.0%) used complex noun phrases more than the Level 200s (54.0%) and 300s (68.0%). Thus, whereas 72.0% of the total NPs of the Level 100 were complex, 54.0% and 68.0% of the total NPs of Levels 200 and 300, respectively, were complex. It must be noted that the Level 200 students wrote more NPs (2,097) than Levels 300 and 100 students. Therefore, it is not surprising that relatively, they had more of complex NPs and simple NPs. However, this result cannot be used to conclude the overall complexity level of students' writing.

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Another plausible reason to wrongly conclude the complexity of students' writings is to consider only the descriptive data, relying on the component of complex NPs (pre and postmodifiers). The literature supports two types of complexities (semantic and syntactic complexity), where frequent use of premodifiers is associated with semantic complexity. In contrast, frequent use of postmodifiers is related to syntactic complexity. Our results do not interpret the types of complexity identified for the various levels. Therefore, in one instance, based on the frequency, the Level 100s had more complex NPs, and in another example, Level 200s had more complex NPs does not mean that the Levels 100 and 200s were more complex in their writing than the Level 300s.

Again, the complexity will depend on the number of premodifiers and postmodifiers, but not only just numerous premodifiers, found in their noun phrase (Biber, 1988; Biber & Gray, 2010, 2011). Therefore, Level 300 students' writings can have less premodified noun phrases than Level 100 and 200 students and may have used more postmodifiers in their writings than the Level 100 and 200 students. Put differently, even though the finding from the frequency figures shows that the Level 100s had more complex noun phrases in the simple frequency and 200s had more complex noun phrases in the relative frequency, premodifiers may dominate their complex noun phrases. And this could only be known after discussions on the results of the elaborated descriptive data on the types of modifiers used in students' writing in the sections ahead.

Therefore, until we know the proportion of premodifiers and postmodifiers in the noun phrases, we cannot be sure about the types of

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complexity of the writing of the students. The subsequent section will analyse the various features of the noun phrase structure and to further identify which of the three levels is complex in writing. The complexity of the students' writings will be clearer as we move descriptively to detail features of pre- and postmodifiers and finally from descriptive to inferential findings from syntactic complexity analyser overall complex written texts.

The overall quantitative findings from Table 4 indicate that the students' writings in the selected colleges of education in Ghana's Eastern and Greater Accra Regions (EAGAR) zone reveal that these students skilfully manipulated the NPs that constitute an essential textural feature of high-quality writing. This explains why students' writing used more complex NP structures, as the present study reveals.

Elaboration of the NP Structures

These sub-sections discuss results of the parts of NP structures in support of Research Question 1. The first to look at is determiners used. Determiners always precede the noun head and adjective functioning as the premodifier (Berk, 1995). Table 5 presents a summary of determiners.

Table 5: Frequency of Types of Determiners Used

Types of determiners	**Level 100**	**Level 200**	**Level 300**	**Total**
Zero Determiners	8	123	57	**188 (11.0)**
Definite Articles	172	305	201	**678 (39.0)**
Indefinite Articles	66	110	68	**244 (14.0)**
Demonstratives	23	23	24	**70 (4.0)**
Indefinite Pronouns	12	15	15	**42 (2.0)**
Cardinals	12	35	10	**57 (3.0)**
Ordinals	1	8	1	**10 (0.5)**
Possessives	109	170	111	**390 (22.0)**
Quantifiers	22	22	30	**74 (4.0)**
Total	**425**	**811**	**517**	**1753 (100.0)**

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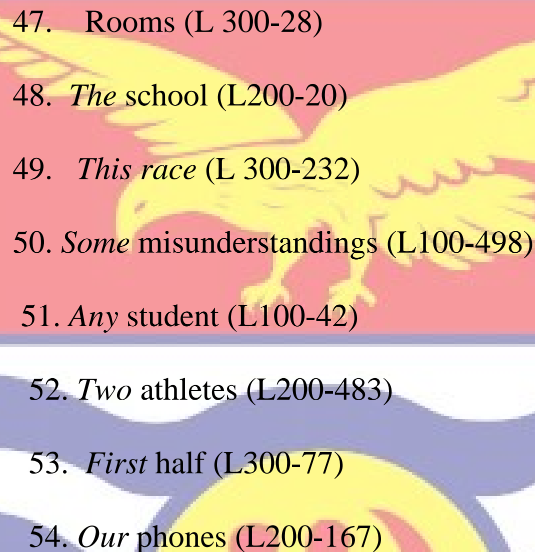
The data on the simple NP structures from all the writings from the students showed that the writings produced 188 zero determiners, six 678 definite articles, 244 indefinite pronouns, 70 demonstratives, 74 quantifiers, 42 indefinite pronouns, 50 numerals—thus, 40 cardinals and 10 ordinals—and 390 possessives. The examples below have the determiners italicised.



47. Rooms (L 300-28)

48. *The* school (L200-20)

49. *This race* (L 300-232)

50. *Some* misunderstandings (L100-498)

51. *Any* student (L100-42)

52. *Two* athletes (L200-483)

53. *First* half (L300-77)

54. *Our* phones (L200-167)

In the Examples above, Example (47) has no determiner (zero determiner). *The* (definite article), *this* (demonstrative), *some* (quantifier), *any* (indefinite pronoun), *two* (cardinal), *first* (ordinal), and *our* (possessive) are the determiners used in students' writings, as seen in examples (47)-(53) respectively.

In all, 1,753 determiners were used, with definite articles having the highest frequency of 678(39%). This result indicates that whatever students refer to in their texts are things known to them, whether stated previously in their writings or from general knowledge (Downing & Locke, 2002). Similarly, the frequency of the other determiners (zero determiners, indefinite pronouns, demonstratives, quantifiers, indefinite pronouns, numerals and possessives) was

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1,079 (64%). This shows that some determiners were used to identify or quantify the noun head in the noun phrase (Quirk et al., 1972).

The Use of Mono and Multiple Modifiers

The second is the use of modifiers. The data also recorded two types of complex noun phrases (CNPs). These are mono modifiers and multiple modifiers. Obeng (2012) borrowed the term mono modifier to represent complex noun phrases with a single modifier either at the premodification or postmodification level. In the examples below, the mono modifiers have been italicised:

55. They speculated rumours *of his death* (L100-115).

56. It was the most *memorable* event (L200-5).

57. The best *in my life* (L300-3).

In the examples above, *of his death*, *memorable*, and in *my life* are examples of mono modifiers of the NPs in Examples (55), (56), and (57) respectively. Also, multiple modifiers are those complex NPs with more than one modifier modifying a single head. The examples below have the multiple modifiers italicised:

58. The red lions *of the noble hall, which happens to be my hall* (L200-82).

59. My arrival *as a new student* (100-101).

60. The *most special* events *in my college* (L300-25).

In Example (58), the head noun, *lions,* has the modifiers *red, of the noble hall*, *which happens to be my hall,* which collectively functions as multiple modifiers.

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Table 6: The Use of Mono and Multiple Modifiers

Level	Mono Modifier		Multiple Modifier	
	F	%	F	%
Level 100	618	34.4	470	30.9
Level 200	637	35.4	493	32.4
Level 300	541	30.1	556	36.6
Total	**1796**	**100**	**1519**	**100**

Table 6 shows that out of the 3,315 modifiers, 1,796 were mono modifiers. Level 100 students produced 618 (34.4%); Level 200 students produced 637 (35.4%); and Level 300 students produced 541 (30.1%). Table 6 also present the frequency and percentage for the multiple modifiers used as 1,519. Level 100 students used 470, representing 30.9%; Level 200 students used 493, representing 32.4%; and level 300 students used 556, representing 36.6%. From Table 6, there is a closed gap in using both the mono and multiple modifiers. This implies that students' use of more Mono Modifiers demonstrates that vagueness is reduced as learners grow in age and level and increase in Multiple Modifiers through phrasal and clausal elements (Krashen, 1982). Hence, complexity goes with age and level.

Concatenated Modifiers and Embedded Modifiers/ Types of Multiple Modifiers

The third is the types of multiple modifiers. Another classification of complex NP modifiers under multiple modifiers includes phrases with concatenated and those with embedded modifiers.

Concatenated modifiers are two or more modifiers found in a noun phrase (NP) that modify the same head noun (Jucker, 1992; Quirk et al., 1985). For easy analysis, the complexity of the concatenated phrases has been grouped

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into levels: Level 1 has been catered for by *mono modifiers;* in Level 2, the concatenated modifier occurs with two modifiers which modify the same head noun as seen in examples (61), (62) and (63) below. In the examples below, the concatenated modifiers have been italicised.

61. The *saddest* day *in my college* (L100-50).

62. The auditorium *of the college for the program* (L200-31).

63. The *Regional* minister *who was the chairman of the programme* (L300-141).

Examples (61) - (63) illustrate NPs with two concatenated modifiers. In Example (61), *saddest* and *my college* come together to modify the noun *day*. Also, in example (62), the different modifiers that change the *auditorium* are *the colleges* and *the program.* Similarly, in Example (63), the adjective, *Regional,* and the relative clause, *who was the chairman of the programme* respectively, premodify and post-modify the noun, *minister.* The data also provided concatenated modifiers of three modifiers of an NP. In Level 3, the concatenated modifiers occur with three modifiers that modify the same head noun, as seen in Examples (64), (65), and (66) below. In the examples below, the concatenated modifiers have been italicised:

64. The people *of the migration of Ewes from Notsie* in the Republic of Benin (L100-656).

65. A *long* queue *at the entrance of the gate* (L200-683).

66. The *male soccer* team *is in strokes hall* (L300-1002).

In Example (64), the different modifiers modifying *people* are *of the migration*, *Ewes, Notsie,* and *the Republic of Benin.* Examples (64), (65) and (66) illustrate NPs with three concatenated modifiers. The data also provided concatenated

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modifiers of four or more modifiers of an NP. In Level 4, the concatenated modifier occurs with four or more modifiers that modify the same head noun, as seen in Examples (67), (68) and (69) below. In the examples below, the concatenated modifiers have been italicised:

67. The *new* construction *of the road from Juaboso to Edwana* (L100-634).

68. The *memorable* day *that I will never forget in my entire life in Abetifi Presbyterian College of Education* (L200-313).

69. The *New Juaben* Municipal *in the Eastern Region of Ghana* (L300-626).

Examples (67)-(69) illustrate the NPs with concatenated modifiers at four or more levels. In Example (69), the different modifiers that modify the head noun *municipal* are *new, Juaben, in the Eastern Region,* and *Ghana*. Table 7 summarises the frequency and percentage of noun phrases with varying numbers of concatenated modifiers.

Table 7: NP with Two, Three or Four and More Concatenated Modifiers

Level	**Level 2**		**Level 3**		**Level 4**		**Total**
	F	**(%)**	**F**	**(%)**	**F**	**(%)**	
Level 100	323	42.8	80	38.6	23	25.8	**426**
Level 200	218	28.9	89	43.0	55	61.8	**362**
Level 300	214	28.3	38	18.4	11	12.4	**263**
Total	**755**	**100.0**	**207**	**100.0**	**89**	**100.0**	**1051**

Table 7 shows the prevalence of NPs with concatenated modifiers. From Table 7, it can be seen that 1,051 NPs had concatenated modifiers, representing 42.8 of the multiple modifiers. This means that NPs with concatenated modifiers were pervasively used in students' essays as compared to NPs with embedded

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modifiers. Out of the 1,051 concatenated modifiers, 755 were used at Level 2. At Level 2, 323 (42.8%) were used by Level 100 students, 218 (28.9%) concatenated modifiers were used in Level 200 essays while 214 (28.3%) concatenated modifiers were used in Level 300 students' essays. Also, at Level 3, there were 207 NPs with three concatenated modifiers. Out of the 207 Level 3 concatenated modifiers used, 80 (38.6%) were produced in Level 100 students' essays, 89 (43%) were made in Level 200 students' essays, while 38 (18.4%) were produced in Level 300 students' essays. In the instance of NPs with four or more concatenated modifiers, 89 were used. Level 100s produced 23 (25.8%), Level 200s produced 55 (61.8%), and Level 300s produced 11 (12.4%). Concatenated modifiers were highly used in the writings (1051, in total) as compared to the embedded modifiers. Also, there were more concatenated modifiers with two modifiers than those with three and four or more modifiers. This implies that students were explicit in describing their head nouns and, hence, semantically were straight forward in describing their NPs to avoid the dangers of stretching with numerous modifiers, which pack more meanings into the head to create ambiguity (Cullip, 2000). As students progress from one level to another level, they reduce the vagueness in their writings and become explicit and poised for academic writings. This has strengthened the initial argument on age and level as determinants of the high frequency of linguistic resources (Krashen, 1982).

Number of Noun Phrases Embedded within Modifiers

Another type of multiple modifiers of the complex NP used is the embedded modifier. Embedded modification occurs when the modifiers in the clause do not modify the head word except one. If one of the modifiers does

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not modify the head noun in a noun phrase structure, it is said to be at Level 1. Also, if a noun head is modified by only one modifier directly while the other two modifiers do not modify the head but the other modifiers in the clause, it is called Level 2 embedded modifiers. At Level 3, out of the four modifiers, only one modifies the head noun. Then at Level 4, out of the four or more modifiers, only one modifier modifies the head; the four or more modifiers do not modify the head directly but other modifiers in the clause. Table 8 provides the number of NP modifiers that occurred in a clause structure but did not modify the heads of arguments in the clause structure. In the examples below, embedded modifiers at Levels 2, 3, and 4 are italicised:

70. The look *on the speaker's face* when the light went off. (L100-73).
71. The program *where the best student in each various class* (L200-68).
72. A lot of discussions *with our families and friends* from outside the school (L300-13).

In Example (71), the head noun, *program,* is modified by only *where the best student*. *In each various class,* the other modifier does not modify the head noun *program,* but it modifies *students*, making it an embedded modifier.

Table 8: Number of Noun Phrases Embedded within Modifiers

Level	**Level 2**		**Level 3**		**Level 4**		**Total**
	F	**(%)**	**F**	**(%)**	**F**	**(%)**	
Level 100	57	21.8	52	34.0	15	28.3	124
Level 200	76	29.0	39	25.5	16	30.1	131
Level 300	129	49.2	62	40.5	22	41.5	213
Total	**262**	**100.0**	**153**	**100.0**	**53**	**100.0**	**468**

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Table 8 reveals a contrasting result to that of Table 7. While Table 7 indicated that Level 100 students used the highest concatenated modifiers (40.5%), Table 8 paints a different picture, with Level 100 students using the least embedded modifiers 124 (26.4%) and with Level 300 students using the highest embedded modifiers (213) at Levels 2,3 and 4. With a total of 468 (30.8%) multiple modifiers, Level 100 students used 124 (26.4%), Level 200 students used 131 (27.9%) while Level 300 students used 213 (45.5%). This suggests that the more learners' English proficiency develops in academic progression, they tend to rely on NP with embedded modifiers (Biber et al., 2011; Halliday, 1993; Parkinson & Musgrave, 2014). Students used more phrasal and clausal elements in order to be more economical and concise. However, it is not surprising to see Level 300 students using the highest frequency to confirm age and level as indicator of complexity (Krashen, 1982).

The use of complex modifiers supports the assertion that complex NPs are very frequent in academic English and are linked with grammatical complexity in written texts (Biber & Gray, 2016; Biber et al., 1999). Grammatical complexity can be indicated by the presence of clausal and phrasal features. However, in academic texts, using NPs to package a good amount of content in fewer words means an economy and efficiency of expression (Biber & Gray, 2016; Biber et al., 1999). Students in CoEs made use of more mono modifiers (1,796), representing 54.1% of the total modifiers used, and this was significantly seen in Level 200 students' writings (35.4%)

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Structural Types of Pre-modification and Post-modification in Noun Phrase

This sub-section analyses the structural types of complex NPs students use in their essays in response to Research Question 1.

Premodification

Biber et al. (1999), Leech and Svartvik (1975) and Quirk et al. (1985) explain premodifiers as all the words that come before the head noun. The data collected indicates that pre-modifiers usage was the most frequent. With a total of 5,519 complex NPs, 3742 (67%) had pre-modifiers. This finding contradicts Jucker's (1992) finding that there is some form of equalisation of premodifiers and postmodifiers, such that the variation is not vast. However, studies on the narrative texts of students in CoEs in Ghana indicate the huge difference between premodifers and postmodifiers. The differences in findings can, however, be attributed to the differences in genres studied. While Jucker studied syntactic variation in British newspapers, the present study focuses on students' narrative essays. The determinant type of premodification consists of complex premodifiers modifying the head word. From the data, there are differences in the descriptive data, as seen in Table 4 (p. 80), and a significant difference between the descriptive data and the inferential data by the syntactic complexity analyser (see page 104). Examples of complex premodifiers are shown below:

73. The *long-awaited annual SRC week celebration* float (L100-4).

74. I have witnessed <u>*numerous memorable* events </u>(L200- 26).

75. My *entire College* life (L300- 41).

In Examples (73), (74), and (75), the head nouns are premodified by more than one modifier, making the structures consist of complex modifiers. In Example

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(73), the head, *float* is modified by *long, awaited, annual* and *SRC, week and celebration.* Also, in Example (74), the head noun, *events,* is premodified by *numerous* and *memorable*. In Example (75), the head noun, *life*, is modified by *entire* and *college*. Nevertheless, modified premodifiers were analysed separately as seen in Examples 76, 77 and 78, since complex premodifiers in structures such as Examples 79, 80 and 81 normally generate ambiguity or uncertainty (De Haan, 1989; Quirk et al., 1985). Though complex premodifiers are characterised by a high lexical density (Halliday & Martin, 1993), they may lead to semantic ambiguity. Semantic ambiguity makes it hard for readers to understand and for writers to use correctly. Such uncertainty was taken care of in this study, as the premodifiers were analysed after the NP structures had been lifted from the essays and treated out of contexts. However, the context helped to identify the ambiguity in such structures.

Table 9 below indicates the frequency distribution of the use of premodification and postmodification by the students.

Table 9: Frequency of Premodifiers and Post-modifiers Usage

Level	Premodification		Post-modification	
	F	%	F	%
Level 100	1164	31.1	511	28.7
Level 200	1601	42.8	563	31.7
Level 300	977	26.1	703	39.6
Total	**3742**	**100**	**1777**	**100.0**

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Table 9 presents a summary of the use of premodifiers and postmodifiers. Table 9 shows that students used more premodifiers than postmodifiers. This result validates Liu and Li (2016) findings where students' argumentative texts revealed underdevelopment of postmodifiers. This has strengthened the

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argument that the genre types does not matter much but the aim of the genre in studying syntactic information of a text (Kinneavy, 1971).

However, Level 300 students used more complex postmodifiers and they were at a Mean of 3.49. Out of the total of 3,742 (68%) pre-modifications, Level 200 students used 1,601 (43%), as compared to level 100 students' 1,164 (32%) and level 300 students' 977 (26%). Though students at Levels 200 and 100 are seen as novice writers at this level, they were able to pack more and more meanings into the noun head in order to bring clarity, and that is a sign of progression to mature writers. The premodifiers consisted of ellaborated structures such as attributive and prepositional phrases and, therefore, allow content to be condensed into the structure (Biber & Gray, 2010).

Complexity at the level of premodification, unlike at the level of postmodification, relates more to semantics (meaning) than syntax (structure). An example of premodification relating to semantics is seen in Example 74. The head *event* is modified by the adjectives, *numerous* and *memorable* which are phrases and this is a compressed structure densed with meaning. It, therefore, requires increased processing effort to remember all the elements in the front of the head noun until a head is reached, and the interpretation of such premodified nouns depends on the readers' background knowledge (Biber et al., 1999; Cullip, 2000; Parkinson & Musgrave, 2014). Complexity at postmodification relating to syntax can be seen in Example 109. The head *occasion* is post-modified by the stretched structure, preposition phrase *of the Students Representative Council*. Preposition phrase elaborates the grammatical relationship between the head and its modifier.

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Therefore, while Level 200 students used the highest frequency of premodifiers in their writings, and Level 300 students used the highest frequency of postmodifiers in their writings. Thus, in my view, Level 200 students' use of highest frequency of complex premodification shows their complexity at the semantics level more than Levels 300 and 100 students. Level 300 students' use of highest frequency of complex postmodification indicates their complexity at the syntactic level more than Levels 200 and 100 students (Biber & Gray, 2010). This implies that Level 300 students were explicit, removed syntactic ambiguity with more elaborated structures such as clausal postmodification and non-clausal postmodification, elaborating the relationship between the head noun and its modifiers (Biber & Gray, 2010).

Properties of Premodifiers

The features of premodifiers in the data were analysed under three dimensions: simple vs. complex dimension, open system dimension, and the slot dimension.

Simple vs. Complex Dimension

Simple premodifications are realised by only one modifier element. The modifier may either be preceded by determiners or not since determiners were not analysed as part of Quirk et al.'s (1985) framework on premodifiers. The data indicates that the simple premodifiers were mostly adjectives or nouns. Examples from the data are given below:

76. A *new* day has begun (L100-2).

77. The *academic* counselling (L200-191).

78. There was *poetry* recitals (L300-198).

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Examples (76)-(78) above show the use of simple premodification in the data analysed. In Example (76), the adjective, *new,* which is preceded by the indefinite article, *a,* pre-modifies the noun, *day.* In a similar way, *academic* and *poetry* premodify *counselling* and *poetry* in Examples (77) and (78) respectively.

Complex premodifications are premodifications which have more than one modifier. Examples in the data are as follows:

79. The *male soccer* team (L100-277).

80. The *Ohemaa stokes* competition (L300-63).

81. The *Sunday church* service (L200-167).

In Example (79) above, *males* and *soccer* constitute the modifying elements. Similarly, *Ohemaa* and *stokes* form the premodifying part in Example (80). The same applies to Example (81) where *Sunday* and *church* pre modify the noun, *service.* In all these examples, more than one element constituting the premodifier, making the premodification a complex one. Table 10 shows the distribution of premodifiers used by students:

Table 10: The Use of Simple Pre-modifiers and the Complex Pre-modifiers

Level	Simple Premodifiers		Complex Pre-modifiers		Total
	F	%	F	%	
Level 100	490	35.0	674	28.8	1164
Level 200	562	40	1039	44.4	1601
Level 300	352	25.0	625	26.7	977
Total	**1404**	**100.0**	**2338**	**100.0**	**(3742)**

With a total of 3,742 pre-modifications, 1404 (37.5%) were simple pre-modifiers and 2338 (62.5 %) were complex pre-modifiers. This means that complex premodifiers characterised students' writing rather than simple

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modifiers. The implication is that students use more complex language than simple language because, according to Carrio- Pastor (2008), the more complex a text is, the higher the number of premodified structures that can be found, and such text becomes difficult to comprehend. Complexity at the level premodification, unlike at the level of postmodification, relates more to semantic than syntax. It, therefore, requires increased processing effort to remember all elements in front of the head noun until the head noun is reached, and the interpretation of such premodified nouns depends on the reader's background knowledge. Structures in simple premodification are condensed both lexically and informationally, as found in a study by Biber and Gray (2010). Simple premodification allows regular editing and revising, mostly in academic writing. Whereas Level 200 students used 562 (40%) simple premodifiers, Level 300 students used 352 (25%) and Level 100 students used 490 (34.9%). This is again reflected in the use of the complex premodifiers, where Level 200 students dominated their usage. With complex pre-modifiers, Level 200 students used 1,039 (44.4%), Level 100 students used 674 (28.8%), and Level 300 students used 625 (26.7%).

Table 10 also indicate that Level 200 students, who are at the centre of the maturation, used more complex premodifiers than Level 100s and 300s. Though Quirk et al. (1985) argue that premodifiers are semantically less explicit, it cannot be the same in this situation, since the contextual information available helped avoid ambiguity. We can say the Level 200 students were more explicit by packing meaning into modification. They used more language as premodifiers to their head nouns in their quest to be more explanatory. This clearly indicates that Levels 100 and 200 used more complex modifiers as

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premodifiers. This result supports Biber et al.'s (1999) findings that in academic writing, little complexity is expressed most often as premodifiers by learners, which is mostly acquired and applied in their writing.

The use of more premodifiers by student writers in CoEs demonstrates the students' ability to share information to readers. The content included less communicative dynamism, (variation of communicative value as between different parts of an utterance) than new information (Halliday, 1985). This skill requires much effort to recall and identify all the elements before the head noun to arrive at the head noun. Therefore, it can be interpreted that the Level 200 students and, by extension, all levels (300, 100 students) use more complex premodification to indicate their complexity at the semantics level compared to their use of limited postmodification to show their complexity at the syntactic level.

Open System Dimension

Table 11 presents the types of open class premodifiers used in the data and its frequency distribution.

Table 11: The Use of Open Class Pre-modifiers in Noun Phrases (F = 3886)

Level	Level 100		Level 200		Level 300		Total	
	F	%	F	%	F	%	F	%
Adjective	462	28.7	674	41.9	473	29.4	1609	47.5
Noun	403	29.8	605	44.7	346	25.5	1354	39.9
Participle (Verbs)	76	30	107	42	70	28	253	7.4
Genitive (Possessives)	54	53.4	43	42.6	4	4	101	2.9
Compound Nouns	15	21.7	36	52.2	18	26.1	69	2.0

Table 11 presents the various open class premodifiers used in the data. The discussion is presented according to the order presented in Table 11 above.

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Adjectives

In terms of premodifiers used in the complex NPs, the most preferred premodifiers found are adjectives, which recorded 1,609 (48%) out of the total open class premodifiers used in the entire data. According to Biber et al. (1999), higher adjectives in texts result from many different semantic fields, such as size, time, age, frequency, and effective evaluation. Hence, as there are different adjectives, students explored the various types in their narrative texts to describe entities. There was a significant difference in adjectives as premodifiers across the levels. With 1,609 adjectives used as premodifiers, Level 200 students used 674 (41.9%). Thus, Level 200 was the group that used the highest number of adjectives as premodifiers. In terms of frequency, there was not much difference between Level 300 students' and Level 100 students' use of adjectives as premodifiers. Level 300 students used 473 (29.4%) and Level 100 students used 462 (28.7%). Below are examples of adjectives used as premodifiers in the data:

82. Those *eligible* Ghanaians (L100-1190).

83. The *great* gathering (L200-280).

84. The *unskillful* players in ATRACOE (L300-468).

The adjectives *eligible, great,* and *unskilful* premodify the nouns *Ghanaians, gathering,* and *players,* respectively.

In Example (82), *eligible*, a descriptive and general adjective, was used to describe the event of an SRC election. In context, the writer, in describing the event of the SRC election, equated it to the electoral system in Ghana where people who are *eligible* to vote are those who are qualified by the constitution. Still, during the SRC election, students were allowed to vote based on students' identification card. Example (83), *great*, is also a descriptive and a general

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adjective. *Great* was used attributively to qualify the *gathering*, that is, matriculation at PCE, to describe its features which made it distinct from other gatherings in the college. Examples of attributes include the presence of tutors, the principal, the guests, and the use of ceremonial uniforms by students. In Example (84), the descriptive and general adjective, un*skilful*, was attributively used to describe players for the fresher's games at ATRACOE. In all, the three adjectives, *eligible,* fantastic and *unskilful* were used as non-restrictive adjectives to the head nouns (cf.Payne, et al., 2010). The use of the adjectives as premodifiers in high frequency in written genres demonstrates a heavy reliance on NPs to present information (Biber et al., 1999). They are common in academic prose, and in the present study, students, especially Level 200 students (41.9%), used more adjectives to classify the head noun. It was evident that the non-restrictive type of adjectives was predominantly used across the levels, as seen in Examples 82, 83 and 84.

Nouns

From the data, the second most common type of open class premodifier is noun premodifiers. Nouns as premodifiers recorded 1,354 (39.9%) in the data. There was a difference in the students' use of nouns as premodifiers. Level 200 students used 605 (44.7%), Level 300 students used 346 (25.5%), and Level 100 students used 403 (29.8%) of nouns as pre-modifiers. Below are examples of nouns used as premodifiers in the data:

85. The *school* uniforms used at PWCE (L100-1186).

86. That *Wednesday* afternoon has a history in PWCE (L200-183).

87. The much-awaited *movie* night in ATRACOE (L300-942).

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Examples (85) – (87) demonstrate nouns as premodifiers in the data analysed. In these examples, the nouns, *school, Wednesday,* and *movie*, premodify *uniforms, afternoon,* and *night,* respectively. In Example (85), the classifying non-restrictive noun, *school*, narrow the denotational class of the head to a sub-set denoted by the head, *uniform*, as the type of dress worn by students during the freshers' week celebration at PWCE. The common noun, *school*, specifies the type of uniform used on that special occasion of freshers' week. In Example (86), *Wednesday*, a proper defining noun, provides information about the specific day of the event, matriculation at PCE. They include the affirmation of the matriculation oath, the cheering from their seniors, and the presence of tutors and guests. In Example (87), the noun, *movie,* a classifying common noun, restricts the night as a night for movies on the first Sabbath day at ATRACOE.

Noun modifiers are extremely compressed in terms of packaging information. Biber and Gray (2010) reveal that noun modifier is a characteristic of expert writing, and they occur more frequently in specific topic sub-corpus. It has more specialised meaning, which demands specialised knowledge, in the specific topic sub-corpus than in general topic sub-corpus (Biber & Gray, 2010).

Compound Nouns

Noun sequences, compound nouns, and a sequence of noun modifiers were also realised in the data. It was the least type of open class premodifiers. In the data, 69 (2%) of noun sequences were used by students. Level 100 students used 15 (21.7%), Level 200 students used 36 (52.2%), and Level 300 students used 18 (26.1%). Examples are seen below:

88. The *school's entertainment* committee (L100-286).

89. The *aerobics and soccer* match (L200-500).

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90. The *hall gyama* competition (L300-55).

The examples above show the use of noun sequences and compound nouns in the data. In Example (88), *school's* and *entertainment* form a noun sequence that premodify the noun, *committee.* In Example (89), *aerobics* and *soccer* form a compound noun that modify *match*. In a similar vein, *hall* and *gyama* constitute a noun sequence modifying *competition* in Example (90).

Once again, Level 200 students used more (52.2%) of the compound nouns as premodifiers to the head noun than Level 300 students and Level 100 students. The compound nouns (noun + noun sequence, e.g., fire report, air force machines etc.) and a series of noun modifier + noun head appear to be a challenge during the analysis since the difference between noun in sequence and nouns used as modifiers relates to both orthography and stress placement. Hence, to solve this challenge, these concepts (compound nouns and nouns in sequence) were treated the same. Noun premodification has shown to serve the function of adding detailed information to a noun head to make the phrase more economical and faster to read (Biber & Gray, 2010, 2016). Thus, since they are compressed, one does not require more time to decode them in a structure.

Participle

Participles (both present ending -ing and past ending- ed, en) constitute another open class premodifier type used in the data. Participles recorded 253 (7.4%) of the total open class items used as premodifiers. The examples below were found in the data:

91. The s*hocking* announcement (L100, 223).

92. The *invited* pastor (L200-226).

93. The *continuing* students (L300-313).

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In examples (91) and (93), we have the -ing participials, *shocking* and *continuing,* premodifying *announcement* and *students.* In Example (92), the -ed participial, *invited,* pre-modifies the noun, *pastor.*

Out of the total of 253 participles found in the data, Level 200 students used 107 (42%), Level 300 students used 70 (28%), and Level 100 students used 76 (30%). Though participles are rare in English (Biber et al., 1999), they show a permanent feature of referent (Quirk et al., 1985). This implies that in students' narrative writing, they modified their subjects mainly at the initial stage. However, Level 200 students, with the highest frequency of 107, used participles to alter their head nouns at the premodification stage. Students explored language acquired at any given situation to bring variety and beauty to their writings (Hocket, 1958). Students as second language learners used language for multiple purposes, such as providing a secondary function for verbal elements as premodifiers.

Genitives

Genitives recorded 101 (2.9%) of the total number of open class modifiers. Level 100 students used 54 (53.4%), Level 200 students used 43 (42.6%), and Level 300 students used only 4 (4%). The following examples were found in the data:

94. The *children's* ward (L100-1061).
95. The *athletes'* morale (L200-118).
96. The *principal's* children (L300-93).

In Examples (94) - (96), *children's, athletes'* and *principal's* are genitives that premodify the nouns *ward, morale*, and *children*, respectively.

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In these instances, common and proper nouns are combined with the suffix-‘s to specify a reference to the head noun, usually to indicate possession or clarify its group or type. Usually, when it specifies another noun, its function is a determiner, but it functions as a premodifying adjective if it classifies a noun. They are less frequent in academic prose (Biber et al., 1999) and students at all levels in this study used only a few of them (2.9%) compared to the other open class items.

The Slot Dimension

This research followed Quirk et al.'s (1985) distinction between the four premodifier slots – precentral, central, postcentral, and pre-head. I, therefore, analyse and discuss the slot dimensions used in the data in detail. Table 12 presents the frequency distribution of the various premodification slots in the data.

Table 12: The Use of Pre-modification Slot Dimension Level Precentral

Level	Precentral	Central	Postcentral	Pre-head	Total
Level 100	162 (30.0)	205 (33.5)	252 (34.0)	288 (25.0)	907(29.6)
Level 200	210 (39.0)	273 (44.6)	368 (49.0)	497 (43.0)	1348 (44.0)
Level 300	168 (31.0)	133 (21.7)	131 (17.4)	377 (32.0)	809(26.4)
Total	**540 (17.6)**	**611 (19.9)**	**751 (24.5)**	**1162 (37.9)**	**3064 (100)**

In the subsequent sub-sections, I offer a detailed discussion on the data presented in Table 12 above.

Precentral Position

The precentral position is occupied by non-gradable adjectives such as intensifiers, amplifiers, and down-toners. They form 17.6% of all premodifiers in this dimension from the data. Below are examples from the data:

97. A *considerable* price afterward (L100-198).

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98. The *entire* family (L200-272).

99. An *entire* school body (L300-201).

In Examples (97)-(99), we have the non-gradable adjectives, *huge*, and *entire* premodifying the nouns. These adjectives occupy the precentral position. The data shows that the peripheral adjectives used at the precentral slot were the least.

Central Position

The second slot, central position, is occupied by the most typically adjectival elements that satisfy all the four specification of adjectival status (e.g., *intelligent, powerful*, and *slow*). Such adjectives have all the features of adjectives outlined by Quirk et al. (1985). Examples from the data are given below:

100. A *big* vacuum in our hearts (L100-47).

101. The *happiest* day (L200-307).

102. A *big* program (L300-329).

As Examples (100)-(102) show, the adjectives, *big, happiest,* and *big* respectively premodify the nouns, *vacuum, day* and *program*. These adjectives have all the features of adjectives: admit intensifiers, can be compared and can be placed at alternative positions of adjectives. Therefore, they are central adjectives.

The central and the pre-head positions are the most important positions for the premodifiers. The central position was made up of 611 (19.9%) of the total premodification slots. There is a clear indication of ascendancy in the slot dimensions, as it moves towards the head. There is a significant rise in

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frequency of usage from precentral (17.6%) to central (22%). The data shows that the Level 300 students used the least (21.7%).

Post-central Position

From the data, it is realised that the postcentral position is equally important and used by students in CoEs. Adjectives that emerge in this position are predominantly descriptive adjectives. Such adjectives cannot be graded or intensified compared with adjectives that appear at the central position. From the data, a total of 751 (24.5%) of the premodifiers were used in this position. Level 100 students used 252 (34%), Level 200 students used 368 (49%) and Level 300 students used 131 (17.4%) of them. Examples from the data are below:

103. *Then,* the *seizing* opportunity was jubilated after the power-cut (L100-67).

104. The *teaching* staff was present (L200-277).

105. An *enlightening* thought of sermon from the president (L300-72).

Examples (103)-(105) illustrate postcentral adjectives in the data analysed. In these examples, *postcentral adjectives are seizing, teaching, and enlightening*, premodifying the nouns *opportunity, staff,* and *thought*, respectively.

Pre-head Position

Comparatively, the pre-head position appears with the highest frequency in the data. It accounted for 1,162 (37.9%) of the total number of premodifiers in the slots. According to Jucker (1992), this position is a reciprocal category of central and post-central positions. The difference between the two categories is that while the adjectives used are largely descriptive, the premodifiers that occur

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in the pre-head position are classifying premodifiers, including adjectives, nouns, or names. Examples used in the data are presented below:

106. There was a *Science* seminar (L100-62).

107. *The College* auditorium was filled with students (L200- 274).

108. The *school* environment (L300- 325).

In Examples (106)-(108) above, *science, college* and *school* are premodifiers that occupy the pre-head position. The respective nouns premodify *seminar, auditorium,* and *environment in these examples.*

From Table 12, it is shown that there is a significant difference in the use of premodifiers in the pre-head position by the three levels of students. Level 100 students used 288 (25%) of all premodifiers in this slot, Level 200 students used 497 (43%), and Level 300 students used 377 (32%). The data on premodification indicated that students at the CoEs demonstrated a varied and higher proportion of descriptive modifiers.

Post-modification in NP

This segment presents the data on the varied types of postmodifiers students use in CoEs. The classification of postmodifiers follows the syntactic principles of consisting of stretched elements such as phrasal and clausal modifiers (Biber et al., 1999). To Jucker (1992), as a rule, postmodifiers are syntactically more complex and explicit than premodifiers. In support of this argument raised by Jucker, I add that the study of language must involve the assessment of lexical, grammatical, and textual features. Some of these measures include overall text length (Chalk, Hagan-Burke, & Borke, 2005), number of words per clause and number of clauses per T- Unit (Beers & Nagy, 2011), mean length of T-Unit, and the use of nominal, relative and adverbial

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clauses. However, this study is aligned with the belief that writing quality is one of the indices that differentiate different proficiency levels, and syntactic complexity is one of the components used to determine language development (Wang & Slater, 2016).

Therefore, the data in Table 9 of page 93 show that the essays written by students in CoEs have more premodifiers. With a total of 5,519 modifiers found in the data, 3,742 (68%) were pre-modifiers whereas 1,777 (32%) were post-modifiers. There exists high proportion of premodifiers over postmodifiers, a sharp contrast to Jucker's (1992) observation of no remarkable distinction between the two in the British newspaper.

Though postmodification was syntactically more ellaborated and explicit than premodification, it was the least used in students' writings (Biber & Gray, 2010; Biber, Gray & Poonpon, 2011). Results from Table 9 (p.79) show that students varied in their language use. About the distribution of postmodifiers across the three levels, Level 100 students used 511 (28.7%), Level 200 students used 563 (54.5%), and Level 300 students used 703 (39.6%). Below are examples of NPs with postmodifiers used in the data:

109. The occasion *of the Students Representative Council (SRC) election day* (L100-18).

110. The students *of 2015/2016 academic year* (L200-6).

111. The euphoria *in the hall* (L300-33).

Examples (109) – (111) show prepositional phrases as postmodifiers in the noun phrases analysed. In example (109), the *Students Representative Council (SRC) Election Day's prepositional phrase* post-modifies the noun *occasion*. Similarly, in Examples (110) and (111), the nouns, *students* and *euphoria*, are

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post-modified by the prepositional phrases *of 2015/2016 academic year* and *in the hall* respectively. The under-usage of postmodification in students' writing implies that though grammatical complexity can be indicated by clausal and phrasal elements, students preferred and used more complex premodification to package a good amount of information in fewer words, which represents economy and efficiency of expression (Biber & Gray, 2016; Biber et al., 1999; Carter & McCarthy, 2006).

Characteristics of Post-modifiers in NP

In the data, I found some types of postmodifiers used. They include non-verbal postmodifiers (NVPs), non-finite verbal postmodifiers (NFVPs) and finite verbal postmodifiers (FVPs). Table 13 gives the frequency distribution in the types of postmodifiers produced by students in the CoEs.

Table 13: Frequency Distribution of the Types of Post-modifiers

Level	NVPs		NFVPs		FVPs		Total
	F	%	F	%	F	%	
100	475	30	10	19.6	26	22	511
200	519	32	8	15.7	36	30	563
300	612	38	33	64.7	58	48	703
Total	1606	90.4	51	2.9	120	6.7	1777

f = frequency

Table 13 shows that students in CoEs used more prepositional phrases (PP). Thus, out of the total 1,777 postmodifiers, 1,606 of them were NVPs. This represents 90.4% of the total postmodifiers. The NFVPs were only 51(2.9%). Finally, the FVPs were 120 (6.7%). The subsequent sub-sections discuss the different types of postmodifiers into detail.

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Non-Verbal Post-modifiers (NVP)

The NVPs constitute the most important sub-type of all the postmodifiers. They are made up of prepositional phrase (PP), post-nominal adjectives, nouns and adverbs. However, PPs are the most preferred non-verbal postmodifiers, according to Biber et al. (1999) and Jucker (1992). PPs constituted 90.3% of the total number of postmodifiers used in the data. Below are examples of PPs used as postmodifiers:

112. The admission *of the new students* (L100-600).

113. The special day *for the people of PCE* (L200-478).

114. My first day *in college* (L300-398).

In Example (112), the prepositional phrase, *of the new students,* post-modifies the noun, *admission,* while in Example (113), the noun, *day,* is post-modified by the prepositional phrase, *for the people of PCE.* Also, the noun, *day*, is post-modified by the prepositional phrase, *in college*, in Example (114).

An in-depth analysis of the types of prepositions that introduced the PPs was conducted to find out the preferred choice preposition. Six main types of prepositions were common in the data with different numerical strengths. These are *of*, *in*, *for*, *on*, *to,* and *with*. This is shown in Table 14.

Table 14: Percentage Use of Different Types of Head of PPs

Head of PPs	Frequency	Percentage
Of	665	41.4
In	214	13.3
For	133	8.0
On	108	7.0
To	664	4.0
With	142	8.0
Others	268	16.7
Total	606	100

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From Table 14, it can be seen that the six common prepositions (*of, in, on, for, to* and *with*) accounted for 90% of postmodifiers, thereby confirming Biber et al.'s (1999) finding that the majority of PP postmodifiers are preceded by one of these six prepositions. From the data, *of* is by far pervasively used, occupying 651 (41.4%) times out of the total number of prepositions used, and Biber et al. (1999) attribute this to the variety of functions it serves. Among the prepositions used in the data, the preposition was the least used one. The prepositions placed under *other prepositions* were prepositions such as *by, among, within* and *at*. Though they recorded 268 (16.7%), they were identified as such because they were scantly used, so I believed they did not merit separate analysis on an individual basis. This indicates that though there were numerical differences in the types of prepositions used, the essays written by the students in CoEs were dense with NVPs.

Non-Finite Verbal Post-modifiers (NFVP)

The non-finite verbal postmodifiers used in the data are characterised by a non-finite verb, with likely complements. The verb can be a to-infinitive, -ing, or -ed participle. Examples of NFVP are given below:

115. The music *accompanying the float* (L100-149).
116. The four significant subjects were *treated in the school* (L200-1206).
117. The right *to express himself* (L300-513).

In Example (115), the -ing clause, *accompanying the float,* post-modifies the noun, *music*. Again, in Example (116), the -ed participial clause, *treated in the school,* post-modifies the noun, *subject,* while in Example (117), the to-infinitive clause, *to express himself,* post-modifies the noun, *right*.

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From Table 13 (p. 109), the NFVP recorded 51 (2.9%) of the total number of postmodifiers used, though there were numerical differences between the three levels. Table 15 presents the differences.

Table 15: Percentage Use of the Types of Non-Finite Verbal Post-modifiers

Level	ING (F)	ED (F)	Infinite (F)	Total
100	5	3	2	10(19.6%)
200	4	3	1	8(15.6%)
300	15	12	6	33(64.7%)
Total	24(47.1%)	18 (35.3%)	9 (17.6%)	51 (100%)

With a total of 51 NFVP, Level 100 students used 10 (19.6%), Level 200 students used 8 (15.6%), and Level 300 students used 33 (64.7%). Table 15 shows the percentage of the types of non-finite verbal postmodifiers in the data. From Table 15, it can be seen that in the case of the NFVPs, the -ing forms were mostly used (47.1%) as against the -ed non-finite verbal postmodifiers (30.5%) and infinitive non-finite verbal postmodifiers (8.3%).

Finite-verbal Post-modifiers (FVP)

The finite-verbal postmodifiers (FVP) are complex among the postmodifiers. Their internal clausal structure consists of a finite verb and all other relevant complements. The types of finite verbal postmodifiers include the relative clause and appositives. Of the 1,777 postmodifiers used, 120 (6.7%) were relative clauses at the postmodification level. 100 students used of 26 (22%), Level 200 students used 36 (30%), and Level 300 students used 58 (48%) of FVPs. Below are examples of relative clauses used in the data:

118. A player *who scored the whole team* (L100-438).

119. Some short cultural interlude *which brought sleeping heads back* (l200-1052).

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120. The music *that was played* (L300-132).

Examples (118)-(120) above show relative clauses as noun postmodifiers in the data analysed. The relative clauses in focus are italicised and they post-modify the nouns, *player, interlude*, and *music,* respectively.

Relative clauses with zero relativiser were used in the data. The zero relativiser occurs when users decide to omit the relativiser in relative clauses. This becomes possible with clauses with no gap in the subject position. Examples of zero relativisers are given below:

121. One of the most significant events *I have witnessed* (L100-620).

122. The day *the celebration began* (L200-371).

123. Then numerous memorable events *I have witnessed* (L300-1).

Examples (121)-(123) show relative clauses with zero relativisers in the data. In Example (121), the relative clause could have been *that I have witnessed* but the relativiser has been omitted, making it a zero-relativiser. Similar omissions are observed in examples (122) and (123).

Table 16: Percentage Use of the Types of Finite Verbal Postmodifiers

Level	Frequency	Percentage
100	26	21.6
200	36	30.0
300	58	48.3
Total	120	99.9

Table 16 shows that of the total 228 relative clauses used, 120 (52.6%) had zero relativiser. Out of the 120 zero relativisers used, Level 100 students used 26 (21.6%), Level 200 students used 36 (30%), and Level 300 students used 58 (48.3%).

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Phrases with both Premodifiers and Postmodifiers

Some of the NPs in the data analysed had both premodifiers and postmodifiers. Out of the 6,198 noun phrases produced by the students in the selected CoEs, 679 (10.9%) had both premodifiers and postmodifiers. Out of this total, 223 (33%) were produced by Level 100 students, 306 (45%) were produced by Level 200 students, and 150 (22%) were produced by Level 300 students. Below are examples of noun phrases with both premodifiers and postmodifiers used in the data:

124. A *special* occasion *for the people in the village* (L100-723).
125. A *very crucial athletics* event *at Presbyterian College of Education* (L200-752).
126. *Their room* members *who are ladies* (L300-62).

In Example (124), the noun, *occasion,* is premodified by the adjective, *special,* and post-modified by the prepositional phrase, *for the people in the village.* In Example (125) too, *very crucial athletics* premodifies the noun, *event*, which is in turn post-modified by the prepositional phrase, *at Presbyterian College of Education.* The same applies to Example (126), where the noun, *members,* has both a premodifier and a postmodifier.

To summarise, this section discussed the complex NPs produced by student writers in selected CoEs. The analysis has revealed that the students in these CoEs used remarkably more premodifiers than postmodifiers as complex NP constituents. In the data as a whole, premodifying adjectives were frequently used in complex NPs. Also, post-modifying PPs were the most common type of NP postmodifiers used. In all, the results indicate learners' strong reliance on these modifiers to compress information in NPs.

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Variation in the Use of Noun Phrase Complexity among the Levels in CoEs

This section examines the variation in the use of complex NPs across the educational levels in CoEs, answering Research Question Two. To answer this question, three indices used for measuring noun phrase complexity were utilised: the mean Length of clause (MLC), complex nominal per T-unit (CN/T), and complex nominal per clause (CN/C). These three indices were merged to generate the overall noun phrase complexity level. The ANOVA was utilised for this study to find whether there was a significant difference in noun phrase complexity among Levels 100, 200 and 300 students. A one-way ANOVA was employed when comparing the mean scores of several continuous variables for three or more distinct groups of subjects (Pallant, 2010). With the three samples of the study (Levels 100, 200, and 300), a one-way ANOVA was the best inferential statistics to use.

However, the homogeneity of variance assumption of ANOVA was not met since the Levene's tests significance was less than 0.05. Therefore, the robust homogeneity test was used to correct this violation, in this case, the Welch test. Welch test is appropriate for ANOVA when the groups in the study utilise different sample sizes, and unequal variance is assumed. Table 17 presents the summary of variation results according to the level of education in CoEs in the use of noun phrase complexity.

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Table 17: ANOVA Results on Noun Phrase Complexity Usage by Students

Variables	Mean			ANOVA	
	L100	L200	L300	F(2, 307)	P-value
Mean length of clause	7.73	7.86	8.32	3.31	.038*
Complex nominal per T-unit	1.04	1.06	1.23	7.72	.001*
Complex nominal per clause	0.77	0.74	0.91	11.25	.000*
Noun Phrase Complexity	3.18	3.22	3.49	5.05	.007*

Significance level at 0.05

Mean Length of Clause

Table 17 summarises the mean score of the Mean Length of Clause. Regarding the Mean Length of Clause (MLC) in the writings, the analysis showed that the Level 300 students had the highest mean (Mean = 8.32). This is followed by Level 200 (Mean = 7.86) and finally level 100 (Mean = 7.73). The results from 17 indicate that Level 300 students had eight words within a clause; Level 200 students had seven words within a clause and Level 100 students had seven words within a clause. Meaning, Level 300 students' number of words per clause outnumbered those of level 200 and 100 students, while there was no significant difference between the score of ML/C for Levels 200 and 100. The study found a statistically significant difference in the use of MLC for the three groups (F= 3.31, P = 0.038 < alpha level of 0.05). Thus, Level 300 students significantly used more MLCs than any other levels.

Complex Nominal Per T-Unit

The results from Table 17 also reveal that the Level 300 students utilised the highest number of the complex nominal per T-unit (CN/T) (Mean = 1.23). This is followed by Level 200s (Mean = 1.06) and then Level 100s (Mean = 1.04). Thus, Level 300 students had 1.23 complex nominal clauses in a T-Unit, Level 200 students had 1.06 complex nominal clauses in a T-Unit, while Level

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100 students had 1.04 complex nominal clauses in a T-Unit. The results also show a significant difference in the use of complex nominal per clause for the three groups (F =7.72, P-value = .001 < alpha = 0.05). This means that Level 300 students significantly used more CN/T than any of the other levels. Also, Level 300 students were sophisticated in using complex nominal clauses within a T-Unit.

Complex Nominal Per Clause

Results from Table 17 also reveal that, for the complex nominal per clause (CN/C), it was found that the Level 300 students used it the most in their writings (Mean = 0.91). This is followed by Level 100 (Mean = 0.77) and Level 200 students (Mean = 0.74). Thus, Level 300 students used more complex nominal structures in a clause than Level 200 and Level 100 students. The study again found a statistically significant difference in the use of CN/C for the three groups (F= 11.25, P = 0.00 < alpha level of 0.05). Thus, again, Level 300 students significantly had more CNCs.

Post-hoc Analysis of the 3 Indices across the three Levels of Education

The study further presented the post-hoc tests using Games-Howell tests due to equal variance not assumed and unequal sample group. The post-doc results depict precisely where the differences among the groups occur (Pallant, 2010). Table 18 presents the details of the results:

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Table 18: Differences in 3 Indices across the three Levels of Education
Significance level at 0.05

Variables	**ANOVA multiple comparison**	
	Mean diff.	**P-value**
	L100/200	
Mean length of clause	-0.13	0.85
Complex nominal/T-unit	-0.03	0.86
Complex nominal/clause	0.03	0.74
NP Complexity	-0.04	0.91
	L100/300	
Mean length of clause	-0.59	0.04*
Complex nominal/T-unit	-0.21	0.00*
Complex nominal/clause	-0.14	0.00*
NP Complexity	-0.32	0.01*
	L200/300	
Mean length of clause	0.87	0.13
Complex nominal/T-unit	-0.19	0.01*
Complex nominal/clause	-0.17	0.00*
NP Complexity	-0.27	0.03*

Table 18 presents a comparison of the usage of overall complex noun phrases and its indices, mean length of clause (MLC), complex nominal per T-unit (CN/T), and complex nominal per clause (CN/C) between Levels 100 and 200, Levels 100 and 300, and Levels 200 and 300 using the post-hoc ANOVA multiple comparisons.

The post-hoc analysis using Games-Howell tests found no significant difference in the use of MLCs between Levels 100 and 200 (Mean diff = -0.13, P = 0.85 > alpha level of 0.05) as well as between Levels 200 and 300 (Mean diff = 0.87, P = 0.13 < alpha level of 0.05). The results, however, revealed a significant difference in the use of MLCs between Levels 100 and 300 (Mean diff = -0.59, P = 0.04 < alpha level of 0.05).

With regard to the use of CN/T, the post-hoc test showed that the difference was not significant between Levels 100 and 200 students (Mean diff = -0.03, P = 0.86 > alpha level of 0.05), as shown in Table 18. The post-hoc

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analysis, however, revealed a significant difference in the use of CN/T between Levels 100 and 300 (Mean diff = -0.21, P = 0.00 < alpha level of 0.05) and between Level 200 and 300 (Mean diff = -0.19, P = 0.01 < alpha level of 0.05).

In relation to CN/C, the results from the post-hoc test showed that the difference in its use was not significant between Levels 100 and 200 students (Mean diff = 0.03, P=0.74> alpha level of 0.05). The post-hoc analysis, however, showed a significant difference in the use of CN/C between Levels 100 and 300 (Mean diff = -0.14, P = 0.00 < alpha level of 0.05) and between Levels 200 and 300 students (Mean diff = -0.17, P = 0.00 < alpha level of 0.05).

From the results so far, it can be concluded that students in CoEs in Ghana use complex noun phrases, and the complexity level is an indication of proficiency and an index of language development and progress (Biber et al., 2011; Krashen, 1982). The results, again, are grounded in Krashen's (1982) input hypothesis that enough internalisation of inputs by learners will result in the use of the increasingly complex structures and hence, progression in grammatical complexity of learners in 'the natural order' where there is a progression from the acquisition and use of more premodifiers (semantic complexity) to postmodifiers (syntactic complexity). Therefore, the results of Level 300s (Mean = 3.49) over Level 200s (Mean = 3.22) and Level 100s (Mean = 3.18) can further be explained based on the input hypothesis that NPs produced by Level 300 students, at a significance level of 0.05, are more complex because they have been exposed to more linguistic inputs. Naturally, their level should be above Levels 100 and 200.

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Noun Phrase Complexity

Table 18 revealed a significant difference in the usage of the complex noun phrase by students of different academic levels (F= 5.05, P = 0.007 < alpha level of 0.05). The results showed that the Level 300 students (Mean = 3.49) employed complex noun phrases in their writings more than the Levels 200 and 100 students. The Level 200s (Mean = 3.22) also used complex noun phrases more than their colleagues in Level 100 (Mean = 3.18).

For the general noun phrase complexity, even though Level 200s (Mean = 3.22), on the average, used more complex noun phrases than the Level 100s (Mean = 3.18), the post-hoc test showed that the difference between the use of the complex noun phrase was not significant (Mean diff = -0.04, P = 0.91 > alpha level of 0.05). However, the post-hoc analysis using the Games-Howell tests found a significant difference in the use of complex noun phrases between Levels 100 and 300 (Mean diff = -0.32, P = 0.01 < alpha level of 0.05) and between Levels 200 and 300 (Mean diff = -0.27, P = 0.03 < alpha level of 0.05).

The results clearly showed that Level 300 students used more complex NPs than Levels 100 and 200. Thus, based on all the three indices of noun phrase complexity, mean length of the clause, complex nominal per T-unit, and complex nominal per clause, the Level 300 students used more complex NPs in their writings than the Levels 200 and 100 students. Beers and Nagy (2011) acknowledged that specific syntactic structures such as subordinate clauses, relative clauses, and complex NPs allow writers to express more complex ideas. This implies that though there was a high relative frequency of use of premodifiers in Level 200 students' essays (see Table 4, p. 66), overall, the Level 300 students' texts per the use of the inferential statistical tool (syntactic

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complexity analyser) appear to be syntactically complex, indicating sophisticated forms of language in writing and making them the most proficient and linguistically-developed than Levels 100 and 200. This result is grounded on Krashen's (1982) input hypothesis that as students advance in writing, there is an increase in linguistic complexity to demonstrate grammatical progression and fluency. Therefore, it is much anticipated that upper-level students like the Level 300s demonstrate more competence and maturity in using the complex NP. This is due to the fact that these students have been practising these skills longer than their colleagues at the lower levels.

Evidence from studies done so far on NPs supports the fact that nominal complexity is an indicator of academic writing maturity (Biber et al., 2011). Therefore, Level 300 students can be said to have matured in academic writing compared to Levels 100 and 200. This evidence is in line with Strid (2016), who argued that as students progress through school, their writing skills develop on numerous levels, leading to the production of texts of greater complexity. This reinforces the idea that the longer one practises writing, the higher the ability to compose complex phrases. Therefore, in support of Halliday's (1994) assertion that accounts are complex due to the use of complex grammatical structures, it can be concluded that narrative accounts written by Ghanaian students in CoE are complex and that Level 300 students produce more complex NP structures.

The results also showed that among all the levels of students, Level 100 students were the ones that less frequently used complex NPs. However, the Level 200 students were found to use less of CN/C, which is quite surprising, as we expect senior levels to often do better in their writings than their juniors. The post-hoc tests further confirmed the insignificant difference between Levels

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100 and 200 students' usage of NPs. About the use of the mean length of a clause in written texts, the difference was significant only between Levels 100 and 300. This means that Levels 100 and 200, on average, utilised the same MLC in their writing. Also, the Level 100 students' usage of complex nominal per clause was not different from their colleagues in Level 200. However, the Level 300 students' usage of complex nominal per clause was greater than both Levels 100 and 200. Again, there was no significant difference between Levels 100 and 200 students' complex nominal per clause usage. However, that of Levels 200 and 300 varied significantly. The results suggest that other factors, especially students' background, may also influence academic writings.

Chapter Summary

The chapter has discussed the two research questions by presenting and analysing the data accordingly. Concerning the first research objective that sought to identify the features of the NP structural types predominantly present in the essays of the student writers in CoEs in Ghana, the results revealed that even though simple NPs were used, complex NPs were very frequent in the texts. Students in CoEs used more mono modifiers, and this was greatly seen in Level 200 students' writings. In addition to the features of the complex NP structural types, the results again showed that the students in the selected CoEs used remarkably more premodifiers than postmodifiers as complex NP constituents. In the corpus as a whole, premodifying adjectives were the most frequently used word class in complex NPs, whereas post-modifying PPs were the most common type of NP postmodifiers used. In all, the results indicate learners' strong reliance on these modifiers to compress information in NPs. Finally, the second research question dealt with the variation that exists among

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the three levels in the use of the complex NP structures to demonstrate their proficiency and grammatical complexity. The results from the one-way ANOVA revealed that Level 300 students significantly are the most grammatically complex in the use of complex NPs in their writings than any of the other levels.

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CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

This section presents the summary of findings, conclusion, and recommendations. The chapter first presents the overview of the study, followed by the key findings, conclusions and recommendations for further research.

Summary

The purpose of the study was to investigate NP structural types used by student writers at the colleges of education in Ghana. Based on this result, the study hoped to uncover the variation in the use of complex NPs among the educational levels in the CoEs in Ghana, resulting in utmost proficiency and grammatical complexity by using the quantitative tool, ANOVA. The study was specifically guided by the following objectives:

1. To identify the features of the NP structures predominantly frequent in the writings of students in CoEs in Ghana.
2. To examine the variation in the use of the complex NP structures among Levels 100,200 and 300 students in CoEs in Ghana.

The descriptive survey approach, which made use of content analysis was used to collect information on the NP structural types used in the essays of students in CoEs. Using this approach, the NP variables were measured as they exist naturally in students narrative texts. Samples were drawn from PWCE,PCE and ATRACOE and generalisation was made on the entire population based on the responses. The cluster, purposive, and stratified random sampling methods were used to select a total of three hundred and eighteen (318) student writers as respondents for the study. The study used the L2 Syntactic Complexity

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Analyser developed by Lu (2010) to measure the overall noun phrase complexity, while the ANOVA was used to find the significant difference in the dependent variables: MLC, CN/T and CN/C among the levels.

Key Findings

Research Question One sought to identify the features of NP structural types that were present in the essays of students. The study found that the students utilised both the simple and complex NPs. All the students of the academic levels (Levels 100, 200, and 300) used both simple and complex NPs in their essays. However, all the students used more complex NPs than simple NPs.

The study again found that complex NPs produced by the student writers had more of premodifiers than postmodifiers as complex NP constituents. In the data, premodifying adjectives were the most frequently used word class in the complex NPs, whereas post-modifying PPs were the most common type of NP postmodifiers used. In all, the results indicate learners' strong reliance on these modifiers to compress information in NPs.

Research Question Two sought to examine the variation in the use of complex NPs among the educational levels in the CoEs in Ghana based on students' writings to demonstrate students' proficiency and grammatical complexity. The results showed a significant difference among all the levels of students in the use of mean length of a clause, complex noun per T-unit, complex noun per clause, and the overall noun phrase complexity. Further analysis showed a significant difference between Levels 100 and 300 students and between Levels 200 and 300 students for their usage of complex NPs; however, no significant difference was found between Levels 100 and 200. Overall, Level 300 students are significantly complex in their writings than the

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other levels. Thus, we can say that the Level 300 students are syntactically complex and matured in their writings since they are approaching professional disciplinary norms of the teaching profession.

Conclusion

Students of CoEs in Ghana utilise both simple and complex NPs in their texts. Besides, more of the NPs present in students' essays were complex. Student writers in the selected CoEs used remarkably more premodifiers than postmodifiers as complex NP constituents, of which premodifying adjectives were the most frequently used word class in complex NPs. In contrast, post-modifying PPs constituted the most common NP postmodifiers used. In all, the results indicate learners' strong reliance on these modifiers to compress information in NPs.

However, the study found that even though there was a high relative frequency of use of complex NPs (premodification) by Level 200s, the overall complexity about the quality, proficiency and maturity, as measured by the three indices (the mean length of clause, complex nominal per T- unit and the complex nominal per clause), indicated that Level 300s were the most syntactically complex. The high relative frequency of use of complex NPs (pre-modifiers) made Level 200s semantically complex but not the overall matured and grammatically complex writers. The study, therefore, concludes that the more students advance from a lower level to a higher level of education, the more they can use more complex NPs in texts to demonstrate their maturity in writing. Thus, progression is from semantic complexity to syntactic complexity.

Recommendations for Further Research

First, though enough, the data for this research could not cover more colleges of education in the EAGAR zone. Also, the study focused on one genre:

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the narrative text. However, further research could venture into the study of NPs based on more than one zone and to even conduct a comparative analysis between different zones of CoEs with several proficiency levels and genres representation.

Second, the study applied the L2 syntactic complexity analyser and ANOVA to support the analysis to investigate the more grammatically complex level and proficient in its writing. I recommend that other language tools for analysing syntactic complexity such as the Chi-square (Pearson, 1900), Biber Tagger (Biber et al., 1999) and Coh-Metrix (McNamara et al., 2014) should be employed to renew interest in studies on complexities. This variety in the use of various tools could promote essential innovations in automated approaches for assessing text complexity as part of future studies on the same topic. These tools could also cater to this study's limitations: inadequate construct coverage (single measure of syntactic complexity e.g., noun phrase), overly narrow criterion variables, and inappropriate treatment of genre effects.

Finally, further research can consider more than one element for analysing the complex academic language used in narrative written texts. A variety of features of academic language such as relative clauses, prepositional phrases, and nominal clauses may be analysed to assess complexity since academic language is a multifaceted entity and may be quantified in countless ways.

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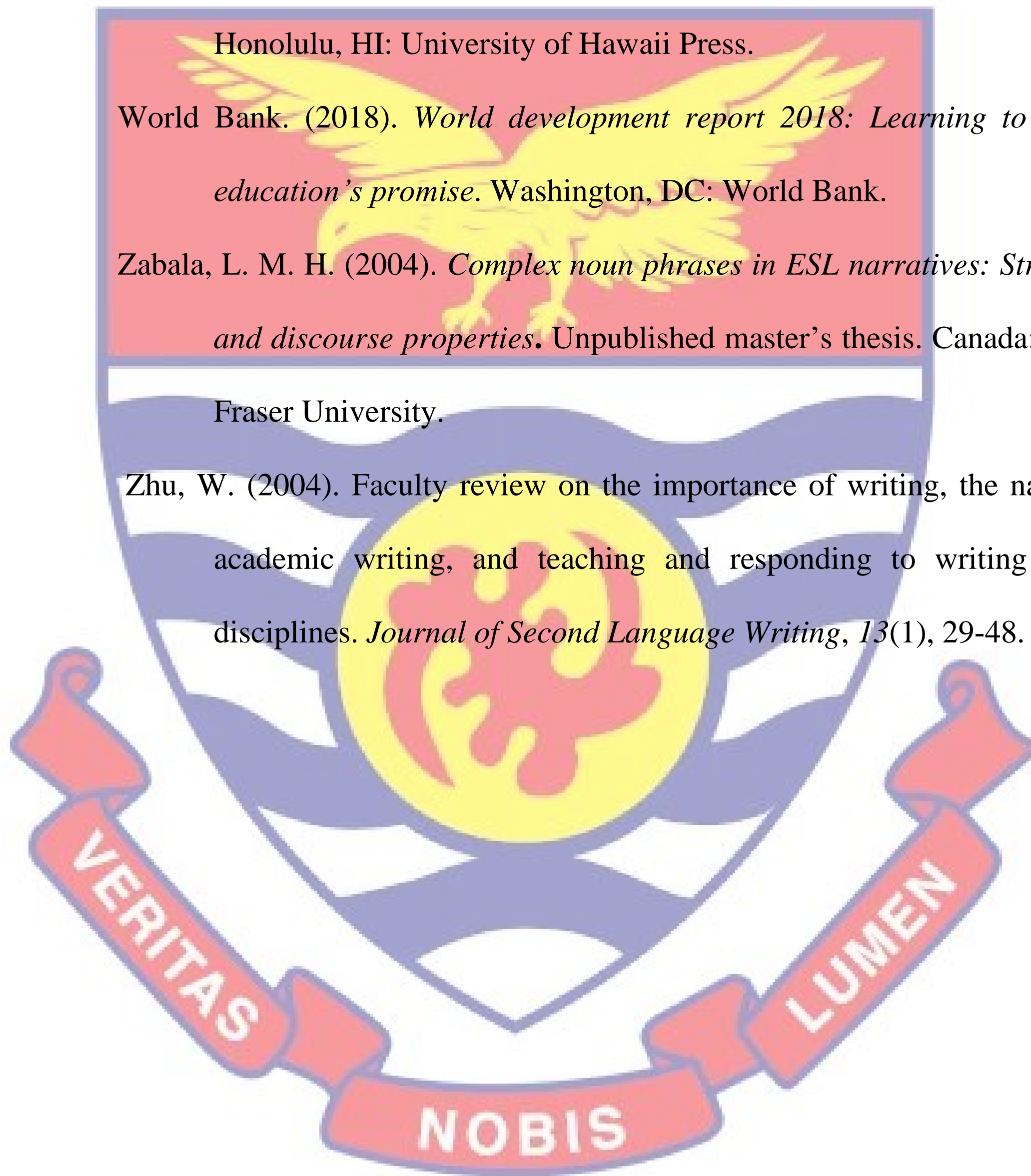

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APPENDIX A

ESSAY WRITING TASK

In not more than 200 words, write about a memorable event you have witnessed in your college.

INSTRUCTIONS:

a) Do not write your name or number on the paper.

b) Indicate your level on the paper.

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APPENDIX B

LEVEL 100 ESSAY WRITING SAMPLES

LEVEL 100

Write about a memorable event you have witness or experience in your college.

A MEMORABLE EVENT I HAVE WITNESSED IN THE PRESBYTERIAN COLLEGE OF EDUCATION - AKROPONG.

At exactly nine O'clock on the 14th of November, 2019, Student of the Presbyterian College of Education (P.C.E) founded in 1848 trooped in to the Dining hall to have their breakfast of which I was part. Wednesday mornings are busy days at the Dining hall because what is served on wednesday mornings is the favourite of every student in the ~~Pre~~ Presbyterian College of Education. We were all seated to be served with Ideal chocolate drink and bread gently and quietly. A lot of announcements were made that day which angered many of the students. After the announcement, each and everyone of us was served his/her food. The Mess prefect said a word of prayer and we started to eat. At the far end of the Dining hall was a great murmuring. Every student ~~was~~ became alert to know the cause of the murmuring, of which we were told the Ideal Chocolate has been expired for more than a month. There was a great rumble, Chaos and Confusion. food was Scattered all over the place and others shared tears because they knew they were going to die for eating an expired food. This became the topic of every conversation in the College until the S.R.C. President ~~elected~~ pleaded on the behalf of the pantry staff for serving an expired food to we the Students.

Infact, that day was a memorable day.

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APPENDIX C

LEVEL 200 ESSAY WRITING SAMPLES

LEVEL 200

A MEMORABLE EVENT I HAVE WITNESS ON CAMPUS

Throughout my life I have had numerous memorable events. The memorable times in my life vary from being the best in my life and some being the worse. Either way, these memories have become milestones that I will remember forever, which is the day of the S.R.C week Celebration 2018 – 2019. This day is the most memorable because the enjoyment I had was never before. I can remember that day like it was today. My friends came into my room at 5:00 am telling me, "rise and shine it's was time to get up". I opened my eyes and started to stretch, wishing it was just a dream, but of course it wasn't! I was extremely tired from staying up late the night before, because I was so anxious for the big day.

As everyone was taking their seats getting ready for the speech to be delivered under the theme "The teacher trainee a perfect instrument for a sustainable national development". At the auditorium we were inspired by a lot of guest invitee's through their speech, How to cope and overcome problems in life, how to improve or to become academically good. After, we had close for the summon. We took pictures with friends and after that we had lunch. Later in the day we play[illegible]

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Level 200

A memorable event I have withness in my College

On monday 25th, May 2019, there was a very profoundly honoured event that took place at Ghana's premiere College, Presbyterian College of Education (P.C.E) formerly known as 'P.T.C Compus.
It was a graduation Ceremony for our brothers who have just finished their national Service. The event was to commence at ten O'Clock but at exactly eight O'clock am, the school's auditorium was filled with graduants who are to be conferred, high muckamuck and parents.
I was very felicitous when I was called to be one of the ushers of the program.
The program started by a word of prayer from the Chaplain of the College, Rev. Osei Prince Gyan. After the pray, One of the dignitaries. Hon. Matthew Opoku Prempeh who is the minister of education and also the chairman of the program gave his sensational speech about the the program. There were a lot of activities that went on that time but the most crucial one is when the graduants were conferred as graduate students.
The school recorded twenty-seven first class students which is a plus for the school. All the students that graduated recieved certificates and medals but the twenty-seven (27) students got additional money, and blessings from the moderator of the Presbyterian Church of Ghana.
As the program was about to bring to a halt, vote of thanks was offered by the Students Representative Council (SRC) president and Closing remark was given by the Principal of the College, Mr. George Appah.
After the closing prayer all the people departed to their various destinations.
Many people learnt a lot from the program but for me, I learnt that, education and God is the key to success. This is a worth remembering event that can never varnish from my psyche.

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APPENDIX D

LEVEL 300 ESSAY WRITING SAMPLES

Write an Interesting event you have witnessed in your College or University days.

I had the Opportunity to witness several events back at College, but the most Interesting and outstanding of them was the DASA Week Celebration. DASA is the Dagomba Students association, which is made up of all Dagomba Students in the school. DASA week Celebration was One of the events I never wanted to miss.

During the Celebration, Students from Other Colleges were invited, local Chiefs and Other Prominent members of the Community were also Present. The DASA week was celebrated annually and usually falls on the second week of January.

At exactly 9:00 am On the Seventh day, all Students, Staff and Invited guest were Pres sitted. The Introduction Of the dignitries and guest was made by the President Of the Club, the Principal Of the College gave his Openning remarks followed by the Patron Of the Club.

The Club Cultural group was called upon to Perform a Cultural dance (Barmaga) This was the Part that got every On their feet and dancing along. Indeed It was a Ceremony filled with a lot of fun. And then Came the session Of Poetry recital in the local language. Varieties of local foods was Prepared and served. I Can still remonber the tasty Adowa, which was the most eaten dish. The festival served as an Opportunity for some Students to learn the traditional dances and how to Prepare some of our local dishes.

The Chief Of the Community who

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LEVEL 300

An Interesting Event I Have Witness.

COMMUNITY 5/1 BASIC GOLDEN JUBILEE CELEBRATION

Jubilee marks the 50th years of a birth of something
Jubilee marks 50 years of birth of something. Community 5/1 Basic School Celebrate its 50th anniversary. Being an old student and also a former student of the school, the joy of being part of the Celebration cannot be over emphasize. A week was set for the celebration of the schools golden jubilee.

A clean up exercise by the pupils and teachers on the school compound and around was organised to make the tidy for the event. Chocked gutters were desilt and a little painting was of the classroom walls and school were given touch up by one of our sponsors that is Ghana Port and Harbour Authority. Committee for the various section of the co-curricula activities in the school rehearsed for the day. Some of these sections were the cultural group or dance, Creative art club to display their art works for exhibition, Science putting finishing touches on their inventions and the Cadet troop also rehearsing.

Finally the actual day for the celebration came; there was joy in the atmosphere, the pupils and the teachers were all dressed nicely in the jubilee celebration cloth. The exact place for the event decorated with beautiful colour. Dignitaries from the Tema Metro Directorate came, Tema West MP, Former MP for tema west constituency, Ghana Port and Harbour Authority and some religious authorities etc. Speeches were delievered by some invited guest, pledges and appeal and awards were given to deserving teachers and pupils. The programme came to close after the Cadet displayed, chorography and finally the exhibition show art by the art club.

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