

**UNIVERSITY OF EDUCATION, WINNEBA**

**“AN ANALYSIS OF LEXICAL BUNDLES IN THE ENGLISH WRITINGS  
OF SENIOR HIGH SCHOOL STUDENTS IN ACCRA METRO”**

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**JULY, 2020**

## DECLARATION

### STUDENTS DECLARATION

I, **Jemima Naa Dedei Adipah**, declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted either in part or whole, for another degree elsewhere.

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### SUPERVISORS DECLARATION

I, hereby declare that, the presentation and preparation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba

**NAME OF SUPERVISOR: DR. CHARLOTTE FOFO LOMOTey**

Signature : .....

Date : .....

## **DEDICATION**

I dedicate this work solely to my husband, Seyram Kojo Adipah and my three sons,  
Sesee Kojo Adipah, Selikem Kojo Adipah and Sedinam Nii Dromo Adipah.



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## TABLE OF CONTENTS

<b>Content</b>	<b>Page</b>
DECLARATION	iii
DEDICATION	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
GLOSSARY	xi
ABSTRACT	xiv
<b>CHAPTER ONE : INTRODUCTION</b>	<b>1</b>
1.1 Background of the study	1
1.2 Statement of the problem	2
1.3 Objectives of the study	5
1.4 Research questions	5
1.5 Significance of the study	6
1.6 Limitations of the study	6
1.7 Organization of the study	7
<b>CHAPTER TWO: LITERATURE REVIEW</b>	<b>8</b>
2.0 Introduction	8
2.1 What are lexical bundles?	9
2.2 Lexical bundles in academic discourse	11
2.3 Characteristics of lexical bundles	15
2.4 Approaches to phraseology studies	20
2.5 Conceptual framework	23

2.5.1	Continuous sequence of words	24
2.5.2	Corpus of writings	25
2.5.3	Frequency of occurrence	26
2.5.4	Structural classification	26
2.5.5	Functional classification	29
2.5.6	Summary	36
2.6	Types of lexical bundles	36
2.7	The importance lexical bundles in Students' writing	40
2.8	Related studies	44
2.9	Conclusion	50
<b>CHAPTER THREE : METHODOLOGY</b>		<b>53</b>
3.0	Introduction	53
3.1	Research approach	53
3.2	Research design	54
3.3	Population	55
3.4	Sample and sampling techniques	55
3.5	Instruments and data collection	58
3.6	Data analysis	59
3.7	Validity and reliability	60
3.8	Ethical issues	61
<b>CHAPTER FOUR : DATA PRESENTATION AND ANALYSIS</b>		<b>62</b>
4.0	Introduction	62
4.1	Frequency of occurrence of bundles	63
4.2	Structural patterns of bundles	73
4.2.1	Noun structure	74

4.2.2	Verb structure	77
4.2.3	Prepositional phrase structure	81
4.2.4	Other structures	83
4.2.5	Summary	86
4.3	Functions of lexical bundles in the writings	87
4.3.1	Research-oriented bundles	90
4.3.2	Participant-oriented bundles	98
4.3.3	Text-oriented bundles	102
4.4	Summary	109
4.5	Conclusion	109
<b>CHAPTER FIVE : SUMMARY, RECOMMENDATIONS AND</b>		
<b>CONCLUSION</b>		<b>112</b>
5.0	Introduction	112
5.1	Summary of findings	112
5.1.1	Frequency of occurrence of lexical bundles in the writings of students	113
5.1.2	Structural patterns of lexical bundles in the writings of students	115
5.1.3	Functions of lexical bundles in the writings of students	116
5.2	The importance of lexical bundles in the teaching and learning of English	117
5.3	Pedagogical implications	117
5.4	Suggestions for future research	119
5.5	Conclusion	120
<b>REFERENCES</b>		<b>121</b>
<b>APPENDICE : List of Identified Lexical Bundles</b>		<b>127</b>

## LIST OF TABLES

<b>Table</b>	<b>Page</b>
2.1. Lexical bundles often seen in students' English essays	13
2.2. Discipline-specific bundles	17
3.1. Sample size according to ability grouping	57
4.1.1. Frequency of lexical bundles in data	64
4.1.2. Types of lexical bundles in students' writings	71
4.2. Distribution of lexical bundle structural types	74
4.2.1. Subcategories of noun structure bundles	75
4.2.2. Subcategories of verb structure bundles	79
4.2.3. Subcategories of prepositional structure bundles	82
4.2.4: The Verb Structure	83
4.2.5. Summary of structural patterns of lexical bundles structures	86
4.3. Examples of functional lexical bundles identified in the data	89



## LIST OF FIGURES

Figure	Page
4.2.5. Summary of structural patterns of lexical bundles	87



## GLOSSARY

**Accra metropolis** - Accra Metropolitan Assembly (AMA) is the political and administrative authority for the city of Accra.

**Bundle** - a collection of words or quantity of material tied or wrapped up together.

**Clichés** - are terms, phrases, or even ideas that, upon their inception, may have been striking and thought-provoking but became unoriginal through repetition and overuse.

**Collocation** - the habitual juxtaposition of a particular word with another word or words with a frequency greater than chance, for example, Deep feeling, deep pockets, deep sleep.

**Commerce** - the activity of buying and selling, especially on a large scale.

**Credence** - means truthfulness, or believability.

**Disaggregated** - separate (something) into its component parts.

**Discourse** - written or spoken communication.

**EFL** – English for Foreign Learners

**Formulaic expressions** - is a commonly used expression. Example: In this day and age, most people know that you can't be too careful, she walked through the door.

**ICT** – Information and communications technology

**Idioms** - An idiom is a phrase or expression that has a meaning that in most cases cannot be deduced directly from the individual words in that phrase or expression.

**Lexical** - relating to the words or vocabulary of a language.

**Linguistics** - the scientific study of language and its structure, including the study of grammar, syntax, and phonetics.

**Native Speakers** - A native speaker is someone who learnt to speak a language as part of his or her childhood development. A native speaker's language is usually the language their parents speak and/or the language of their country of origin.

**N-gram analysis** - In the fields of computational linguistics and probability, an n-gram is a contiguous sequence of n items from a given sample of text or speech. ... The n-grams typically are collected from a text or speech corpus. When the items are words, n-grams may also be called shingles.

**Non-native Speakers** - someone who has another native tongue than the language being used.

**Phraseology** - a particular mode of expression, especially one characteristic of a particular speaker or subject area.

**Proverbs** - a short, well-known pithy saying, stating a general truth or piece of advice.

**Strata** - a level or class to which people are assigned according to their social status, education, or income.

**Discourse Function** - This term refers to how a particular expression is used on a particular occasion. The discourse function of a sentence depends on the context.

**Discourse structure** - is a term used to describe the way in which an entire text is organized – for example, how language is used in a poem, in a newspaper article, or in a speech designed to read aloud.

**Synthesis** - the combination of components or elements to form a connected whole.

**Target Population** - A target population is a certain group of the population that share similar characteristics and is identified as the intended audience for a study or research.

**WAEC** – West African Examination Council

**WASSCE** – West African Senior School Certificate Examination



## ABSTRACT

This study examined the use of lexical bundles in the writings of students of public Senior High School Students in the Accra Metropolis. Specifically, the frequency of occurrence of lexical bundles, their structural classification as well as their functional classification are explored in order to propose pedagogical approaches to teaching lexical bundles as an aspect of English Language to Second Language Learners. The research design was a case study and the research approach qualitative. The sampling procedures adopted were stratified sampling and purposive sampling techniques, while analysis of the data was done using the identification, categorization and textual analysis approach. Data were obtained from 5 schools, 12 courses from 168 writings (scripts) of students. The findings indicate that out of a total number of words of seventy-five thousand, six hundred (75,600) analyzed, two hundred and twenty-two (222) lexical bundles were identified, with the most recurring lexical bundles recurring 20 times across all scripts analyzed. Three (3) word lexical bundles formed the majority of all identified lexical bundles, making up 40% of the 222 identified lexical bundles. With regard to the structure of these identified lexical bundles, the noun structures formed the majority, constituting 34% of the 222 bundles. Functionally, the research-oriented bundles and text-oriented bundles constituted 17% each of the lexical Bundles. There are pedagogical approaches that have been proposed in the study that directs the educator as to how to introduce and infuse the learning of phraseology into mainstream classroom-based activities.



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

Written and spoken English have been assumed over the years to be a compilation of single words following each other and their individual meanings used to communicate the meaning of the sentences to make communication meaningful. In as much as this assertion may be true, it is gradually becoming clear from research studies on clusters, groups, and phrases that some words of English move in “packs”. Thus, separating one from the other in terms of how they are arranged, either functionally or structurally, becomes impossible, and any attempt to change the arrangement of these group of words, will mean completely changing the meaning of what is meant to be communicated. It is this realization that has necessitated the present study. Lexical bundles are a group of words that move together at any point in time, usually in speech or in writing. They are not likely to be separated and mostly convey meaning that is pragmatic in nature.

Technically, teachers do not specifically teach lexical bundles; neither do students learn anything on lexical bundles, as an aspect of English language for the number of years that they stay in the senior high school. Lexical bundles help non-native speakers to often depend on a stock of pre-fabricated semi-automatic word chunks, instead of constantly making new combinations of individual words (Sinclair, 1991). Although the English language is widely accepted as an international medium of communication, it has established itself as a language of international prestige, in many fields of academia in contemporary life (Hoffman, 2000). Students are expected to pick it up somehow or somehow. Lexical bundles must follow each other in succession, an omission of one of them in its occurrence, in speech or in unity makes

it wrong, and since students are unaware of this knowledge, they are unlikely to use it at all or correctly when they are writing their English assignments. An awareness of lexical bundles structurally aids learners to avoid an omission or deletion of a word or an addition of a word is grammatically incomplete or faulty (Biber, Conrad & Cortes, 2004). In the area of essay writing, where the use of lexical bundles falls under *expression*, the lack of appropriate usage of lexical bundles tends to affect their performance in the English language, making them incompetent in the language. Most students do not know how lexical bundles are supposed to be used and this is the reason it becomes impossible to see learners use them or write with them often or appropriately. This study therefore examines the use of lexical bundles among students of some senior high schools in the Accra Metropolis. Specifically, it focuses on the frequency of their occurrence, their structural patterns, and their functions.

## **1.2 Statement of the problem**

The use of words in the correct context and in the correct combinations is part of good writing, and it is important for a second or foreign language writer to know the most frequent combinations used in specific registers, genres and disciplines. This is especially true in all writings of the English language especially essays, as the writing of essays employs the aspect of English language, particularly grammar and expressions, to make it a composite whole, this is to enable the writers to communicate their ideas in its vivid way as much as possible. The writing of English language, especially essay writing, demand that the writer uses a particular choice of words, that fits the particular essay type on topic that they have been given to write on. As Gledhell (2000, p. 204) puts it, in scientific writing, the central role played by formulaic language in essay writing, combined with learners' apparent struggle with this particular aspect of academic discourse, should be enough reason to place the

teaching and learning of multi word units of meaning on the agenda of researchers and practitioners in the field of English for Academic Purposes (EAP).

Lexical bundles often referred to as multiword units or expressions that are in a continuous sequence of repeated co-occurring words, are combined and used by all learners in the academic field. This set expression helps learners who are often writing in a particular field of study, to be at an advantageous position of using expressions that are likely to be error free as much as possible to also represent the standard language that are accepted, in that field of work. These bundles are highly significant in academic writing for native (NSs) speakers and non-native (NNSs) speakers alike (Schmitt, 2005). Studies show that most non-native learners have expression problems in their writing; they are unable to write full essays because they do not have the language to express themselves (Salazar, 2014). Studies have shown that although students have an idea of what phrases are, in terms of their grammatical names and functions, they are usually unable to use lexical bundles, which are usually phrasal, effectively, and this affects the quality of the discourse. In practice, they either omit one of them either by deleting it at the beginning or at the end, making the meaning they intend to communicate completely different. The result of this is that the meaning of what is to be communicated is often not clearly achieved (Sinclair, 1991).

It must be noted that whereas multi-word expressions come naturally to native speakers, it usually presents itself as a source of difficulty for non-native users of English language (e.g. De-Cock, 2003; Granger, 1998; Howarth, 1998a; Nesselhauf, 2003). Lexical bundles are usually fairly easy to understand, but they can hinder language prediction. They are essential to achieving native-like competence and fluency, and they are thus important aspects that have to be taken into account in



language teaching and learning (Coxhead, 2008; Howard, 1998b; Okeefe, McCarthy, & Carter, 2007; Wray, 2000).

However, despite these very strong motivations, teaching related discussion on the use of frequently occurring and combinations in academic context has largely been limited to brief sections on possible pedagogical implementations of results at the end of research reports. A lot has been written on why recurring phraseological units such as lexical bundles should be taught to language learners, but very little has been published by way of practical advice on which bundles to teach and how to teach them. This present study aims to fill this gap by examining the use of lexical bundles in essay writing in Ghana, especially in the Accra Metropolis in the Greater Accra Region.

There is a research gap and knowledge gap being filled here through the conduct of this study. In as much as this kind of analysis fits anybody or learners who are interested in writing and producing the standard set to represent a good work, it is very beneficial to NNS, non-native speakers of the language, especially in the wording of English Language. Instead of constantly making new combinations of individual words, NNS of the language who have acquired this stock of prefabricated semi-automatic word chunks (Sinclair 1999) depend on them for their writings, as a result, the use of single words in language description is not much encouraged, and rather attention is now paid to units of meaning comprising multiple words (Granger & Paquot, 2008a; Howarth, 1996; Wray, 2000; Wray & Parkins, 2000). This new focus has led to the development of the linguistic description of phraseology, the systematic study of multi-word lexical units.

In short, this present study intends to fill the gap created by not researching on lexical bundles in English language in Ghana and the effect this gap has on the users

of the English language to write their essays in the Accra Metropolis, especially in the Senior High Schools. The results obtained from this study can be used to make a general conclusion on how best the problems can be solved with its pedagogical implications, so that further studies into other language areas in Ghana may be conducted. To help achieve this, essays were collected from all the five SHS in the Accra Metropolis, where the stratified sampling technique was used to put students into 3 strata: above average, average and below average. From these strata, a total of 168 essays were collected from Forms 2 and 3 students to help analyze data to answer the research questions.

### **1.3 Objectives of the study**

The objectives of the study are to:

1. examine the frequency of occurrence of lexical bundles as captured in the writings of students;
2. To examine the structural patterns of lexical bundles as seen in the writings of students;
3. To examine the functions of lexical bundles in the writings of students.

### **1.4 Research questions**

The questions guiding the study are:

1. What is the frequency of occurrence of lexical bundles found in the students' writing?
2. What are the structural patterns of the lexical bundles?
3. Which functions are identified with the lexical bundles in the students' writing?

### **1.5 Significance of the study**

This study will create a general awareness of the existence and use of lexical bundles among second language learners, especially senior high school students in the writing of their essays in the Accra metropolis. This awareness will help all learners, both native and non-natives to benefit from the results and findings the study will generate. This will also improve drastically the studying of language and reading habits, in the quest to create, acquire, accumulate and use of chunks of words in continuous succession that are basically error free in their language exercises and presentations.

All learners interested in the acquisition and use of English language (both in speaking and writing) at any level of the language learning process, will acquire great insight from the study. Educators and students in the Accra Metropolis stand a great chance of benefitting from this research and to a large extent, educators and learners of other languages (Ga, fante, Akuapim Twi, Asante Twi, Ewe, French and German) and to a large extent, those who will be interested in how language writing in a particular field of study, science, business, politics, etc. can be encouraged to make their writing easier and of standard of acceptance, particularly in language areas. Broadly speaking, this awareness will also help teachers to encourage their students to make good use of bundles they have acquired in their field of study or in their readings to enhance the language qualities of their work.

### **1.6 Limitations of the study**

The coverage of the study is limited to the Accra Metropolis, boundaries to be considered during this study will be; the content and the geographical location. Content-wise, the study will look at lexical bundles, its identification, the frequency of occurrence, the structure of the identified lexical bundles and the functions of these

lexical bundles, or the role they play in a writing. Geographically, the study is limited to the area of the Accra Metropolis and to the public senior high schools located within this area, and the findings is applicable to them.

### **1.7 Organization of the study**

The rest of the thesis is organized as follow: Chapter 2 discusses what other people have written concerning lexical bundles. Materials from notable personalities and foremost theorists and proponents of phraseological studies are reviewed in this chapter. This include items such as the conceptual framework, the development and categorization of lexical bundles into the frequency of occurrence, the structure of lexical bundles, and the functions of lexical bundles. Chapter 3 focuses on the methodology, which looked at the research approach adopted, the research design, the sampling technique, and the sample size. In all, 168 scripts of students in 12 course areas from 5 schools within the Metropolis were analyzed. The rest of the chapter was devoted to the discussion on data collection and analysis.

Chapter 4 presents a discussion of the results from the analysis of data in tandem with the research objectives. From the analysis, two hundred and twenty-two (222) different lexical bundles were generated from all five schools, from both second year and third year students. Out of the 222 lexical bundles, form three students produced a total of 124 lexical bundles and Form two students produced 81 lexical bundles in their writings, whereas both Form three and Form two students produced seventeen (17) common bundles in all. Chapter 5 is the conclusion of the study; discussing issues such as the summary of findings, the role of lexical bundles in students' writing, as well as pedagogical implications of the findings. The chapter ends with suggestions for future research.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

Lexical bundles are a group of words that move together at any point in time, usually in speech or in writing. They are not likely to be separated and mostly convey meaning that is pragmatic in nature. They may not on their own give coherent meaning or describe the performance of an action, or how something can be done or cannot be done, but pragmatically, they make a lot of sense. Lexical bundles are normally known as phrases in junior and senior high schools. The curricula of the schools identify them as phrases, because phrases do not convey meaning on their own, and yet constitute a group of words. However, whereas phrases can be grouped into forms, such as noun, adverbial, adjectival, and prepositional phrases, lexical bundles on the other hand may not appear as nouns, adverbials, or adjectival, but have specific grammatical arrangement in nature and nothing can replace or change their arrangement to make them correct.

This chapter presents the review of literature on lexical bundles. It seeks to examine the different terms that are used in the literature to denote them, by showing examples of the different terms used and the reasons for the choice of specific lexical bundle among the lot. This chapter also assesses lexical bundles in academic discourse by discussing the role of lexical bundles in students' academic writings and show how the use of lexical bundles help in achieving coherence in writing. This brings out the various distinguishing features or the characteristics of lexical bundles, which make them unique from other phraseology or formulaic expressions. The chapter also presents a discussion of the different approaches to phraseology studies or analysis of phraseological units (lexical bundles) and then discusses the one that

has been adopted for this study. This is done by discussing the underlying principles, as well as the components of the framework, and show how it relates to the analysis of lexical bundles. In addition, types of lexical bundles, their structure and their function in writing or speech are examined.

## **2.1 What are lexical bundles?**

Learners of any language try to specialize in the language, through oral skills acquisition. Language learners always try to figure out the easier ways, or roots that are available in the language to navigate their way through it. This technique helps them acquire the language early and faster. This also makes communication easy for the learner of that particular language. In our context as members of either the outer circle or the expanding circle, who are learning English language, to aid us in communication for various reasons, for business, or interaction, there is the need to assess areas that make the acquisition of the English language easier. One such way is the use of lexical bundles.

Lexical bundles are words that follow each other in succession without any break or interjection by another word, to add to its meaning or cause a change to the overall meaning of the words. That is, most lexical bundles cannot be altered functionally or structurally; they are multiword sequences which come together as a bunch, which enables the speaker to have free flow conversation or written words, with limited errors. This sequence helps second language learners to be accurate with the language as much as possible. Biber, Conrad and Cortes (2004) explain lexical bundles as three or more recurring sequence of words. In the literature, lexical bundles have been identified with many names that imply their meaning; they are largely known as clinical expressions due to the nature in which they present themselves or cluster, that is, moving together in succession or fixed expressions, in

that, whatever form they are presented, they are always fixed, whether structurally or functionally. In its usage, their occurrence is frequently either conscious or unconscious, in the speakers' speech. According to Hyland (2000), lexical bundles are extended collocations which appear more frequently than expected by chance, helping to shape meaning into specific contexts and contributing to our sense of coherence in a text.

Lexical bundles can be referred to as formulaic expressions regarding the formula by which they are used, meaning that if they are going to be used, then they must be taken as a whole and the formula by which they appear must be maintained to have its natural characteristics for listening/reading pleasure. Non-native speakers of English (NNE) can disapprove more on this formulaic way of speaking, an easy way of conveying meaning of a spoken or written language by both communicators. This way of learning the language also makes second language learners apprentices of the language, aiming more to please the natives of the language, than being owners. After all, a learner of a language has no choice than to speak what the 'owner' of the language has prescribed as the most appropriate way of presenting the language for acceptance, and this is why non-native speakers tend to rely more on the use of formulaic expressions aimed at attaining proficiency in the language.

These formulaic expressions can be subcategorized as usually being together, part of common expression like proverbs, collocations, idioms, speech formulae, are often completely fixed (Wray, 2002). This is because to a large extent, idioms are fixed and one cannot change the way they are presented or arranged to suit a new condition. For example, the expression *a bird in hand is worth two in the bush*, cannot be changed to *a cow in the forest is better than the one in the house*. This goes to confirm the idea that, formulaic expressions like proverbs and idioms are a form of

lexical bundle. Biber et al (1999) in the *Longman grammar of spoken and written English*, first introduced the term *lexical bundles* as recurrent words regardless of their idiomaticity and regardless of their structural status. Lexical bundles, hence, are simply sequences of word forms that go together in a natural discourse. For example, *the fact that, I don't think so, the thing is that, I wish to, if I had known, irrespective of the fact that, considering the fact that*. Lexical bundles are also defined, as the most frequent recurring lexical sequence in a register, according to Biber et al (1999).

These words or expressions are mostly characterized by three or four words in multi units which occur frequently, performing identifiable discourse functions and displaying analyzable structural patterns (Biber et al, 2016). According to Nekrasova (2009), these structurally incomplete units have been found to be stored and processed holistically in the mental lexicon. Thus, it is considered the best way of using error-free language as a second language learner, since once the structure is stored in the memory, it can be retrieved. In sum, lexical bundles are three or more words in succession, which are used to help in acquiring fluency and are mentally stored in the mental lexicon, and easily extracted during discourse to explain or make a point.

## **2.2 Lexical bundles in academic discourse**

Phraseology in academic discourse is both written and spoken; its use enables the learner become more proficient in oral and written discourse. The role of lexical bundles in academic discourse cannot be overemphasized as their use helps especially students to produce fluency or error-free information by having a sequence of words that follow each other without a break, insertion or replacement. This in itself improves fluency of the speech and creates good communication between the communicators as decoding and encoding of the speech becomes easier for each other. Lexical bundles are frequently occurring continuous words normally from three



to six words, are very important in students' academic writing. This is because students' academic writing is made up of formal structural requirements that mostly feature in academic writing.

Although the academic writings of students may vary according to the course they offer, on the whole, it helps to achieve the same effect of unity and coherence (Wood, 2015). Hyland (2008a) also asserts that proficient use of lexical bundles in students' academic work helps students' writing become more logical and coherent. Hence, having different types of bundles for specific purposes in the English language, can direct teachers in preparing specific lessons that are intended to enable learners become more proficient writers in their specialized fields. Lexical bundles can be used in students' academic writing, for writing specific things, as well as across all fields of discussion.

Whereas by the internal structure of some courses or subject areas of students, they may use more lexical bundles, others may have just some limited forms or use of lexical bundles in their writings. The use of phraseology in academic writing is mostly preferred since this normally can be taken together as a group. This enables the student to reduce erroneous productions. It also helps in paragraph unity and coherence, since a whole paragraph can have about seven of such bundles, making writing and listening easier for the listener or reader. To this end, it can be argued that these formulaic writings help in boosting the writers' confidence in writing, because at the end of the day, it helps to produce or articulate more natural-sounding language.

Lexical bundles are therefore seen as the building blocks for any first-time learner of English language (Bernard & Lieven, 2012). Wood (2015) opines that lexical bundles help learners to have early acquisition on pragmatically appropriate language, since these are set phrases or chunks, even if they would end up struggling

from the generality of the language, the chunks are likely to make the language easier for them, since language experts are pleased with the set phrases they use. One major advantage of formulaic writing for students is the acceptability of the language by native speakers of the language. It enables students to use them for either written or oral exercises. One good reason for using the lexical bundles is the fact that their usage does not necessarily force you to develop an accent or act as a native, when you are not necessarily one. It is interesting to note that the importance of lexical bundles in students' academic writings can be seen throughout their work, and so it becomes virtually impossible to ignore them. For example, in each aspect of the English paper, we can identify them in Table 2.1 as follows:

**Table 2.1. Lexical bundles often seen in students' English essays**

Three-word lexical bundles	Four-word lexical bundles	Five-word lexical bundles	Six-word plus lexical bundles
at all cost	I agree with you	one good turn deserves another	let the cat out of the bag
I think that	My point of view	as fit as a fiddle	make hay while the sun shines
We have to	The end of the	to keep a straight face,	your guess is good as mine
Take your chances	by the grace of God	grinning from ear to ear	a stitch in time saves nine
In order to	Is the way to	as shown in the table	two is company three is a crowd
You need to	Is based on the	A cat has nine lives	leaving your footprints in the sand
it was reported	cheaper by the dozen	A little bird told me	to tell a cock and bull story
as well as	No honour	A lot on one's plate	an apple does not fall far

	among thieves		from the tree
the fact that	as a result of	A penny for your thoughts	you could hear a pin drop
How about you	a swarm of locust	Beyond a shadow of doubt	A penny saved is a penny earned
I don't know	a pinch of salt	A sight for sore eyes	A picture is worth a thousand words
in accordance with	wool over our eyes	A storm in a teacup	Drag his name through the mire
among many others	stir the hornets' nest	Add fuel to the fire	Pull the wool over your eyes
how dare you	clean pair of heels	All bark and no bite	The scandal will soon blow over
something like that	saved by the bell	An eye for an eye	I ran into my old friend
the fact that	in the nick of time	As fit as a fiddle	Beyond a shadow of a doubt
you dare not	crème de la crème	Back to the drawing board	Flies in the face of available fact
on the other hand	in the light of	Bad taste in one's mouth	Bitten more than you can chew
I think that	water under the bridge	Beauty is only skin deep	I am of the opinion that
In my opinion	Slipped through your fingers	Birds of the same feathers	Between a rock and a hard place
Bury the hatchet	what do you mean	My hair stood on end	Between the Devil the deep blue sea
You need to	saved by the bell	Anything to write home about	I take great exception to your remarks
You have to	take an exception to	To keep a straight face	Strike while the iron is hot
Off the cuff	hard nut to crack	I am out of my element	Sweeping the issue under the carpet
Had cold feet	through thick	Opportunity slipped	Keep on the right side of

	and thin	through my fingers	
Was a walkover	I want you to	A spitting image of himself	It affords me a great pleasure
To pass out	take a look at	It touched a raw nerve	Let the grass grow under his feet
Raise your eyebrow	in this chapter we	Keep us in the dark	Save the best for the last
Heart of gold	on the basis of	He keeps his own counsel	Put ones hand in his pocket
Open the floodgate	a few days ago	This is open to question	Cut ones nose to spite the face

From Table 2.1, it can be seen that these co-occurring words (lexical bundles) go a long way to aid comprehension as well as create coherence in students' academic work.

### 2.3 Characteristics of lexical bundles

Lexical bundles, also termed as prefabricated chunks (Pawley & Clyde, 1983), has certain distinct features that make them unique and totally different from other formulaic writing in academic circles. This is due to the fact that these fixed sequences of three to six words or more, are different in both structure and function, and it is this structure that makes them easily identifiable. First and foremost, they can be easily identified, as they are also in a group, which is why they are not single words. They often appear in phrases; most of the time they are within a fixation of three to six continuous words. Even when they do not give much meaning by their fixation, they are such that the group of words cannot be added on or subtracted from. They may not communicate much sense grammatically as a group, but the fact that they can do more together makes them bundles. Examples are *I want you to*, *it is important to*, *we are going to*, *to be able to*, *in this chapter we*, *one of the things*, or

*something like that, a little bit of, in the form of, on the basis of, in Ghana now, at the same time, as shown in the table, a little bit more, at the end of, as well as, and at the same time.*

Again, these lexical bundles can come in the form of clauses, as they can contain some finite verbs to make them meaningful, but at times they do not make complete sense, and they cannot stand completely on their own and make sense, unless their meaning is drawn from the other part of the sentence. This often makes them subordinate or dependent clauses in terms of their functions, for example, *when the teacher arrives* and *as if he knew what was going to happen*. Also, lexical bundles are mostly identified with different names, in the form of multi-words, they are single words (Real, 2000). This is why they are mostly referred to as prefabricated chunks, lexical phrases (Nattinger & DeCarrico, 2002) formulaic sequences (Wray, 2002), and lexical bundles (Biber et al, 1999). They are considered “the most frequently recurring lexical sequences in a register” (Biber, Conrad & Cortes, 2004, p. 376).

Another characteristic of lexical bundles is that they are corpus-based or frequency-based four-word units and have been found to be stored and processed in the brain (Nekrasova, 2009). The bundles show various structural and functional differences, for example, Biber et al (2004) found that spoken and written registers of lexical bundles differ significantly. Bundles also differ according to academic discipline. This implies that some bundles are seen and used around some specific course disciplines like those for only English (at least language discipline), Science, and ICT, making these kinds of bundles specific for specialized purposes. A lot of terminologies are used to refer to such units including academic clusters (Hyland, 2008), phrasal expressions (Martinez & Schmitte, 2012), and academic formulas (Simpson-Vlack & Ellis, 2010). In the study of English for specific purposes, it is

observed that specific disciplines also bring forth specific choice of words that are germane to particular disciplines. In the same vein, lexical bundles can equally be area- discipline- and course-specific. Lexical bundles in the area of ICT for instance, will and most likely be different from lexical bundles in the area of Engineering and commerce. This assertion is demonstrated in Table 2.2 from Adel and Erman (2012) and Lio (2012) to support this observation.

**Table 2.2. Discipline-specific bundles (adopted from Adel & Erman, 2012; Lio, 2012).**

<b><i>Science based lexical bundles</i></b>	<b><i>Business based lexical bundles</i></b>	<b><i>General Arts lexical bundles</i></b>	<b><i>Visual Arts lexical bundles</i></b>
Typical results are shown	How are you faring	I am very pleased	Down to a fine Art
It is believed that	Could you repeat that	Last but not least	Art is long and life is short
In my experience	For this reason	It is a tall order	State of Art
According to statistical analysis	To that end	To begin with	Work of art
A definite trend is evident	A case in point	To start with	Break new grounds
In case after case	To be specific	I am cocksure	Dribs and drabs
In a series of cases	From the data	A thing of the past	Sink your teeth into
A wild guess	Without a doubt	A bitter pill to swallow	Poetry in motion
The data indicates	Make no mistake	In a nutshell	To be sure
Findings point to	You were saying	All manner of	Art for art sake

<i>fashion design &amp; technology lexical bundles</i>	<i>hospitality &amp; catering management lexical bundles</i>	<i>Cosmetology lexical bundles</i>
Dressed to the nines	A table for two	Wash and cut
Dressed to kill	This way please	Cut and dry
A la mode	We are fully booked	Do you want a cut or perm?
Dress how you want to be addressed	What is on the menu	Manicure or pedicure
Fashion is a language	take my order	I want a trim
Quality never goes out of style	Can I have this	My nails are done
Dress with style	Would you recommend this	Just a trim
Fashion never sleeps	I am not drunk	How much do I owe you?
Innovation at work	What is today's special	Could you trim my beard
A classic never goes out of style	Try this drink	I'll leave it to you

While these terms can be placed under the umbrella term of *formulaic language* (Wood, 2015; Wray, 2002), they are used here to refer to a special set of pre-assembled words whose meaning can be inferred from the meaning of their constituents parts and their identification in natural discourse involves applying some frequency and dispersion measure (Cortes, 2004). One other important characteristic feature of lexical bundles is the fact that they help non-native speakers produce error-free sequences in communication. The use of lexical bundles successfully hinges more on the academic maturity and expertise of the disciplinary writers, rather than on their native or non-native backgrounds (Haswell, 1991). The academic background and experience of the non-native learner plays a vital role in the learner's ability to construct or speak flawless English. This is because they are able to adopt the bundles

specific to their disciplines and field of expertise and adapt them in their contribution to flawless discourse.

Lexical units are also characteristics of lexical bundles. It must also be noted that longer lexical bundles are usually formed through an extension or combination of one or more shorter bundles (Biber et al, 1999). Examples of easily identifiable lexical bundles and the different forms they present themselves are exemplified as follows: idiomatic expressions - a stitch in time saves nine, it takes two to tango, one good turn deserves another, to keep a straight face, in the nick of time, to tell a cock and bull story, when pigs fly, to add insult to injury, and to hit the nail on the head; and proverbs; A tree is known by its fruit, the words of friends makes you cry, the words of an enemy makes you laugh, and laugh and the world laughs with you.

Another characteristic of lexical bundles is the inverse relationship that exists between the length of a lexical bundle and their frequency of occurrence (Cortes, 2013, Hyland, 2008b, Hyland, 2012; Simpson-Vlach & Ellis, 2010). In an analysis of academic prose and conversations, it was observed that three-word lexical bundles occurred almost ten times more than four-word lexical bundles and five-word lexical bundles. It was realized from the research that three-word lexical bundles occurred 80,000 times per a million words in conversation and over 60,000 times per a million words in academic prose (e.g. Biber et al, 1999). This revelation buttresses Nation's (2001) proposition about the process of incorporating the teaching of lexical bundles into pedagogical approaches in the classroom. The second stage of the process talks about the process of retrieval and the mechanics or mechanism of retrieving and keeping track of lexical bundles learnt or chanced upon. Three-word lexical bundles, by virtue of their length, make easy recollection and remembrance an easy proposition as compared to other lengthier lexical bundles (Nation, 2001).



## 2.4 Approaches to phraseology studies

Lexical bundles, as part of formulaic language or expressions, can be studied using different approaches. These approaches are the ways by which the bundles can be identified in a written paragraph or in a given expression. It is important to note that as humans, in both our written and spoken expressions, we produce ‘chunks’, which is, we tend to produce our thoughts or ideas, in groups or in bundles. Apart from this knowledge, it is worth knowing the approaches by which the lexical bundles can be studied, that is, the analysis of phraseological units. Cowie (1994, p. 3168) defines phraseology as “the study of the structure, meaning and use of word combination”. It brings back the way in which words combine with each other in the English language, which can be traced back to the 20<sup>th</sup> century, when a number of researchers published works on fixed expressions. Due to the limitations of detailed research materials at the time, studies into phraseological expressions had to be limited to few areas of fixed sub-classes of formulaic sequences, especially in the areas of ideas and set expressions. This makes more composite language constructions like lexical bundles to be ignored. With the coming of computer and electronic software, researchers were later able to investigate more to discover lexical bundles in academic writing.

John Sinclair showed the way to corpus-driven lexico-grammatical research into phraseology studies by use of two concepts; the Idiom Principle and Lexical Grammar Principle. The Idiom Principle refers to the phraseological tendency of language, whereby words do not appear in isolation, but combine with each other to make meaning (Sinclair, 2004). For example, *a stitch in time saves nine*, *a picture is worth a thousand words*, and *frag his name through the mire*. In the open-choice principle, words are individually chosen to fill certain slots in sentences. Sinclair

(1991, p. 110) states that “a language user has available to him or her, a large number of semi-pre-constructed phrases that constitute single choices, even though they might appear to be analyzed into segments”. For example, even after the operation, doctors say Kankam’s road to *recovery* is uncertain, despite his ability to breathe *unaided* at the moment. All the same, as his *condition* has improved slightly, Kankam has begun to *respond* to pain. In addition, his body can now perform *basic* functions, even though he is in *induced* coma. Since he suffered a *heavy* stroke last week, doctors can now say Kankam is *out of* danger, though a full assessment of brain *damage* is yet to be made.

After a number of studies, it was evident that there was a lot of evidence of the inseparability of lexis and grammar, leading to Sinclair (2004, p. 164) to go beyond Lexico-grammar Principle and to propose the notion of lexical grammar, “an attempt to build together a grammar and lexis on an equal basis”, where meaning and structure are considered as one. From Sinclair’s idea of lexical grammar, pattern grammar is echoed. Later, there was a new finding from Sinclair, which is the inductive approach to phraseology, which is the distributional (Event, 2004) or frequency-based approach (Nesselhauf, 2005). This approval stems from Sinclair’s Idiom Principle. The Distributional Approach takes phraseology from the periphery to the centre of language analysis. This approach does away with pre-defined linguistic categories in the identification of phraseology units, and embraces a wider range of word combinations than the more traditional approach to phraseology which tends to focus primarily on fixed expressions such as idioms and proverbs. Basically speaking, there are two broad ways of categorizing the approach to phraseology. These are the Traditional approach and the Distributive approach.

The Traditional approach tends to focus primarily on fixed expressions such as idioms and proverbs. The second approach; the distributional approach, does not depend on semantic criteria to determine what a phraseological unit is, and it is much more interested in the relationship between a word and its surrounding context. It introduces concepts that bridge the lexis-grammar divide, such as semantic preference, the “relation between a lemma or word-form and a set of semantically related words” (Stubbs 2001, pp. 111-112). The Distributional approach opened up new and varied avenues of investigation into phraseology, which then resulted in the proliferation of terminologies and analytical methods for various kinds of automatically extracted multi-word units.

For Biber et al (2004), empirical studies on word combination differ in terms of different features. For example, the research goal is a determinant in the conduction of phraseological studies, this examines the objective of the discourse being undertaken and an examination of the size of the corpora of the study, whether it's the entire corpora of study or just a section of the corpora in question such as a focus on the editorial, the methodology or just the conclusions of a written discourse. The interplay of word combinations throughout the entire discourse, is the point at which a determination is made, as to the categorization of the text document being referred to.

Another form of phraseological studies is the criteria for identification of multi-word units (perceptual salience, frequency criteria) in these instances we are referring to the identification of multi word units either in terms of the structure or function of the discourse. An assessment is done to determine the nature of the text of the discourse at any given point, whether it's a look at the structure of the discourse or the function of the discourse, as in relation to the entirety of the existing text. Another feature or formal characteristic of phraseology studies is the use of multi-word units

(continuous sequences, discontinuous frames or lexico-grammatical patterns, two-word collocations versus longer sequences), these trend looks at the well documented and distinguishable characteristics of lexical bundles, and their occurrence in a textual body of written discourse or spoken discourse, whiles examining their placement and the relationship between the lexical bundle and its immediate sets of environmental texts.

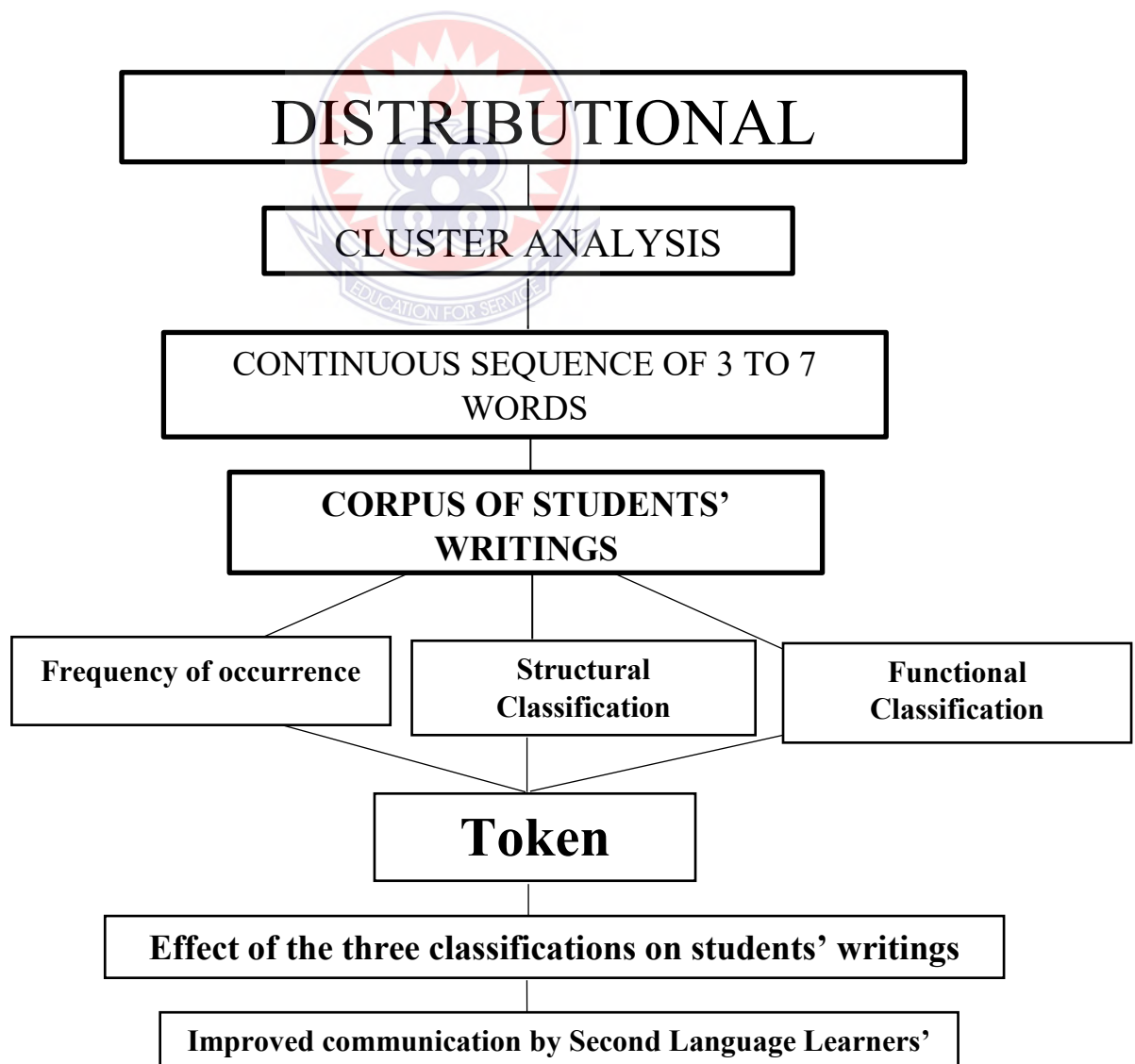
Lastly, the number of text samples used (small versus large corpora), the corpora is a determinant as to the conduct of phraseology studies. The larger the corpora, the greater the propensity of encountering larger numbers of lexical bundles, the smaller the corpora, there is a corresponding reduction in the number of lexical bundles that will be extracted from it. Although, as Biber et al (2004) points out, this diversity in research methods and perspective is needed to better understand a complex issue like phraseology, it is true that such a situation “hinders communication between linguists and generally increases the impression of fuzziness in the field” (Granger & Paquot, 2008, p. 28).

## **2.5 Conceptual framework**

In order to bring order to this fast-developing area, Granger and Paquot (2008) suggest a typology of the kinds of phraseology and units obtained through the distributional method. In this study, the distributional approach has been adopted as the conceptual framework to guide the study. However, because of its complexity in terms of its analytical orientation, it has been modified to suit the needs of the present study. Thus, the modified (adapted) version is utilized in this study and is illustrated in Figure 2.1.

### 2.5.1 Continuous sequence of words

The framework has a cascading downward effect, in the sense that, each section has a cumulative effect of the other section or level. The main objective is to end up with second language learners or students who can exhibit improved or better communication skills. The various sections impact the other differently but essentially and contribute to the proficiency level or skill of the student and this is seen in the last segment. Within the ambit of the framework, lexical bundles could comprise three-word phrases to seven-word phrases. This means that there is the possibility of having three-, four-, five-, or even six-word structure imbedded in the seven-word lexical bundle.



The distributional approach to phraseological analysis (adapted from Granger & Paquot, 2008b)

Similarly, you could have a three-word phrase imbedded in a four- or five-word phrase in any particular bundle, provided it is more than four or five words. This is referred to as lexical units or chunks, for example, '*the fact is that she is learned*'. It can be observed from this statement that the phrase, '*she is learned*' is a three-word lexical bundle, '*the fact is*' is another lexical bundle within the same environment, Similarly, '*the fact is that*' is a four-word lexical bundle, also within the same sentence, but upon a closer examination of the sentence, it will be observed that a three-word lexical bundle like '*the fact is*' embedded in the four-word lexical bundle, '*the fact is that*'.

### **2.5.2 Corpus of writings**

The corpus of students' writings refers to the body of corpora that is analyzed, using content analysis, for the identification and categorization of lexical bundles. Corpus is described as a collection of words either in spoken discourse or written discourse, designated as a resource hub for analytical purposes, especially in the area of multi-word discourse analysis. These corpora could be academic prose, journalistic publications, newspaper articles, students' writings or essays, manuals of electronic devices' emanating from countries in Asia or the Middle East. Others may be business journals or scientific journals, online portals and virtual repositories of information. Some corpora are also specific or detailed, for example, you can have a corpus that only focuses on the choice of language used in the introduction or conclusion sections of articles, or the dissertations of students. A corpus can comprise the language used

in editorial pieces in a one month window, by a particular media organization, or a collection of articles targeted at hate crime (Jablonkai, 2009).

### **2.5.3 Frequency of occurrence**

The frequency of occurrence relates to the number of times that a particular phrase or lexical bundle is identified to have occurred repeatedly throughout a text that is being analyzed or read. The recurrence of a wide variety of lexical bundles, both in terms of the number of word compositions in lexical bundle and sentence formation, instead of a repetitive recurrence of particular lexical bundles, will point to the proficiency of the writer or author. The frequency of lexical bundles dovetails into the phenomenon of tokens. Quantifying lexical bundles differs from quantifying the occurrence of tokens; if tokens are quantified alongside the lexical bundles data, it will inflate the quantitative results, even though they are an integral part of lexical bundles. Token refers to the number of times that a particular lexical bundle occurs throughout the writings of an author. For instance, if a lexical bundle occurs 10 times or 15 times throughout an article, the number of recurrences becomes the token of that particular bundle. Thus, while the particular bundle is called the *type*, its number of occurrences is called *tokens*. From this, we see that tokens are an inalienable part of the analysis when it comes to the frequency of lexical bundles, structure of lexical bundles, and the functions of lexical bundles.

### **2.5.4 Structural classification**

Structural classification in the framework talks about the grammatical constructions that are identified in lexical bundles that have been used in a piece of writing. Whether they are verb phrases, prepositional phrases, or noun phrases, depends on the context or the relationship between the identified lexical bundle and the rest of the sentence, the placement of verbs or nouns in the sentence and the task

or role that these verbs or nouns play in the sentence. This also involves the subsequent effect that the bundles have on the sentence or the relationship between them and other parts of the sentence, at any given point of time.

Several studies on lexical bundles have captured different structural categories and major sub-categories that are further sub-divided. These are described as follows:

**1. Noun structures: Noun phrase + phrase fragment:** For example; As a result of, we solve a lot of, the use of, a lot of, a whole lot of. Noun phrase with other post-modifier fragments; for example; the fact that, the reason why, the fact is, this will lead to, the event was supposed to be. Other noun phrase, for example; this line talks about, these three friends, she did not say much, Love for music.

**2. Verb structures: Passive + preposition-phrase fragment:** For example, was added to, were added to, was analyzed by, were analyzed by, was assessed by, is associated with, are associated with, is composed of, was confirmed by, performed as described previously, were prepared as described. Other passive fragments, for example; were allowed to, carried out using, have been described, has been described, can be detected, could be detected, has been implicated, have been implicated, at the indicated, of the indicated, used to amplify, used to determine, results were obtained, similar results were obtained, used to determine, can be used, has been used. Verb phrase with personal pronoun we, for example; we asked whether, we concluded that, we demonstrated that, we showed that, we have shown, we have shown that, here we showed that. Other verbal fragments; for example, did not affect, may contribute to, exclude the possibility, would result in, play a role, had no effect, had no effect on, for review, for review see.

**3. Prepositional phrase fragments; Prepositional phrase + of:** For example, in the absence of, in the absence or presence of, by the addition of, by addition of, in the



formation of, by the presence of, at the surface of, on the surface of. Other prepositional phrase (fragments), for example, for their ability to, in accordance with, in each case, in combination with, in comparison with, to the left, on the left, in this paper, in the materials and methods section, at room temperature for, by treatment with, in this paper, with the following, under the same condition, in conjunction with, for up to, in the upper.

**4. Other structures; Verb or adjective to clause fragment:** For example, verb phrase or noun phrase + that – clause fragment, for example, the conclusion that, results demonstrate that, have demonstrated that, the fact that, by the fact that, have found that, the possibility that, possibility is that, these result suggest that, data suggests that. Adverbial – clause fragment, for example, as compared with, as described previously, as describe in materials and methods, as described by, as reported previously, as determined by, as shown in figure 1, as judged by. Copula be + adjectival phrase, for example, is capable of, which is consistent with, is dependent on, is important for, is also possible, is due to, be due to, was due to, may be due to. Other adjectival phrase, for example, alone or in, consistent with this, consistent with previous, consistent with our, not due to, little or no, also present in, are present in, similar to that of. Anticipatory it + verb or adjectival phrase, for example, it appears that, it is clear, it is not clear, it is likely, it is likely that, it should be noted, it should be noted that, closely related to, the same as, significantly different from. Other expression, for example, this is consistent with, results are consistent with, these results are consistent with, in order to, there are several, taken together these results, together these data, taken together these, as well as.

### **2.5.5 Functional classification**

Functional classification sheds light on the functions the identified lexical bundles play in the overall scheme of the writing or the perspective of the writing or the writer. From a purely pedagogical point of view, the functional analysis of lexical bundles is important as far as their functions as teaching and learning items are concerned. The motivation for the study of lexical bundles arises from the fact that they tend to play very versatile roles in the area of introduction of a topic, comparing and contrasting of variables, quoting of sources, and drawing conclusions. This makes it imperative to provide an adequate description of what they are and the role they play in academics (Salazar, 2010). The functional classification has sub-categories that give a clearer direction or intention of the author or writer. These sub-categories are discussed further and the effect they tend to have on the direction of any form of written or literary discourse:

#### **2.5.5.1 Research-oriented bundles**

The first type consists of those which perform research-oriented functions. These are lexical bundles used to help structure and report accounts of research activities and the world in which they take place in. Lexical bundles in this category help writers to situate, contextualize, and describe their research. The language and phrases used and the context of use, tends to throw light on the research theme or objective of the discourse. Within this category, they types are further re-categorized into five subgroupings: locational bundles, procedural bundles, quantitative bundle, descriptive bundles, and topical or thematic bundles (Johnson, 2017). Examples of such bundles are listed as follows:

#### **2.5.5.1.1 Location**

Location emphasizes place, extremity and direction. Every author or writer initiates his or her writings or continues from a specific point or refers to an incident, an organization, or refers to a previous point or makes referrals to previously made positions. For example, *in a nutshell, in the book, in our class, in my heart, in the Bible, in this line, in our country, and in this era.*

#### **2.5.5.1.2 Procedural**

This category of discourse focuses on events, actions, and methods. The procedural bundle is characterized by making statements which serve as launch pads for further disclosure of facts or the occurrence of subsequent events or scenes. For example, *to continue with, in addition to, in the meantime, as we all know, in the course of, one evening after school, and for that matter.*

#### **2.5.5.1.3 Quantification**

This category indicates measures, quantities, proportions, and changes thereof. This category indicates a means of making an assessment or a pronouncement or state a position of increasing or voluminous relevance but not necessarily numerical. Examples are *most at times* and *to add up*.

#### **2.5.5.1.4 Description**

This category of discourse indicates quality, degree and existence, of a thing. It could be tangible or intangible but the descriptions of that thing can literally bring it to life from the pages of an article. For example, *this line talks about, to throw more light, as of now, as far as am concerned, can you imagine that, as far as I was concerned, and to throw more light on.*

#### **2.5.5.1.5 Grouping**

This indicates group, categories, parts, and order. It throws light on the usage of language to describe a host or collection of data set, ranging from a point to another point, the exact nature of the data sets could be statistical data, numeric data, a collection of items or persons, a temperature range, or a performance range. For example, *a series of test, students make sure that, one of them, we were all behind our books, we walked slowly, we got there, we all know that, is in three parts, is a group of people, and to assist some members.*

#### **2.5.5.2 Text-oriented bundles**

This category of lexical bundles is concerned with the organization of the text and its meaning as a message or argument, its sub-categories are enumerated:

##### **2.5.5.2.1 Additive**

This type of lexical bundles establishes additive links between elements, for example, *in addition to*. This category looks at the relationship that exists between different parts and aspects of an unfolding narration through the linkages that lexical bundles provide. For example, *on the other hand, to add insult to injury, as well as, and in other words.*

##### **2.5.5.2.1 Comparative**

This kind compares and contrasts different elements, for example, *as compared to, or in contrast with*. This category looks at the relationship that exists between two variables; there is an attempt or an effort at doing a comparative analysis between these sets of variables laid out by the writer. Examples are *compare and contrast and in relation to*.

### **2.5.5.2.3 Inferential**

Bundles of this kind signal inferences and conclusions drawn from data, for example, *these results suggest that* and *we conclude that*. This category examines the sequential sets of pronouncement or activities that are about to be made as a consequence of previously made comments. In the area of statistical analysis, this means an examination of data while in the area of English summary, it means intelligent deductions made from previously read passages. Examples are *in this case*, *in view of this*, *as a result of*, *there are few suggestions*, and *for this reason*.

### **2.5.5.2.4 Causative**

These types of bundles indicate a cause and effect relations between elements, for example, *as a result of* or *is caused by*. An activity must have occurred to cause a series of resultant decisions to be taken; it is almost as a reaction to a previous occurrence. The previous position serves as an impetus for the next series of actions to be taken. Examples are *due to the fact that* and *the reason why*.

### **2.5.5.2.5 Framing**

These bundles situate arguments by specifying limiting conditions, for example, *in the case of* and *with respect to*. This framing subcategory presents a scenario where, a series of points, arguments, are made within certain bounds and certain limitations. It presents an argument or a position of the writer based on certain previously made points upon which further analysis of pronouncements are to be made.

### **2.5.5.2.6 Citation**

These bundles cite sources with supporting data, for example, *it has been proposed that* and *studies have shown that*. This category talks about the use of language or a set of arguments that draws the reader's attention to landmarks, places,

or things in a write up that seeks to buttress the writer's assertion on an issue. Arguments are presented on an issue by the writer; his evidence is equally presented, for the reader to assess the veracity of the points being made. This evidence is usually cited in the text, or described as in text citation.

#### **2.5.5.2.7 Generalization**

This type of bundle tends to signal generally accepted fact or statements, for example, *little is known about* or *it is thought to be*. This category highlights the use of language to draw the attention of readers to an issue. The arguments tend to be general in nature as they seek to address a multiplicity of issues without any form of specificity therein. Examples are *it is known that*, *draw your attention*, *have a bad feeling*, *most at times*, and *to be given*.

#### **2.5.5.2.8 Objective**

This category of lexical bundles draws the attention of the reader to the objective behind a statement, a comment, a pronouncement or a set of facts presented. The objective is not stated in explicit terms or clear language but the language gives ample direction on the objective or the intention of the author. For example, *to address the problem*, *to make sure*, *to report to*, *to promote unity*, *to be an agent of peace*, and *to be given the opportunity*.

#### **2.5.5.3 Participant-oriented bundles**

Bundles of this nature tend to focus on the writer or reader of the text. The types are as follows:

##### **2.5.5.3.1 Stance**

This category of lexical bundles tends to convey the writer's attitudes and evaluation. for example, *it is possible that*, *it is clear*. These participant-oriented bundles seek to express the feelings of the writer towards an issue under discussion or

make pronouncements on a developing matter. This tends to be a prelude to the entire discussion or write-up to the point where the writer needs to make a decision or begins to make the effort at making an assessment or an evaluation on a series of situations. For example, *we solve a lot of, make sure that, due to the donation, so that we know, would go to farm to, due to the effect, due to this problem, is one of the, this line talks about, the fact that, to put an end to, to address the problem.*

#### **2.5.5.3.2 Engagement**

This addresses readers directly, for example, it should be noted that, see figure 1, as seen in. This category seeks to engage the reader directly, as a means of grabbing his attention throughout the piece. This strategy is useful where the reader is spoilt for choice and needs to make a choice as to what to read and at what time. The writer tends to adopt a conversational approach or tact. The effect of these three classifications on students' writings will be done to appreciate and comprehend their use of these lexical bundles, it will serve as a pointer to their proficiency and appreciation of the exactly what they have accomplished or the dearth of it. For example, *fell on death ears, as far as am concerned, the reason why, I hope all is well, draw your attention, it has been a longtime, we don't have to, it is my hope, and to commence with.*

Improved communication by second language learners this is the expected or projected outcome of this study. Embedded into this section, albeit inherently, is the process of translating the entire framework into tangible pedagogical steps and processes. These will lead to pragmatic classroom and teaching learning processes and to improve the discourse level of second language learners. Authors have brought out the differences between two main extraction procedures, which are co-occurrence analysis and n-gram analysis. The co-occurrence analysis focuses on statistical

associations between lexical items. Words that co-occur more often frequently than expected by chance are referred to as collocations or collocates (Manning & Schutze 1999; Sinclair 1991; Stubbs 2002). Other analysts term it as co-occurrence and co-occurrent (e.g. Evert, 2004; Granger & Paquot, 2008b; Schmid, 2003). Collocations reflect probabilistic events that result from repeated co-selection of words by speakers of a given language. This is seen in examples such as the regular co-occurrence of the verb *have*, the adjective *bad*, the recurrent *and*, the prepositions *about* and *in*, and the noun *dream*. These strong statistical preferences are demonstrated by language corpora and are now a generally recognized aspect of vocabulary description and pedagogy (Lewis, 2000; McCarthy & O'dell, 2005; Okeefe, McCarthy, & Carter, 2007).

N-gram analysis, on the other hand, refers to the extraction of frequently occurring strings of two or more words variously called n-grams or more specifically (bigrams or trigrams) (Stubbs, 2007a; Stubbs, 2007b), clusters (Scott & Tribble, 2006), chains (Stubbs, 2002; Stubbs & Barth, 2003), recurrent sequences (De Cock, 2003), and recurrent words contributions (Altenberg, 1998). Although the N-gram analysis is usually associated with continuous uninterrupted word sequences, some n-gram researchers have also studied discontinuous language patterns which are termed collocational frameworks. Collocational frameworks are composed of fixed high frequency functions words combined with free slots filled by a variety of content words, for example, (a + - + of, an + - + of, be + - + to). Biber (2009) investigated similar features using a corpus driven method that combined identifying the most common patterns in a corpus, determining the variability and fixedness of the elements within these patterns, and comparing their use in speech and writing. Phrase frames are very similar to Renouf and Sinclair's (1991) collocational frameworks.



They are defined as sets of variants of n-gram identical except for one word, as in the highly recurring form, the *-of* the, whose many variants include the *end of* the, the *rest of* the, and the *nature of* the.

### 2.5.6 Summary

The idea of lexical bundles (Biber et al, 1999) is the terminology adopted for my study of an analysis of writings in Senior High Schools (SHS) in the Accra Metropolis in the Greater Accra region comprising five SHS. Lexical bundles are a distributional type of phraseology unit that falls under the category of n-gram. Although Granger and Paquot (2008b) propose two branches emanating or sprouting out of the distributive approach, I have chosen to look at the cluster analysis in my work. In this category, a number of n-gram groups have been identified and one of them is the use of lexical bundles which are used to extract frequently occurring strings of words, in this case, three to six strings of occurring words in continuous succession. The n-gram relates to lexical bundles in that, it has continuous sequence of two or more words (bigrams or trigrams), uses frequency threshold occurrence, and has no free slots. That is, it is associated with continuous, uninterrupted word sequences, and also uses one or more free slots. These lexical bundles come under the general broad term of formulaic expressions. They are like the building blocks that are used by EFL/ESL learners to make their language rich and as much error-free as possible.

### 2.6 Types of lexical bundles

Lexical bundles fall under the umbrella of n-gram/clusters distribution categories of phraseology. According to Biber et al (1999), lexical bundles are recurrent words regardless of their idiomaticity and regardless of their structural status. Simply put, they are sequences of words that commonly go together in natural

discourse. Multi-word sequence used as pre-fabricated chunk that are stored and used. There are different aspects of lexical bundles in the literature. These are the frequency of the lexical bundles, the structural taxonomy of lexical bundles and functional types of lexical bundles. The structural types refer to the particular syntactic or grammatical configuration which a lexical bundle assumes or within which it is embedded. Biber et al (2004) proposes a taxonomy by regarding the structure of lexical bundles in communication register, which implies that “lexical bundles have string grammatical correlates”, in spite of the fact that they are not complete structural units.

Lexical bundles that incorporate *verb phrase* fragments; (connector) + 1<sup>st</sup> / 2<sup>nd</sup> person pronoun + fragment: *I'm going to be, you don't have to*, (connector) + 3<sup>rd</sup> person pronoun + VP fragment: *it's going to be, that was one of the*, Discourse marker + VP fragment: *I mean you know, you know it was*. Verb phrase (with non-passive verb): *is going to be, is one of the*, Verb phrase with non-passive verb: *is based on the, can be used to*. Yes/no question fragments: *are you going to, do you want to*, WH question fragments: *what do you think, how many of you?*

Lexical bundles that incorporate *dependent clause* fragments, 1<sup>st</sup> / 2<sup>nd</sup> person pronoun + dependent clause fragments: *I want you to, I don't know if*, WH clause fragments: *what I want to, what's going to happen?* If-clause fragments: *if you want to, if you look at*, (Verb/adjective) + *to*-clause fragment: *to be able to, to come up with, that* –clause fragments: *that there is a, that I want to*. Lexical bundles that incorporate *noun phrase and prepositional phrase* fragments, (connector) + Noun phrase with *of*-phrase fragments: *one of the things, the end of the*, Noun phrase with other post-modifier fragments: *a little bit about, those of you who*, other noun phrase expressions: *and stuff like that, a little bit more*, Prepositional phrase expressions: *of*

*the things that, at the end of.* Comparative expressions: *as far as the, greater than or equal.*

The structurally incomplete units have been found to be strands and processed holistically in the mental lexicon (Nekrasova, 2009). Another noticeable feature of lexical bundles is their fixedness, which is different from the fixedness that characterizes other word combination, in that, it is due to the frequency criteria applied during the bundle extraction process (Cortes, 2004). With regards to their structure, the larger majority of lexical bundles are not complete structural units, but rather parts of phrases or clauses with embedded fragments (Biber et al, 1999). Also, another distinguishing feature with regards to the structure of lexical bundles is the tendency of shorter bundles to be subsumed in longer sentences.

The functional types of lexical bundles are traced using their frequency of occurrence. Stance bundles express “attitudes or assessment of certainty that frame some other proposition (Biber et al, 2004, p. 384). Discourse organizing bundles show how prior and forthcoming discourses are related. Referential bundles refer to physical or abstract entities, or to the lexical content itself. Participant-oriented (stance expressions) used to express other attitudes or assessments of another proposition. Text-oriented bundles (discourse organizers) which serve to demonstrate a relationship between sections of the writing. Research-oriented (referential expression) used to make direct or indirect reference to other texts (Biber & Barnieri, 2007; Hyland, 2008; Wei & Lei, 2010).

Some other groupings that categorize functions of lexical bundles are as follows:

A. Referential expressions include subcategories specification of attributes, identification and focus, contrast and comparisons, deictic and vocatives and finding

vagueness markers. The category uses specifications of attributes in the form of tangible or intangible framing sentences. For example; Based on the..., in the context..., in such a way...are all examples of intangibles.

The amount of..., the size of..., the level of..., are all examples of tangibles.

B. Stance Expressions, includes hedges, epistemic, obligations and directives and evaluation.

Hedges	Examples of hedging are; To some extent... There may be... Might want to...
Epistemic	This deals with claims of knowledge or expression of certainty or uncertainty, for example; Let's assume that...
Obligation and direction	For example; Tell me what...
Ability and possibility	For example; Going to be able...
Evaluation	For example' It is consistent with...

C. Discourse organizing expressions

Meta discourse and textual reference, Introduction and focus, for example, take a look at, topic elaboration, for example, *it turns out* and *what happened is as a result of*. Discourse markers (connectors) and interactive devices and formulas, for example, *in other words* and *that you use much*. Other similar researchers have include research oriented bundles, text-oriented bundles, and participation-oriented bundles.

## 2.7 The importance lexical bundles in Students' writing

Lexical bundles have numerous functions in the learning of English; especially since they are produced holistically from memory as they are stored, whether in the written form or spoken forms. Again, the knowledge of its fixation, taken as a whole, reduces the production of errors to its barest minimum. Lexical bundles as a variation of formulaic language offer processing advantage, increase confidence and contribute to more natural-sounding language. They are a fixed set of words (that may have open slots in it); they are prefabricated, stored and retrieved whole from memory at the time of production. They are stored and retrieved as whole phrases, or chunks, rather than being analyzed or comprised of separate parts (Wray, 2002). Lexical bundles play important roles in shaping text meanings, thus, the results of this study may assist the students in understanding the different functions of English lexical bundles in academic registers which may help them become better learners in ESL writing classes.

The set phrases or chunks allows learners to have an early grasp on pragmatically appropriate language, even while they may struggle with other aspects of language learning (Wood, 2015). Ellis (1996) asserts that formulaic language and for that matter, lexical bundles, serve as a basis for more advanced language learning, where these sequences serve as the building blocks for later grammar acquisition. Researchers have observed that while writing contains less formulaic language than speech (Biber et al, 2002), having mastery over formulaic sequences common to writing is necessary for learners to produce writing that is acceptable to native speakers (Cowie, 1992).

Also, with more students entering into academic language programmes, and these programmes focus on mastery of academic writing, a grasp on these written

forms is essential for success. Formulaic language has been shown to be important for language learning, both for ease of learning and accelerated pragmatic competence. How appropriate a lexical bundle has been used and made to function will depend on the discipline in which the writer is writing in or on (Hyland, 2008).

For identifying lexical bundles, two aspects of frequency are important; the frequency of occurrence and the range of texts the bundles are found in. Every potential bundle must be identified and every occurrence counted in every text. If a lexical bundle occurs across many texts, it is more likely to be a formulaic sequence than simply an idiosyncrasy of the author (Biber, 2009). Lexical bundles are used differently by writers of different ability towards language backgrounds, and across disciplines. These variations are found in the overall frequency of bundles used, the structures of these and their functional use. Lexical bundles can be used in our daily activities and in everyday life, as a whole. According to Wray (2002), there are chunks of language that appear repeatedly in daily life, especially in telling a story, greeting a friend or writing. Words like chunks, prefabricated routines, collocations, holophrases and ready-made utterances (Schmitt, 2010) are the different words that are used to describe formulaic language. One good thing about formulaic language is that it exists in almost all languages.

One of the reasons for using formulaic language is reducing processing effort (Wray, 2002). While using formulaic language during discourse, it is possible to focus on other activities at the same time, like the ideas of the conversation or another unrelated task. Other reasons for using prefabricated expressions are because of the fact that, it makes certain jobs easier, and are used in for example, sports commentary, aviation and in weather forecasts. For example, boxing ring announcers always tend to announce both boxers and get the crowd up on their feet with, *let's get ready to*

*rumble*, or in aviation, you tend to hear, *you are cleared for take-off*. They can also be used to *mark a style*, meaning that a writer uses certain expressions in order to keep the text genre-appropriate. Prefabricated expressions are also used to lessen repetition and add variation to written text as well as to organize the text by marking discourse (Wray, 2002).

They are also used to make text more comprehensive and less repetitive, and to make spoken language more fluent. Simply put, it can be described as solutions to different linguistic problems which Wray (2002) states, can be further expanded upon by examining the reason why these problems should be solved, that reason being the promotion of the speaker's intent. This intent include having easy access to information, expressing information in a fluent manner, being listened to in the same way, having emotional and physical needs met, being provided with information, and being perceived as an important member of the speaker's group. Lexical bundles create words that are readable, that follow in an order with the usual rules of distribution, which creates an interest in the probabilistic way sentences can be created by psycholinguists, which is often referred to as sentence approximation (Shaoul & Westbury, 2011). Lexical bundles possibly help the human brain to store large complex items rather than small ones (Erman & Warren, 200).

The basis for this comes from the field of information and learning things in psychology. The use of lexical bundles is also a way by which both children and adult naturally acquire language (Wray, 2002). When it comes to academic writing, previous research by Biber et al (2001) suggests that writers of academic text improve their skills in a certain developmental sequence. According to Biber et al (2001), academic writers start by using language similar to spoken language and acquire the density of information and complex phrasal features needed in academic language

over time (Staples et al, 2016). Biber and Barbieri's (2007) study of lexical bundles shows that while prefabricated expressions are used in all types of writings or registers, they are most common in spoken academic English/lectures, and these are more rare in written academic language (textbooks and similar course-related works) and it is important for language learners to be aware of this.

Lexical bundles, which are defined as the most frequently recurring sequence of words (Biber et al, 1999. p. 90), play a central role and fulfill a wide range of important functions in English academic writing. The main discourse functions of lexical bundles can be summarized as follows (Biber, Conrad & Cortes, 2004): they present arguments and frame attributes through referential expressions, for example, *in the context of*. They organize texts through discourse organizers, for example, *on the other hand* and convey attitudes. The bundles reflect how academic writing is formed by a particular discourse community, reveal disciplinary membership and enhance effective communication in academic writing (Cortes, 2004, Hyland, 2008). Uncovering preferred ways of organization and meaning, lexical bundles can also shed light on cultural and preferences in academic writing (Hyland, 2008).

Other importance of lexical bundles is the fact that its use can be seen in almost all areas of human life and in almost all areas of research, for example, education, sports, science, and culture. Lexical bundles also known as chunks or clusters (Hyland, 2008a) or the most frequently occurring fixed-forms sequence of three or more words that are usually neither idiomatic nor complete structured units. Although they have strong grammatical units correlates (Biber et al, 1999; Biber, 2006), they have attracted the intent of researches not only because of their prevalence in language but also because they have been found to be the building blocks of coherent discourse, and strong discipline, genre, and register discrimination and



therefore, important for the production and comprehension of texts in the university (Biber, 2006).

These permanent collocations and their natural and appropriate use of bundles signals their expertise in their given community (Hyland, 2008a). With this, expert academic writers in different disciplines and genres make use of a wide variety of lexical bundles to develop their arguments and persuade the readers. Biber and Barbieri (2007) note that lexical bundles have a transparent meaning; they are not idiomatic, and they are grammatically complete phrases or classes. Although they are not grammatically complete, and often span two structural units, lexical bundles are “readily interpretable in both structural and functional terms” (Biber, Conrad & Cortes 2004, p. 399).

A lexical bundle such as *going to talk about* can be functionally interpreted as introducing a new topic, although it is grammatically incomplete. Because a lexical bundle approach to identify discourse organizing language takes into account only the frequency, it provides the opportunity to identify common multi-word units, classifiable by function that may lack the perceptual salience to be intuitively identified by research. Also, lexical bundles can be classified according to function; they also provide the opportunity to investigate functional differences and how these differences relate to use, within the broader category of discourse organizing language. It is a major component in coherent linguistic production and an essential aspect of the shared knowledge of a professional discourse community.

## **2.8 Related studies**

The field of the study of lexical bundles is not a new area in the literature. A lot of people have studied the topic into detail. Relatively, most researchers over the years have dealt deeply into the subject matter across the globe. Some of the studies

that have been conducted into the studies are discussed under related studies. For instance, Johnston researched lexical bundles by using concordance software, in order to identify four-word lexical bundles in four corpora. The study revealed that professionals in Applied Linguistics and Literature used bundles with different frequency, displaying different choices of lexical items to fill structural bundles, and use functional bundles differently.

She noticed that the difference seemed to reflect the rhetorical needs of each discipline. Also, the learners in each field displayed differences in their use of bundles as compared to the professional use. This also revealed that learners in Applied Linguistics used more types and tokens of bundles, while learners in Literature used fewer. However, both groups of learners relied more on repetitive use of certain bundles than did the professionals. The findings of the study can be viewed for teaching and curriculum development, in that, the findings can be applied to teaching through creating awareness-raising and guided practice opportunities for the students. This would allow them to see how bundles are used in professional wording and to help them apply this understanding to their own writing.

Rafiee and Tavakoli (2011) examined the use of lexical bundles among students in Asia. The study aimed to shed further light on the frequency of occurrence and distribution of lexical bundles. Structural types of lexical bundles used in four newspapers, two of them published in Iran and the other two published in England, in English, whose editorial boards are non-native speakers and native speakers respectively. They used more than three million words of different English and Persian-produced online newspapers on lexical bundles, collected and identified with the help of a computer programme, and then analyzed. The analysis showed that the Iranian journalists used lexical bundles more frequently than native speaker

journalists. The research revealed that structural classifications of bundles by Iranian journalists used the same categories of bundles as native speaker journalists do. New sub-categories of bundles found in newspapers registers were added under the appropriate category. According to them, there were some interesting pedagogical implications for language teachers, EFL practitioners, and EFL learners as well.

Alasmany (2009) investigated lexical bundles, looking at the little attention given to the domains of highly theoretical and abstract nature. He intended to fill the gap by drawing on a 2-million-word corpus of doctoral dissertations, textbook chapters and peer reviewed journalistic articles. A total of 291 four-word lexical bundles that recur 25 times per million and appear in at least 15% of the text were retrieved and their structural and functional attributes examined. Results showed that graduate students used four or less lexical bundles than textbooks authors and article writers, an outcome that reinforces a pattern in the studies comparing accomplished authors and novice students in various academic disciplines. Structural analysis of the lexical bundles demonstrated that, while student writers focused more on phrasal patterns, the expert writers preferred bundles comprising clausal constructions. The analysis of the functional attributes of the bundles revealed no difference between groups, with all writers relying more on research and text-oriented bundles, but showing little interest in using participant-oriented ones.

Key findings emerged as a result of quantitative and qualitative analyses indicated that expert writers exhibited control of and sensitivity to a wide range of academic clusters in comparison with graduate students who relied on a small number of highly recurrent strings. This gives further credence to some previous findings which indicate that the successful use of lexical bundles hinges more on the academic maturity and expertise of the disciplinary writers, rather than or their native/non-

native backgrounds (Haswell, 1991). Also, it was discovered that a large number of lexical bundles in each unity group showed a strong tendency to spread across registers, with the greatest proportion of the shared bundles found in the student discourse. Again, other key findings relate to the structural and functional attributes of the bundles used by each unity group. That is, a great number of lexical bundles in the student produced texts were phrasal, while the majority of the bundles in the expert corpora were clausal, a finding that sheds doubt on the widely held assumption that as writers mature, their reliance on phrasal style become more clearly manifested (e.g. Pan et al, 2016).

Out of the research, several pedagogical implications for the teaching and learning of lexical bundles in the discipline came out. That is, instructional intervention should focus not only on the forms that such lexical bundles display but also on the discourse functions that they perform. The study finally showed that discourse can be studied from a lexical bundle perspective, using a combination of quantitative and qualitative measures.

According to Biber et al (1999), the term *lexical bundles* was first used in the Longman Grammar of Spoken and Written English. Biber and Babieri (2007) consider them as the most frequent recurrent sequences of three and more words in a register or genre. Some features identified of lexical bundles by Biber and Babieri (2007, p. 269) are that they are extremely common, are not idiomatic in meaning, and lacks perceptual salience. They further note that in most cases, they do not represent complete structural units, but often bridge structural units. It must be noted that in most cases, they begin at a clause/phrase boundary, but the last words of the bundle are the beginning elements of a second structural incompleteness. Accordingly, it is

possible to assume that there are four types of bundles based on their structural and functional characteristics.

The taxonomy of discourse functions of lexical bundles adopted draws on the classification suggested by Biber, Conrad and Ellis (2004), Cortes (2004), Biber and Babieri (2007) Hyland (2008) and Simpson-Vlach and Ellis (2010). Three main functions of lexical bundles are considered; referential bundles which reflect ideational meanings, discourse organizing bundles which reflect textual meanings, and attitudinal bundles which reflect interpersonal meanings. It is worth noting that due to their multi-functionality, which is enhanced by structural incompleteness, there are some discrepancies between the existing classifications. Apart from differences in the individual super-ordinate categories and their sub-categorizations, there are also differences in the attribution of some realizations to functional categories. For instance, while Biber (2006) and Simpson-Vlach and Ellis (2010) classify *as a result of* and *on the basis of* as referential expressions specifying the representation of the reality (Cortes, 2014), Biber and Babieri (2007) and Hyland (2008) include them in the group of text organizers, establishing logical relations in discourse.

Since some lexical bundles can have multiple functions even within a single occurrence (Biber, Conrad & Cortes, 2004; Nesi & Basturkmen, 2009), the differences between the above-mentioned categorization may be attributed to variation in the size and composition of the corpora used by the researchers. This affects the main functional specialization of bundles in the respective registers, genres or disciplines. However, despite the variation in the pragmatic meanings of lexical bundles, they are typically assumed to fulfill one main function, which in some cases, maybe discipline- or genre-specific. Salazar (2014) in her study of lexical bundles discusses the difficulties non-native writers face in writing in order to produce

accurate, effective expository texts in English. In an attempt to achieve this singular objective of producing a good work, they tend to face a lot of challenges as to what constitutes a well-written academic prose. She further asserts that one of the most important findings revealed by corpus-based language studies is the fact that instead of constantly making new combinations of individual words, native speakers often depend on a stock of prefabricated, semi-automatic word chunks (e.g. Sinclair, 1991).

Navratilova (2012) in an article wrote that while most studies conducted into lexical bundles in academic discourse have focused on the identification, structure, functions and discipline variation of lexical bundles, significantly less attention has been paid to the challenges NNS experience in acquiring genre- and discipline-specific recurrent expressions. Her study was concerned with the application of lexical bundles in non-native speaker academic discourse. The study was carried out on a corpus of diploma theses written by Czech students of English, with the aim of finding out, to what extent the authors of diploma theses use the different functional types of lexical bundles typical of expert academic discourse.

Gil and Martínez (2019) in a paper wrote that lexical bundles (LBs) are described as the building blocks of discourse in addition to being highly frequent in discourse writing and reducing processing time for readers and writers and also perform important functions in language. The paper sought to throw light on the use of LBs in a learner corpus of bachelor dissertations written in English by Spanish L1 students, in Linguistics and Medicine, and compares them with published research articles in the same disciplines. It was identified that the most frequent occurring lexical bundles were three-, four-, and five-word lexical bundles in the corpora, in order study their types, structures, and functions. The results showed differences in

the use of LBs across disciplines, genres and sections, suggesting pedagogical implications for the inclusion of LBs in L2 writing curriculum.

Beng and Keong (2017) conducted a study which sought to investigate lexical bundles (LBs) usage in the reading passages captured in English Examination papers, taken at a Malaysian University. Specifically, it aimed at comparing and contrasting the functional types of lexical bundles found in arts- and science-based reading passages. A specialized corpus of entrance examination test papers, made up of only the reading passages categorized into two main divisions, which are the traditional disciplines of arts and science, was built using *Wordsmith*. The corpus of lexical bundles of the identified disciplines, were extracted using *Wordsmith*. The extracted data were then analyzed qualitatively based on Hyland's (2008) functional taxonomy.

Findings from the analysis revealed that although the number of lexical bundles in both disciplines showed significant differences, many similar LBs were found. Science-based passages used a lot more research based LBs, whereas arts-based texts used more participant-oriented lexical bundles. These findings confirmed the belief that functions of LBs are specific to particular disciplines. This also goes to strengthen the position that there should be explicit teaching of lexical bundles in schools and for the Malaysian University, two distinct reading tests should be administered to two groups of students. Here, the first can comprise texts adopted from the scientific and technological context, while the other made up of texts from the social sciences, should be designed to accommodate both arts and science students.

## **2.9 Conclusion**

Lexical bundles are an aspect of phraseology and formulaic language (Biber et al, 1999). They have been characterized terms such as multiword units, expressions,

recurrent word combination, continuous sequence of repeatedly co-occurring words, frequently occurring words combinations, collocations and fixed expressions, semi-pre-constructed phrases among others. As already noted, lexical bundles are words that follow each other in succession without an addition or omission of any of the words, and these are words that fall within the ranges of three to seven continuous words. An omission or deletion or addition of any of the words in the combination will make it erroneous in its usage. Lexical bundles have been found to be most useful to non-native speakers of English as its chunked nature makes its acquisition easier and error-free to use when required. Interestingly, lexical bundles are grammatical in nature, when taken in their structural forms.

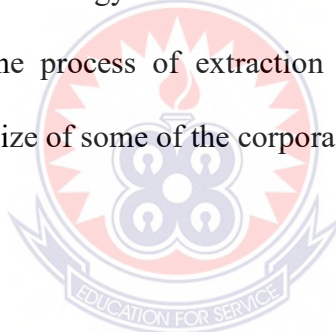
Discourse, either the spoken or written form, is the very foundation of communication skills, whether it is communication to an audience or to explain a topical issue. It could be an article, an editorial piece or an open letter, all of these forms of discourse are continuously being churned out by novices or experts, by persons who are language and linguistic experts and person with no clue as to what they are doing or saying. The use of lexical bundles is certainly a revealing approach to studying a given language, since their acquisition and use is not limited to the English language as a medium of communication, but the very fundamentals can be co-opted, adopted and adapted to fit any other language one desires to study.

The framework of phraseology studies as outlined by the researcher indicates and demonstrates a real time and pragmatic approach to the studying of lexical bundles not in a vacuum, but as a means of improving the communication skills. There is enough literature that goes further to direct the researcher to the steps that can be taken to incorporate the idea of lexical bundles into the pedagogical approach of educators in the classroom. This can be adequately adopted and adapted in lesson



plans to infuse learning materials into their lesson plan and exercises, be they written discourse or oral exercises as in oral English lessons.

Corpora refer to the body of words from which lexical bundles are extracted. The relationship between lexical bundles and their corpora are inversely proportional; the larger the corpora, the higher the number of lexical bundles. Corpora also tend to vary with regards to the discipline or topic under research or in question. Disciplinary areas range from scientific resource materials, to editorial pieces, from a compilation of academic dissertations to mathematical languages usage, newspaper articles to business journals and manuals. The processes of extracting lexical bundles from corpora vary from one study to another and there are different extraction methods and procedures involved in phraseology studies. Technology has served as a catalyst and a fulcrum around which the process of extraction has been made easy and faster, especially looking at the size of some of the corpora that were identified.



## CHAPTER THREE

### METHODOLOGY

#### 3.0 Introduction

This chapter discusses the various processes and procedures adopted in conducting the research. This was a qualitative research approach and the research design adopted was a case study, these were to aid in investigating the issues raised in the research objectives. The study adopted the purposive and stratified sampling techniques in extracting the sample size from the total population of 1,680, to obtain the sample size of 168. Inclusive in this 168, were forms 2 and forms 3 students, from 12 course areas, from five schools, within the Accra Metropolis. Due to the nature of the data being collected from the sample size, there was the need to ensure and observe the rules of ethics pertaining to the data obtained, as some schools found it difficult releasing data of that kind. Data collected were analyzed using identification, categorization and textual analysis.

#### 3.1 Research approach

Qualitative research is an approach that focuses on obtaining data through open-ended, deliberate analytical processes and conversational communication. This method is not only about the thoughts and convictions of persons, but also the reasons behind the choices they make and why they think so and why they act in a particular or specific manner. With regards to data collection methods, the qualitative research recognizes the following three major data collection processes, interviewing, observation and artifact analysis. Qualitative data collection allows collection of data that is non-numeric and helps us to explore how decisions are made and provide us with detailed insight into the thinking behind the choice. For reaching such conclusions, the data collected should be holistic and findings emerge through careful

analysis (Dudovskiy, 2016). In this study, the data collected were presented in prose form, and it had no numeric value to it, the extraction and focus on the content itself, had nothing numerical about it, the tasks that were consequent from the research objectives, pertaining to the data, had to be done through careful identification of the variables stated in the various objectives and then textual analysis was done to understand and comprehend the placement, the context and the function of the identified variable within the text.

### **3.2 Research design**

The study is one of case study; a case study is a method of qualitative research that looks intently and deliberately with a purpose, at an individual or a participant pool or an organization, whiles drawing conclusions only in that specific context (Mondal, 2010). Basic steps to conducting a case study are selecting a subject for the case study, preparing a checklist which comprises a host of questions that seek to answer queries like, who, what, where, why and how, which aids in the quest to remain focused on the most pressing issues. The purpose for the use of the case study approach in this study is based on the fact that the participants of the study or the persons to which the findings of the study are applicable have a common homogenous trait. Here, they are second language learners, they are students, they study the same subject matter and are subject to the same rules and directives that pertain to written discourse expectations they are to meet. In addition, proximity-wise, they are centrally and geographically located and sited within the reach of the researcher. Beyond that, they all fall within the category of second language learners that the adapted framework seeks to improve their communication skills through improved spoken and written discourse.

### **3.3 Population**

The population refers to the entire group of persons in which the researchers are interested, and they are the expected beneficiaries of whatever research is being undertaken and to whom the finding can be applied to. The population usually has varying characteristics and it is also known as the theoretical population (Creswell & Plano-Clark, 2006). The population is the population in research to which the researchers can apply their conclusions. The population or total population for this study is 1,680 students in the Senior High Schools within the Accra Metropolis. The sample population extracted from the total population comprises 168 students from these Senior High Schools.

### **3.4 Sample and sampling techniques**

Sampling is the process of selecting elements from the total population in such a way that, the sample elements selected represent the total population. A sample is therefore, a carefully selected group from the population for the purpose of analysis. The sample should be a representation of the total population such that as much as possible, most characteristics of the population should be represented in the sample selected. The sampling procedure adopted in this was a combination of stratified sampling and purposive sampling techniques. Here, the population is divided into strata, along a relevant dimension such as gender, ethnicity, political affiliation, and so on. The researcher then collects a random sample of population members from within each stratum. This technique ensures that observations from all relevant strata are included in the sample. The sample population was arrived by using stratified random sampling. The stratified random sampling is a method that involves the division of a population into smaller groups known as strata, this is usually based on the members shared attributes or characteristics. The stratified random sampling

reflects the population being studied, because researchers are stratifying the entire population, essentially each group within the population is adequately represented. (John Creswell 2009)

The students that make up the total population of the study have already been grouped into course areas of study through their admission, namely, General Science, General Arts, Home Economics, Visual Arts, Business, Agricultural Science, wood construction technology, hospitality and catering management, fashion design and technology, Accounting and Secretarial, and Cosmetology. Students of Elective literature are also part of the sample, due to the fact that, they tend to write long essays, during their analysis of books, characters and authors, they have read. In all, 168 essays of students, written in English Language were collected. This was arrived by the use of purposive sampling to zone in on the English Language. All of these students were put into strata of *Above average*, *Average*, and *Below average* students.

The composition of each strata was made up of the above list, one above average writing, one average writing and one below average writing, from students in General Science, the same for another set of writings from General Arts, till the entire range of courses were covered, and this applied to both Forms 2 and 3 students. The range of rating for the various strata is the same rating given to essays written during the West African Secondary School Certificate Examination (WASSCE). The examination and analysis of the writings of the students were marked over 20 marks as captured by the marking scheme of the West African Examination Council (WAEC). The rating allotted to the various categories is:

- Above average writing – 11 marks and above
- Average writing – 9marks – 10 marks
- Below average – 8 marks and below

The sample for the study is shown in Table 3.1:

*Table 3.1. Sample size according to ability grouping*

SCHOOL	COURSE	STRATA	FORM 2	FORM3	OUTCOME
AA	General Science	Above average (11marks > )	1	1	<b>6 students Multiplied by 6 courses = 36 writings</b>
	General Arts Visual Arts	Average (9marks– 10marks)	1	1	
	Business Agricultural Science Elective Literature	Below average (7marks - 8marks)	1	1	
	General Science	Above average (11marks > )	1	1	
	General Arts Visual Arts	Average (9marks– 10marks)	1	1	
	Business Elective Literature	Below average (7marks - 8marks)	1	1	
AWG	General Science	Above average (11marks > )	1	1	<b>6 students Multiplied by 5 courses = 30 writings</b>
	General Arts Visual Arts	Average (9marks– 10marks)	1	1	
	Business Elective Literature	Below average (7marks - 8marks)	1	1	
	General Science	Above average (11marks > )	1	1	
	General Arts Visual Arts	Average (9marks– 10marks)	1	1	
	Business Agricultural Science Elective Literature	Below average (7marks - 8marks)	1	1	
SM	General Science	Above average (11marks > )	1	1	<b>6 students Multiplied by 6 courses = 36 writings</b>
	General Arts Visual Arts	Average (9marks– 10marks)	1	1	
	Business Agricultural Science Elective Literature	Below average (7marks - 8marks)	1	1	
	General Science	Above average (11marks > )	1	1	
	General Arts Visual Arts	Average (9marks– 10marks)	1	1	
	Business Agricultural Science Elective Literature	Below average (7marks - 8marks)	1	1	
HT	General Science	Above average (11marks > )	1	1	<b>6 students Multiplied by</b>
	General Arts Visual Arts	Average (9marks– 10marks)	1	1	

	Business Agricultural Science Elective Literature	Below average <b>(7marks - 8marks)</b>	1	1	<b>6 courses = 36 writings</b>
<b>SH</b>	Wood construction technology	Above average <b>(11marks &gt; )</b>	1	1	<b>6 students Multiplied by 5 courses = 30 writings</b>
	Hospitality and catering management, Fashion design and technology, Accounting and Secretarial Cosmetology	Average <b>(9marks– 10marks)</b>	1	1	
		Below average <b>(7marks - 8marks)</b>	1	1	
<b>Total</b>					<b>168 writings</b>

### 3.5 Instruments and data collection

The writings or essays of students were collected and analyzed for the presence of lexical bundles. Beyond the presence of lexical bundles in their writings, the analysis was also to determine the frequency and structure of use of these lexical bundles, as a means of giving credence to one objective of the study. The essays of students are the most preferred material to be collected for analysis, the reason being that, the rubrics of essay writings of students at this level, demands the students to produce consistently and without fail, essays with not less than 450 words. This is quite a target for students to meet regularly, in the process of producing these essays, the use of lexical bundles will be used to fill the void or make up the target, and it will also be an avenue for non-native writers to produce such essays without fail.

Comprehension and Summaries are not materials to be analyzed for the presence of lexical bundles due to the fact that they demand very brief one-line answers without the use of flamboyant, long and winding words in answering specific questions. Students do not have the room to say anything or write anything; there is a limit to what can be produced as answers, and this makes comprehension and summary an inadequate source for the analysis in this study.

### **3.6 Data analysis**

Identification, categorization and textual analysis were adopted to interpret the words, and the context in which these words were used. Identification has to do with identifying specific words and phrases that refer to aspects of the review subject (Byrne, 2017). Text categorization, also known as text classification, is the process of assigning predefined groupings to text documents. It can establish conceptual views of a collection of documents and has immense relevant applications in the real world. For example, news stories are typically organized by thematic areas, such as business, sports, environment, or geographical codes; academic papers are often classified by technical domains and sub-domains. This is reflected in the categorization of the text relevant to this study into above average text, average texts and below average texts, this classifies the level of proficiency of the author with the expectation that, that categorization will translate into quality lexical bundles (Joachim, 2008).

By classifying text, the intention or objective is to assign one or more classes or categories to a text document, making it easier to manage and sort. This is especially useful for persons or individuals who deal with a lot of content materials, to make processing a lot easier. (Ghaffari, 2015) Text analysis deals with systematic analysis of word use patterns in text. Out of the six approaches to text analysis; conversation analysis, analysis of discourse positions, critical discourse analysis,



content analysis, Foucauldian analysis and analysis of texts as social information, this study used content analysis. Content analysis is generally focused on the texts themselves rather than text relations to their historical context (Krippendorff, 2013).

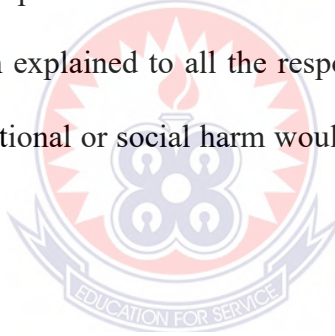
### **3.7 Validity and reliability**

Reliability refers to the consistency or repeatability of measurement of variables that has been undertaken by a researcher. It is the degree to which an instrument or tool of measurement produces the same results each time it is used under the same prevailing conditions with the same variables or subjects. Due to the nature of qualitative techniques, it is not possible to ensure reliability in the strict sense of its interpretation, due to two main reasons, firstly, there is minimal usage of quantitative measures, and secondly, the way in which data are gathered does not allow for collecting the same data in the same manner. Repeating tests and testing for consistency as the case maybe in quantitative processes or as pertains in statistical analysis is not possible (Mondal, 2010). Reliability and validity continue to be important in qualitative research. Concerns about reliability and validity are essentially, concerns regarding quality of data and appropriateness of methods used in a particular research.

In this study, this is measured or reflected in the process of data collection from the subjects of the study, the conditions precedent such as, the category of students, the forms of the students, the subject in which the data is collected, the form in which the data is presented, which is prose, the size of the corpora and the identification of bundle being sort for, the structure and function of the identified bundles. These must exist prior to the collection of the data, before the process of analyzing the data. These steps give credence to the sets of facts or point to the reliability of the data, if there is the need for testing the results and findings.

### **3.8 Ethical issues**

All research involves ethical issues and this study is no exception. Ethical concerns refer to the appropriateness of your behavior in relation to the rights of those who become the subject of your work, or are affected by it. There are four main areas of ethical principles to be considered in research, likelihood of harm to participants, has consent been sought from the respondent, privacy issues pertaining to some information and whether there is an element of deceit involved (Diener & Crandall, 1978; Saunders et al, 2009). For these reasons, extreme care was taken to observe all the ethics involved in research such as approved consent, exposure to risk and anonymity. Informed consent means that subjects are well informed about the study, and benefits of their participation. Harm refers to a negative outcome for the research participants. The research explained to all the respondents that the study is a survey and that no physical, emotional or social harm would be caused them by participating in the study.



## CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

#### 4.0 Introduction

This chapter presents the results obtained from the analysis of data for the present study. The discussion is in line with the research objectives that seek to answer questions on the frequency of occurrence of lexical bundles as captured in the writings of students, the structural patterns of lexical bundles, and the functions of lexical bundles in the writings of the students. Through a qualitative case study, data were collected from SHS students in the Accra Metropolis and subjected to textual and thematic analysis. The analysis showed that 3-word bundles were used slightly more frequently with 89 types than 4-word bundles with 87 types. This is followed by 5-word (30), 6-word (13), and 7-word bundle (3). With respect to the structure, the analysis revealed that there are 70 bundles that are noun-based in nature, 67 bundles that are verb-based, 50 preposition-based bundles, and 18 bundles that contain other word classes. The analysis of the functions of the lexical bundles suggests that there are 38 research-oriented bundles, 38 text-oriented bundles, and 30 participant-oriented bundles. In addition to these, there were bundles that were found in the data not to fall under any of the three types in terms of function. Further elaboration will be made on this last group in the section 4.3.

This chapter is organized in three sections: the first section presents a discussion of the analysis of frequency of occurrence of the lexical bundles. Here, as already indicated, there are more 3-word bundles, followed by 4-word bundles. Also, 5-word bundles are more than 6-word bundles, with only three occurrences of a 7-word bundle. In all, there were 222 lexical bundles identified in the data. The second section presents the discussion of the structure of the lexical bundles used in students'

writing. The analysis revealed that structurally, three main types of bundles were identified: noun-based, verb-based, and preposition-based bundles. In addition, there were other bundles that cannot be captured in any of the three groups, but contain can be considered a mixture of bundles from a multiplicity of other word classes. The third and final section presents the results of analysis of the functions of the lexical bundles. The analysis revealed that similarly to the literature, three groups of bundles, in terms of functions, were identified and these are described by Hyland (2008) as research-oriented, text-oriented, and participant-oriented bundles.

Additionally, there is a group of bundles found in the data which are described as performing other functions other than what are discussed by Hyland (2008). In the present study, following other researchers (e.g. ...), this group is labeled *others*. As indicated by other researchers who analyze lexical bundles, the occurrence of this group may be because of the genre and type of writing analyzed for the study. From the results, it is concluded that although the students sampled for the present study are in the senior high school and may not be advanced in terms of writing, the research has shown that they still utilize these bundles to make their writing coherent. The results are presented in the following sections:

#### **4.1 Frequency of occurrence of bundles**

This section examines the frequency of occurrence, which answers the first research question. It focuses on the most commonly used lexical bundles among Forms 2 and 3 students in SHS. In reporting the frequency, an essay per student is read for the bundles to be identified. The frequency also deals with the token, which is a quantitative activity involving the cumulative summation of specific lexical bundles. In the selection of frequency, a particular bundle is recorded as one, which is the type, but the number of times that same lexical bundle is used constitutes the token. Thus, it

is possible to for instance, use three bundles throughout an essay, giving us only three types. However, the number of times these types are repeated, for instance 10 or 15 times, will give you 10 tokens or 15 tokens. For the purposes of clarity, Table 4.1.1 presents the frequency of occurrence of the bundles found in the data for each group.

*Table 4.1.1. Frequency of lexical bundles in data*

SN	IDENTIFIED LEXICAL BUNDLE	TYPE	TOKEN		
			FORM 2	FORM 3	TOTAL
1	Last but not the least	1	11	9	20
2	To begin with	1	10	7	17
3	First of all	1	5	3	8
4	How are you	1	3	4	7
5	Fit as a fiddle	1	1	6	7
6	In a nutshell	1	4	2	6
7	Due to the fact that	1	5	-	5
8	In this case	1	2	2	4
9	First and foremost	1	2	2	4
10	To set the ball rolling	1	-	4	4
11	To continue with	1	2	2	4
12	How are you doing	1	3	1	4
13	It has been a longtime	1	2	1	3
14	In view of this	1	2	-	2
15	To add up	1	2	-	2
16	I hope all is well	1	1	1	2
17	It is known that	1	1	1	2
18	To put an end to	1	1	1	2
19	Draw your attention	1	1	1	2
20	As a result of	1	1	1	2
21	Beating around the bush	1	1	-	1
22	Spill the beans	1	1	-	1
23	In addition to	1	-	1	1
24	In the book	1	1	-	1

25	The reason why	1	1	-	1
26	In this act	1	1	-	1
27	This line talks about	1	1	-	1
28	On the other hand	1	-	1	1
29	Would come to pass	1	1	-	1
30	Have a bad feeling	1	1	-	1
31	Fell on death ears	1	1	-	1
32	Came out with flying colours	1	1	-	1
33	Keep the fire burning	1	1	-	1
34	To throw more light	1	1	-	1
35	To add insult to injury	1	1	-	1
36	Thorn in the flesh	1	1	-	1
37	To address the problem	1	1	-	1
38	It is my hope	1	-	1	1
39	The way forward	1	1	-	1
40	Don't have to	1	1	-	1
41	We don't have to	1	1	-	1
42	Bring to your notice	1	1	-	1
43	To hit the nail on the head	1	1	-	1
44	Most at times	1	1	-	1
45	I am very glad	1	-	1	1
46	The fact that	1	1	-	1
47	As of now	1	1	-	1
48	As far as am concerned	1	1	-	1
49	Hand in hand	1	-	1	1
50	In the meantime	1	1	-	1
51	It is topsy turvy	1	-	1	1
52	Light at the end of the tunnel	1	-	1	1
53	In the poem	1	-	1	1
54	To commence with	1	-	1	1
55	Can you imagine that	1	-	1	1

56	For your information	1	-	1	1
57	Piss her off	1	-	1	1
58	As we all know	1			
59	Did not know	1	-	1	1
60	Over the years	1	1	-	1
61	Did not know much	1	1	-	1
62	It was a fact	1	1	-	1
63	As we know	1	1	-	1
64	To report to	1	-	1	1
65	He had not been	1	-	1	1
66	Most of them	1	-	1	1
67	In the course of	1	-	1	1
68	Set off at	1	-	1	1
69	On his way out	1	-	1	1
70	In a week	1	-	1	1
71	Thirty years ago	1	-	1	1
72	Did not turn out	1	-	1	1
73	At that time	1	-	1	1
74	I was able to	1	-	1	1
75	Come to pass	1	1	-	1
76	Days went by	1	1	-	1
77	As far as	1	1	-	1
78	Fell on deaf ears	1	1	-	1
79	Few days later	1	-	1	1
80	It was late in the evening	1	-	1	1
81	Bumped into her	1	-	1	1
82	These three friends	1	-	1	1
83	Day after day	1	-	1	1
84	One evening after school	1	-	1	1
85	Little by little	1	-	1	1
86	She woke up	1	1	-	1
87	In the first place	1	1	-	1
88	In case of	1	1	-	1

89	A whole lot	1	1	-	1
90	Rules of each game	1	-	1	1
91	He is doing well	1	-	1	1
92	A series of test	1	-	1	1
93	We solve a lot of	1	-	1	1
94	Make sure that	1	-	1	1
95	Students make sure that	1	-	1	1
96	You are doing well	1	-	1	1
97	Is one of the best	1	1	-	1
98	Due to the donation	1	-	1	1
99	The reason why	1	-	1	1
100	As well as	1	-	1	1
101	Who do not understand	1	-	1	1
102	In our class	1	1	-	1
103	So that we know	1	1	-	1
104	We have about thirty trophies	1	-	1	1
105	He had a dream	1	-	1	1
106	Would go to farm to	1	-	1	1
107	As early as	1	-	1	1
108	As a teacher	1	-	1	1
109	As far as I was concerned	1	-	1	1
110	Back in high school	1	-	1	1
111	Turned against me	1	-	1	1
112	Bring them back to me	1	-	1	1
113	In my heart	1	1	-	1
114	In this expression	1	-	1	1
115	In this line	1	-	1	1
116	The use of apostrophe	1	-	1	1
117	It can be said that	1	-	1	1
118	In the Bible	1	1	-	1
119	It will be done	1	-	1	1
120	A lot of money	1	-	1	1



121	To throw more light on	1	-	1	1
122	Process of teaching and learning	1	-	1	1
123	It is an obvious answer	1	1	-	1
124	The issue of bedbugs	1	-	1	1
125	With no intervention	1	-	1	1
126	There are few suggestions	1	-	1	1
127	We never met	1	-	1	1
128	I did not miss my mother	1	1	-	1
129	Left without a penny	1	-	1	1
130	On an empty stomach	1	-	1	1
131	Dropping the woman off	1	-	1	1
132	It was her turn	1	-	1	1
133	It was okay	1	1	-	1
134	One of them	1	1	-	1
135	I felt dizzy and passed out	1	-	1	1
136	We were all behind our books	1	-	1	1
137	We walked slowly	1	1	-	1
138	It took a while	1	1	-	1
139	We got there	1	1	-	1
140	I am in school	1	1	-	1
141	We all know that	1	1	-	1
142	This can help me	1	1	-	1
143	On a piece of paper	1	-	1	1
144	It is an honour	1	-	1	1
145	Apart from all this	1	-	1	1
146	We all know	1	-	1	1
147	The fact is	1	-	1	1
148	With all his heart	1	-	1	1
149	In the end	1	-	1	1
150	To be given	1	-	1	1
151	In our country	1	-	1	1

152	In other words	1	1	-	1
153	Go to the hospital	1	1	-	1
154	With the help of	1	1	-	1
155	Has been very poor	1	1	-	1
156	Take drugs to compete	1	-	1	1
157	This will lead to	1	-	1	1
158	Should be closed down	1	-	1	1
159	Moved out of	1	-	1	1
160	Have been placed in	1	-	1	1
161	You cannot walk alone	1	-	1	1
162	For this reason	1	-	1	1
163	In this era	1	1	-	1
164	I know for a fact that	1	1	-	1
165	As much as you can	1	1	-	1
166	Is in three parts	1	1	-	1
167	Out of the blue	1	-	1	1
168	Had written to me	1	-	1	1
169	The main reason	1	-	1	1
170	To promote unity	1	-	1	1
171	To make sure	1	-	1	1
172	It will promote	1	-	1	1
173	This is one reason	1	-	1	1
174	It will bring smiles	1	-	1	1
175	Is getting married	1	-	1	1
176	Never happens to anyone	1	1	-	1
177	Have not fallen on deaf ears	1	1	-	1
178	Will have a change of mind	1	1	-	1
179	To know that	1	1	-	1
180	Also has a	1	1	-	1
181	In scene two	1	-	1	1
182	In act four	1	-	1	1

183	They were involved in the war	1	-	1	1
184	The dangers of war	1	-	1	1
185	To be an agent of peace	1	-	1	1
186	She did not say much	1	-	1	1
187	Let me tell you a story	1	-	1	1
188	Little did I know	1	-	1	1
189	On a calm evening	1	1	-	1
190	On your own	1	1	-	1
191	Love for music	1	1	-	1
192	The event was supposed to be	1	-	1	1
193	It happened so quickly	1	-	1	1
194	Going down alone	1	-	1	1
195	Is a group of people	1	-	1	1
196	One is able	1	-	1	1
197	One is able to save	1	-	1	1
198	Kick the bucket	1	1	-	1
199	To be given the opportunity	1	1	-	1
200	To assist some members	1	1	-	1
201	Suffice to say that	1	1	-	1
202	I wasn't able to reply	1	1	-	1
203	It all started	1	1	-	1
204	Couple of months ago	1	-	1	1
205	Due to the effect	1	-	1	1
206	For that matter	1	-	1	1
207	Is to walk miles away	1	-	1	1
208	To solve this	1	-	1	1
209	I didn't pass in my Math test	1	-	1	1
210	Due to this problem	1	-	1	1
211	Is a very good one	1	-	1	1

212	As a result of poverty	1	-	1	1
213	For that reason	1	-	1	1
214	I am very sure	1	-	1	1
215	I want you to know	1	1	-	1
216	Is one of the	1	1	-	1
217	Things could be avoided	1	1	-	1
218	Send my regards	1	1	-	1
219	The causes of all these	1	1	-	1
220	As a result of fear	1	-	1	1
221	This is really sad	1	-	1	1
222	Most people do not get access	1	-	1	1

In all, there were a total of 75,600 words from the 168 students offering 12 courses from the five (5) schools. From the table, we see that there were 222 different lexical bundles generated, with the first most occurring type having 20 tokens for both groups. Table 4.1.1 has been summarized into types of lexical bundles according to number of words in Table 4.1.2:

**Table 4.1.2. Types of lexical bundles in students' writings**

SN	Lexical bundle type	Frequency number
1	3-word lexical bundle	89
2	4-word lexical bundle	87
3	5-word lexical bundle	30
4	6-word lexical bundle	13
5	7-word lexical bundle	3
<b>Total</b>		<b>222</b>

From the two tables, 222 different lexical bundles were generated from all five schools, from both second year and third year students. It is worth noting that out of the 222 lexical bundles produced by the students, Form 3 students produced the most lexical bundles with a total of 124 lexical bundles while Form 2 students produced 81 lexical bundles in their writings. In addition, both groups produced a total of 17 common bundles. This observation brings to the realization that, the number of bundles one is able to use in his or her writings is not as a result of the year group one belongs to in the Senior High School, but the proficiency of one in the English language or the bundles one has been able to acquire over the years, in terms of writing or when the need arises for one to produce such lexical bundles.

It must also be noted that, in terms of tokens, Form 2 students produced 137 tokens, whereas, Form 3 students produced 62 different lexical bundles. These tokens show the number of times a particular bundle occurs. In all, 272 tokens were produced by Form 2 and Form 3 students. It is worth noting that in general, the type of essay questions given to students could have influenced the type of lexical bundles they produced. The most frequently occurring lexical bundles produced by Form 2 students were *The last but not the least* (11 times), *To begin with* (10 times), *First of all* (5 times), and *Due to the fact that* (5 times). The most frequently occurring lexical bundles produced by Form 3 students were *Last but not the least* (9 times), *To begin with* (7 times), and *How are you doing?* (6 times).

With respect to the number of words, 3-word bundles were found to be used slightly more frequently with 89 types. This generally supports the findings of Salazar (2014), who found that most of the frequently used bundles in her work were composed mainly of 3-word strings, accounting for most of the bundles used in the work. These 3-word bundles were followed by four-word, five-word, and six-word

bundles, similarly to the findings of the present study. She also found that the bundle *the presence of* was the most frequent occurring, registering over 450 times per million words, found among the 50 most frequently used bundles in Hyland's corpus. From the analysis of data, most students, irrespective of their level or programme, appeared to use very basic lexical bundles. It also came out that the type or kind of lexical bundles mostly used by students could have been influenced by the essay topic they wrote on.

#### 4.2 Structural patterns of bundles

Studies on lexical bundles agree with Biber et al (1999) that, instead of representing complete structural units, bundles tend to consist of syntactic fragments that extend across structural units (Biber, Conrad & Cortes, 2004; Byrd & Coxhead, 2010; Hyland, 2008a; Simpson-Vlach & Ellis, 2010). This is especially of academic prose, where Biber et al (1999) found that almost no bundle represented syntactically whole lexical bundles. From the analysis, it was revealed that the bundles fall into several basic structural types, similarly to what researchers have created. This is a widely adopted structural taxonomy of lexical bundles commonly used in the analysis of bundles. The main structural types of lexical bundles found in the data are noun structure (noun phrase + phrase fragment, noun phrase with other post-modifier fragments, other noun phrase); verb structures (passive + preposition-phrase fragment, other passive fragments, verb phrase with personal pronoun *we*, other verbal fragments); prepositional phrase fragments (prepositional phrase + *of*, other prepositional phrase (fragments), other structures (verb or adjective to clause fragment, verb phrase or noun phrase + *that* – clause fragment, adverbial-clause fragment, copula *be* + adjectival phrase, other adjectival phrase, anticipatory *it* + verb

or adjectival phrase, other expression). The distribution of the structural patterns is presented in Table 4.2.1.

**Table 4.2. Distribution of lexical bundle structural types**

SN	Structure	Type	%
1	Noun structures	70	34%
2	Verb structures	67	33%
3	Prepositional structures	50	24%
4	Others	18	9%

In terms of the frequency of use, the analysis showed that the following patterns (in order of the most occurring structure): noun phrase + of, passive + prepositional phrase, other prepositional phrase (fragments), prepositional phrase + of, verb or adjective to clause fragment, copula be + adjective phrase, NP with other post-modifier, other passive fragment, verb or noun phrase + that clause, adverbial clause fragment, other verbal fragment, anticipatory it + verb or adjectival phrase, other adjectival phrase, verb phrase with *we*, other expression, other noun phrase.

These patterns and their subcategories are discussed in the following sections:

#### **4.2.1 Noun structure**

Noun phrases are an essential part of every sentence, even if they do not appear on the surface structure of a sentence. This is because they are potentially infinite in length, and can include any number of other phrases (e.g. noun, adjective, and adverb) within their structure. Also, noun phrases can either comprise a pronoun or any group of words, which can be replaced by a pronoun. According to Salazar, the noun phrases with other post-modifier fragments and other types of noun phrases comprised 30% of all her target lexical bundles. This according to her coincides with

findings by Biber et al (1999), Byrd and Coxhead (2010), and Hyland (2008a) which support the view of academic writings as being noun-centric (Pickering & Byrd, 2008). The present study supports that view considering the fact that 34% of all the lexical bundles identified in the data belongs to the noun structure category, and Table 4.2.1 clearly indicates that. English for specific purposes (ESP) students are always being admonished to write noun phrases which are appropriate to the register they are aiming for. For example, for an ESP class which needs to engage in lots of written and spoken discourse, it is appropriate for them to use phrases that are linked to their registers. This helps when learners use authentic and contrastive reading inputs so that they can formulate appropriate language. The noun structure subcategories found in the data are presented in Table 4.2.1.

The different subcategories of noun structure bundles are noun phrase + of – phrase fragment, noun phrase with other post-modifier fragments, and other noun phrases. The noun phrase + of – phrase fragment consist of expressions such as *the majority of, the ability of, the absence of, the action of, an average of, the nature of, the positions of, a subset of, the process of, and the effect of*.

**Table 4.2.1. Subcategories of noun structure bundles**

<b>Structure</b>	<b>Types</b>	<b>%</b>	<b>Token</b>	<b>%</b>
Noun phrase + of- phrase fragment	11	8%	1	2%
Noun phrase with other post-modifier fragments	5	4%	1	2%
Other noun phrases	8	6%	1	2%



Examples in sentences produced are as follows:

1. As a result of – Most people living in these areas do not have any insurance covering their life **as a result of** poverty.
2. We solve a lot of – Secondly, my teachers make sure that **we solve a lot of** past questions
3. The use of - ...the introduction and **the use of** the National Health Insurance Scheme...
4. A lot of – ...has really reduced the burden of paying **a lot of** money when one is been admitted in the hospital
5. A whole lot of – The Headmaster during our 21<sup>st</sup> anniversary celebration provided a lot of sport facilities to the school and some of these were football, basketballs, volleyballs, tennis table and **a whole lot of** jerseys.

The noun phrase with other post modifier fragment consist of expressions such as *a change in, a decrease in, a defect in, the difference between, a defect in, the difference in, the interaction between, the interaction with, a model for, and a model in which*. Examples are seen in sentences produced are as follows:

1. The fact that – **the fact that** laws are still fuzzy regarding cyberbullying add to the challenge, since parents, teachers and administrators are unsure of how to legally handle such issues.
2. The reason why – **the reason why** I am writing you this letter is to inform you of the current status (hardship) the family is faced with now.
3. The fact is – **the fact is** not all human beings are the same.
4. This will lead to – spectators who have taken drugs and are “high” will also join the conflicts **and this will lead to** an even bigger fight.

5. The event was supposed to be – ***the event was supposed to be*** an opportunity to make his debut.

The other noun phrase consist of expressions such as *the ability to, their ability to, its ability to, a previous study, the present study, an essential role, a critical role, this work was, the same time, and an equal volume*. Examples found in the essays are as follows:

1. This line talks about – ***this line talks about*** the blessings sent on man, but God stopped the flow, withholding rest from man.
2. These three friends – ***these three friends*** usually laughed at teachers and gossiped about them
3. She did not say much – I was thrown in jail until my mother paid my bail, ***she did not say much*** that day, she did not need to.
4. Love for music – four years later he came across a young man named Payne who shared Nii's ***love for music***, but Payne was a brazen and gregarious boy.

#### 4.2.2 Verb structure

The majority of verb structures are composed of a verb in the passive voice followed by a prepositional-phrase fragment. In this structure, passive expressions that incorporate a present tense verb typically denote location or logical relationship between elements. Verbs are traditionally defined as “words that express an action or state” and perform the grammatical function of noun phrase modifier within noun phrases. A verb phrase is the part of a sentence that contains a main verb and auxiliary verbs. In order to be complete, every sentence needs at least one verb. The verb can be an action verb (*run, sing, play, climb*) or a linking verb (*seem, look, forms of be*) that connects the sentence's subject to more information about the subject.

Sometimes, the main verb needs help forming different moods or tenses, or needs to provide additional information about when the action was completed. When this happens, writers also use an auxiliary verb. Auxiliary verbs include forms of *be*, *have*, and *do*. When multiple verbs work together to describe the action in a sentence, these verbs also form a verb phrase.

There is some similarity between the findings of this study and Salazar's findings. That is, in Salazar's study, she found that 25% of all target bundles constituted verb structures. In the present study, 33% of all identified lexical bundles were found to be made up of verb structures, as seen in Table 4.2. This is also supported by the findings of Hyland (2008a) and further supported by Tarone et al (1998). The verb structure subcategories found in the data are presented in Table 4.2.2. The different subcategories of verb structure bundles are passive + preposition-phrase fragment, other passive fragments, verb phrase with personal pronoun *we*, and other verbal fragments.

The passive + preposition-phrase fragments consist of expressions such as *was added to*, *were added to*, *was analyzed by*, *were analyzed by*, *was assessed by*, *is associated with*, *are associated with*, *is composed of*, *was confirmed by*, *performed as described previously*, *were prepared as described*, *carried out as described*, *be explained by*, and *were grown at*.

**Table 4.2.2. Subcategories of verb structure bundles**

Structure	Types	%	Token	%
Passive + preposition-phrase fragment	10	8	1	2
<i>Other passive fragments</i>	8	6	1	2
<i>Verb phrase with personal pronoun we</i>	5	4	1	2
<i>Other verbal fragments</i>	7	5	1	2

The following are sentences found in the passive + preposition-phrase fragment bundles.

1. As far as am concerned – *as far as am concerned*, the fun, the adventures, the money, the trill and all the carefree moments gave meaning to life and nothing else.
2. Is one of the best – you know my school *is one of the best* Technical School here in Ghana
3. Is getting married – Mum if you will allow Sister Sylvia to marry brother Clement she will be very happy because she *is getting married* to the man she is in love with.
4. Is one of the – moreover, imposition *is one of the* causes of disturbances during inter school sports and games.

The other passive fragments consist of expressions such as *were allowed to, carried out using, have been described, has been described, can be detected, could be detected, has been implicated, have been implicated, at the indicated, of the indicated, used to amplify, results were obtained, similar results were obtained, can be used,*

*used in this study, and were washed three times, experiments were performed.*

Examples found in the essays are as follows:

1. Would come to pass – this made me more hopeful that my wish for the future ***would come to pass.***
2. Would go to the farm to – the young Baffour ***would go to the farm to*** fetch firewood for sale before he could buy his school materials and school uniform inclusive.
3. To report to – things were set for Kofi Nkrumah ***to report to*** school after the two days mid semester break.

The verb phrase with personal pronoun *we* consists of expressions such as *we asked whether, we concluded that, we demonstrated that, we showed that, we have shown, we have shown that, here we showed that, we suggest that, we tested whether, and we were able to.* Examples found in the essays are:

1. We got there – ***we got there*** around 8:10pm and I was especially was stunned, what beautiful decorations.
2. We all know that – ***we all know that*** being united with one another draws us closer to Jehovah.
3. We all know – ***we all know*** that the man who is known as Nuclark comes from an ethnic group known to stir up conflict everywhere they go.

Lastly, the *other* verbal fragments consist of bundles such as *did not affect, may contribute to, exclude the possibility, would result in, play a role, had no effect, had no effect on, for review, for review see, and these results suggest.* Examples found in the essays are as follows:

1. Did not know much – the National Insurance Scheme as we all know was first frowned upon by Ghanaians as we *did not know much* of its importance to the nation.
2. Did not turn out – I had a mindset set on succeeding my Uncle but things *did not turn out* the way I expected.
3. Due to the donation – *due to the donation* of computers, it has made research and how to type easily and faster.

#### 4.2.3 Prepositional phrase structure

In accordance with the results of Biber et al (1999) and Hyland (2008a), most of the target lexical bundles occurred structurally as prepositional phrases. Here, those with embedded phrases commonly signify abstract, logical relationships between prepositional elements. Some prepositions are characterized by a specific meaning. Some bundles with prepositions are associated with methods (e.g. by the method of, by use of). Some also denote procession (e.g. in the formation of) and amount (e.g. in the amount of), while others with the preposition *at* serve to introduce measurement (e.g. at a density of). Again, the results bear some similarity with existing literature. For example, Salazar (2014) found that 9% of the bundles she examined were categorized as prepositional phrases. In the present study, 24% of all identified lexical bundles constituted the prepositional structure category.

The prepositional structure subcategories found in the data are presented in Table 4.2.3.

**Table 4.2.3. Subcategories of prepositional structure bundles**

Structure	Types	%	Token	%
Prepositional phrase + of	6	5	4	8
Other prepositional phrase (fragments)	33	25	4	8

The different subcategories of prepositional structure bundles are prepositional phrase + of and other prepositional phrase (fragments).

The prepositional phrase + of fragments consist of expressions such as *in the absence of*, *in the absence or presence of*, *by the addition of*, *by addition of*, *in the formation of*, *by the presence of*, *at the surface of*, *on the surface of*, and *in the vicinity of*. Examples found in the essays are as follows:

1. On a piece of – the happiness and excitement I feel inside me cannot be expressed ***on a piece of*** paper.
2. As a result of - an environment which will not allow education to go on smoothly and peacefully and thereby or ***as a result of*** that, causing and creating a lot of problems.

The other prepositional phrase (fragments) consist of expressions such as *for their ability to*, *in accordance with*, *in each case*, *in combination with*, *in comparison with*, *to the left*, *on the left*, *in this paper*, *in the materials and methods section*, *at room temperature for*, *by treatment with*, *in this paper*, *under the same condition*, and *with the exception*. Examples in the sentences are as follows:

1. In our country – as a result of that many people ***in our country*** does not pay a lot of money when patient are sent to the hospital.

2. In the book – *In the book*, she stoops to conquer, the character I dislike is Tony Lumpkin.
3. In this act – *In this act*, it is identified that Tony is a thief.
4. In other words – some people do not have enough resources or *in other words* do not have money to pay his or her hospital bills.

#### 4.2.4 Other structures

The examples show all the other structures including non-preface typical forms, which match with Biber et al's (1999) description of these forms. The verb structure subcategories found in the data are presented in Table 4.2.4.

**Table 4.2.4: The Verb Structure**

STRUCTURE	TYPES	%	TOKEN	%
Verb or adjective to clause fragment	18	14%	30	57%
Verb phrase or noun phrase + that – clause fragment	2	2%	2	4%
Adverbial – clause fragment	2	2%	1	2%
Copula be + adjectival phrase	1	1%	0	
other adjectival phrase	1	1%	1	2%
Anticipatory it + verb or adjectival phrase	11	18%	3	6%
Other expression	4	3%	1	2%

The different subcategories of *other* structure bundles are verb or adjective + to-clause fragment, verb phrase or noun phrase + that-clause fragment, adverbial-clause fragment, copula be + adjectival phrase, other adjectival phrase, anticipatory it + verb or adjectival phrase, and other expression. The verb or adjective + to – clause fragment bundles can be simple clauses or to-clauses preceded by a predicative



adjective or a verb phrase. Bundles with verb phrases before the *to-* clause are most frequently used to refer to previous findings or knowledge and accepted facts. The verb phrase is typically in the passive voice. Bundles featuring predicative adjectives, controlling *to-* clauses express ability and likelihood. Simple *to-* clauses commonly indicate methodological aims, are usually found in sentence – initial position.

The verb phrase or noun phrase + *that* – clause fragment can have either a noun or verb phrase in the main clause. *That-* clauses introduced by the nouns denote conclusion, fact, findings, hypothesis, notion, observation and possibility, serve to highlight a propositional statement, especially when presenting facts or findings corroborating the claim. Such fragments contain bundles such as *the conclusion that, results demonstrate that, have demonstrated that, the fact that, by the fact that, have found that, the possibility that, possibility is that, these results suggest that, and data suggests that*. An example in the data is

It is known that – *it is known that* taking in enough food help to promote growth to the body.

Another substructure, adverbial – clause fragment begin with the subordinator as frequently as appear in text-reflexive markers that directs the reader to different parts of the article and to related literature. They are also employed in stating the basis of an assertion and making comparisons. Bundles in this type are *as compared with, as described previously, as describe in materials and methods, as described by, as reported previously, and as determined by*. Two examples in sentences are:

1. As well as – *As well as* the total number of desk in the school
2. As of now – ‘*as of now* we suffer a large classroom since there are not enough classrooms.

The next substructure is the copula *be* + adjectival phrase. These lexical bundles are a combination of the copula *be* and adjective phrase. They are used to express causative and comparative relationships, as well as the author's evaluative assessment of a proposition. These consist of bundles such as *is capable of*, *which is consistent with*, *is dependent on*, *is important for*, *is also possible*, *is due to*, *be due to*, *was due to*, *may be due to*, and *is difficult to*. There is also *other* adjectival phrase and this contains bundles such as *alone or in*, *consistent with this*, *consistent with previous*, *consistent with our*, *not due to*, *little or no*, *also present in*, *are present in*, *similar to that of*, and *very similar to*. An example in one of the sentences produced by the students is seen in

Due to this – ***due to this*** there is a lot of pressure on the people involved.

Anticipatory *it* + verb or adjectival phrase is another substructure and introduces extraposed structures in the anticipatory *it* pattern are controlled by an adjective or a verb phrase. The majority of bundles with the anticipatory *it* structure feature predicative adjectives, followed by *to-* or *that-*clause. They are employed by writers in the appraisal of possibilities, likelihood and importance. It contains bundles such as *it appears that*, *it is clear*, *it is not clear*, *it is likely*, *it is likely that*, *it should be noted*, *it should be noted that*, *closely related to*, *the same as*, and *significantly different from*. Lastly, the *other* expressions are lexical bundles formed by different adjectival fragment that do not fall into the other categories, most of which express comparative relations, for example, *significantly different from*, *closely related to* and *similar to that*. These contain bundles such as *this is consistent with*, *results are consistent with*, *these results are consistent with*, *in order to*, *there are several*, *taken together these results*, *together these data*, *taken together these*, *as well as*, and *as well as in*. Examples from the writings are

It has been a – *it has been* a while since we last conversed.

In the meantime – *in the mean time* we end up missing a lot of learning.

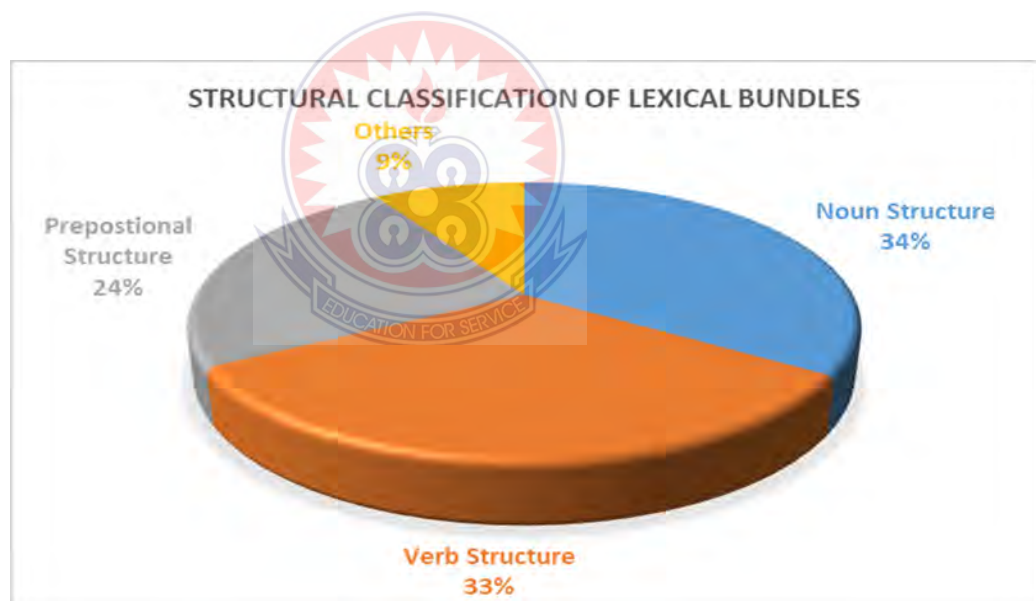
#### 4.2.5 Summary

Every sentence identified in written discourse or spoken discourse can be categorized into one of these groupings depending on the analysis of the sentence structure. The placement or arrangement of the content of a sentence gives an appreciation of the intent of the author or speaker. It is also very possible that the authors and speakers of the spoken discourse do not necessarily know the placement criteria of these words that they produce. The structural patterns of the lexical bundles identified in the data fall into four main categories; noun structure, verb structure, prepositional structure, and *other* structure in the writings. From the analysis, noun structures were the most used by writers, followed by verb structures, prepositional phrases, and *others*. Table 4.2.5 and Figure 4.2.5 present the summary of these structures.

**Table 4.2.5. Summary of structural patterns of lexical bundles structures**

SN	Structure	Types	%	Token	%
<b>1</b>	<b>NOUN STRUCTURES</b>	<b>70</b>	<b>34%</b>		
	<i>i. Noun phrase + of- phrase fragment</i>	11	8%	1	2%
	<i>ii. Noun phrase with other post-modifier fragments</i>	5	4%	1	2%
	<i>iii. Other noun phrase</i>	8	6%	1	2%
<b>2</b>	<b>VERB STRUCTURES</b>	<b>67</b>	<b>33%</b>		
	<i>i. passive + preposition-phrase fragment</i>	10	8%	1	2%
	<i>ii. Other passive fragments</i>	8	6%	1	2%
	<i>iii. Verb phrase with personal pronoun we</i>	5	4%	1	2%
	<i>iv. Other verbal fragments</i>	7	5%	1	2%

<b>3</b>	<b>PREPOSITIONAL STRUCTURES</b>	<b>50</b>	<b>24%</b>		
	<i>i. Prepositional phrase + of</i>	6	5%	4	8%
	<i>ii. Other prepositional phrase (fragments)</i>	33	25%	4	8%
<b>4</b>	<b>OTHERS –</b>	<b>18</b>	<b>9%</b>		
	<i>i. verb or adjective to clause fragment</i>	18	14%	30	57%
	<i>ii. Verb phrase or noun phrase + that – clause fragment</i>	2	2%	2	4%
	<i>iii. Adverbial – clause fragment</i>	2	2%	1	2%
	<i>iv. Copula be + adjectival phrase</i>	1	1%	0	
	<i>v. other adjectival phrase</i>	1	18%	3	6%
	<i>vi. Anticipatory it + verb or adjectival phrase</i>	11			
	<i>vii. Other expression</i>	4	3%	1	2%



**Figure 4.2.5. Summary of structural patterns of lexical bundles**

In relation to the literature, it has been found that the results are similar to the findings of Hyland (2008a) and Salazar (2014).

#### **4.3 Functions of lexical bundles in the writings**

Apart from the fact that lexical bundles are mostly fragmented in nature, they follow certain structural patterns that provide insight into how they are used to write

essays. This same information can be used in relation to lexical bundles and their functions. Pragmatic integrity is a term used by O’Keefe et al (2007, p. 71) to show the pragmatically specialized roles that lexical chunks fulfill in discourse, a notion of functional adequacy that is independent of structural completeness. O’Keefe et al (2007) argue that:

It is in pragmatic categories rather than syntactic or semantic ones that we are likely to find the reasons why many of the strings of words are so recurrent, by pragmatic categories, we mean the different ways of creating speaker meanings in context. (p. 75)

It is therefore necessary to link lexical bundles to pragmatic categories, such as discourse and stance marking. This section intends to emphasize that the identified bundles fall into coherent functional categories that form part of a systematic descriptive framework from a pedagogical perspective. The functional analysis of lexical bundles is essential to their value as teaching items. Even though bundles are largely incomplete units that include words already familiar to most students, their functions afford them a certain degree of face validity for teachers and students.

The fact that bundles can be used to do things such as introduce topics, compare and contrast elements, quote sources and draw conclusions, they provide instructions and learning enough incentive to teach and learn these multi-word expressions. This in turn, makes it of utmost importance to provide an accurate yet accessible functional description of lexical bundles that can help students master certain functions that are crucial to academic writing. The bundles identified in the data have been classified according to the modified version of Hyland’s (2008a) functional taxonomy and this makes it possible to classify them based on their typical meanings and uses and also to determine the extent to which each functional category

is used in writing to gain a better awareness of a particular type of discourse. From the analysis, it was realized that students used the three functional sets of lexical bundles, as highlighted by Hyland (2008a). These are research-oriented, text-oriented, and participant-oriented bundles. These are shown in Table 4.3:

*Table 4.3. Examples of functional lexical bundles identified in the data*

<b>RESEARCH-ORIENTED BUNDLES</b>	<b>TEXT-ORIENTED BUNDLES</b>	<b>PARTICIPANT- ORIENTED BUNDLES</b>
<b>Location</b>	<b>Additive</b>	<b>Stance</b>
<b>In a nutshell</b>	On the other hand	Would come to pass
<b>In the book</b>	To add insult to injury	We solve a lot of
<b>In our class</b>	As well as	Would go to farm to
<b>Procedure</b>		<b>Engagement</b>
<b>To continue with</b>		Fell on death ears
<b>In addition to</b>		As far as am concerned
<b>In the meantime</b>		The reason why
<b>Quantification</b>	<b>Inferential</b>	
<b>Most at times</b>	In this case	
<b>To add up</b>	In view of this	
	As a result of	
<b>Description</b>	<b>Causative</b>	
<b>This line talks about</b>	Due to the fact that	
<b>To throw more light</b>	The reason why	
<b>As of now</b>		
<b>Grouping</b>	<b>Structuring</b>	
<b>Most of them</b>	In this act	
<b>These three friends</b>	In the poem	
<b>A series of test</b>	In this expression	

---

**Framing**

The fact that

It was a fact

The fact is

**Generalization**

It is known that

Draw your attention

Have a bad feeling

**Objective**

To address the problem

To make sure

To report to

---

We can see from the table the students used more text-oriented bundles (7), followed by research-oriented bundle (5), and participant-oriented bundles (2). The analysis also revealed that the sub category of *location* and *grouping* were used more than all the other types. With the text-oriented bundles, the framing sub-category was mostly used by the students in their writings, while the stance category was the highest used sub-category within the category of the participant-oriented bundles. The functions within the various categories are discussed in the following section:

**4.3.1 Research-oriented bundles**

Research-oriented bundles are lexical bundles used to help structure and report accounts of research activities and the world in which they took place in. Lexical bundles in this category help writers to situate, contextualize, and describe their research. The language and phrases used and the context of use, tend to throw light on the research theme or objective of the discourse. Within this category, Hyland (2008a, 2008b, 2012) divides the bundles into five, namely, location, procedure, quantification, description, and topic. Location bundles report on time and place;

procedural bundles are used to recount the research process; quantification bundles are used to report size or scale; descriptive bundles are used to describe the setting, and topical or thematic bundles are used to report the main focus of the study (Johnson, 2017). These are discussed as follows:

#### 4.3.1.1 Location bundles

Location bundles are used to help structure and report accounts of the research activities and the world they occur or occurred in. These are clusters that focused more on the external relations in the world, describing time and place relations, size and magnitude, the study itself, and research procedures. An author or writer uses location bundles to initiate his or her writings or to continue from a specific point or refers to an incident or an organization. They also use them to refer to a previous point or to make referral to previously made points. Some examples of location bundles used by the students are *in a nutshell*, *in the book*, *in our class*, *in our country*, and *in the Bible*. For example, in Extract 1,

##### Extract 1

To set the ball rolling, the National Health Insurance Scheme plays a vital role in our health sector. The National Health Insurance Scheme helps many people in solving their medical expenses. Many people go to the health centers and do not afford to pay their medical bills due to poverty, with the help of the NHIS, it covers some part of the medical expends in the Health centers and hospitals. As a result of that, many people *in\_our country* do not pay a lot of money to buy medicines.

From Extract 1 (taken from a General Arts student), the student is to give reasons for supporting the National Health Insurance Scheme. In the discourse, the student makes allusion to the poverty-stricken nature of his or her community and



how the NHIS seems to have helped reduce the financial burden of subscribers to the Scheme. The student talks about how the purchase of drugs has been made possible through the Scheme. The lexical bundle *in our country* is that of location. This represents the setting of the narration, as the student explains the Scheme vis-à-vis the existing economic challenges, as referenced in the discourse.

Another example of the use of location bundles is seen in Extract 2:

### **Extract 2**

One of the poetic devices in the poem The Proud King is biblical allusion. William Morris makes reference to some biblical events in the poem when the King, Jovinian, compares his nakedness to that of Adam. He describes him sarcastically as “a man in such attire as Adam’s eme”. The Angelic apparition also depicts some form of biblical allusion. When the Angel appeared to the people of God, to deliver God’s messages to them, just as the case usually is *in the Bible*.

From Extract 2, the student is seeking to draw linkages between occurrences in the Bible and the novel. The linkages specifically are between characters within the novel and characters in the Bible. The lexical bundle is used to reference the exact location or to show the point of reference from which the comparison is being made. The primary objective of the student here was to comment on the poetic devices, in this particular context, a comparison between events and characters in the Bible and that of the poem and the proud king with the biblical character Adam, due to similarity in their nudity.

The last example of the use of location bundles is illustrated in Extract 3:

### **Extract 3**

*In the book, she stoops to conquer*, the character I dislike is Tony Lumpkin. Tony is the son of Mrs Hardcastle from her first marriage to Mr. Lumpkin, and a step son to Mr Hardcastle. Tony also has a step sister who is Miss Kate Hardcastle. Tony is a prankster, who seems to pull one over all characters in the book. It's either a case of thievery or scheming to outwit someone.

According to Byrd and Coxhead (2010), the functions of lexical bundles can differ depending on the placement of the lexical bundle within the text. It could be before the main text or after the entirety of the text. Another important factor to consider is the environment of the lexical bundle or its co-text. These are the words surrounding the bundle and these sometimes determine its function in the sentence.

#### **4.3.1.2 Procedure lexical bundles**

These are bundles used to recount the research process that a researcher goes through, as they explain the various steps adopted. The steps being discussed could be at the initial stages of the study, drawing attention to linkages between phases of the study and the sequences used in ending the study. The procedure bundle is characterized by the making of statements which serve as launch pads for further disclosure of facts or the occurrence of subsequent events or scenes. According to Salazar (2014), these bundles take the form of past-tense passive structures, as well as noun and prepositional phrases that describe research activities and experimental processes. Some examples found in the students' writings are *to continue with* and *in addition to that*. These are shown in Extracts 4 and 5 respectively:

##### **Extract 4**

Lateness to class, sleeping in class and so on which adversely affect our performance during examination, also the teachers sometimes will come to school and gather at one of the school mango trees and sit there, eat and chat

with their colleague teachers and the students who do not know the reason for which they are in the school, will also leave their books and make noise in the class. Notwithstanding, they should provide a quality trained teacher in the school to improve the teaching and learning. *To continue with*, lack of sick bay in our school is another major problem confronting my school. The lack of sick bay in my school has caused a lot of havoc in my school'. The lack of sick bay in my school, has caused a lot of havoc'.

From Extract 4, the student is making a case for the challenges that his school is facing. He mentions challenges that the school is confronted with and the consequent effect this has had on the academic performance of the students. The placement of the lexical bundle is pivotal as it makes the reader aware that a point has been raised previously and there are more issues to be raised. According to Salazar (2014), majority of lexical bundles depicting experimental and scientific activities are procedure bundles.

Another example of the use of location bundles is seen in Extract 5:

#### **Extract 5**

Lastly Sir, there are few suggestions I will like to make to address the problems my school is facing and confronted with. Below are the suggested solutions to these problems. The agricultural sector of every nation is the power house of the nation. The government should invest more into agriculture so that there will be abundant of food in the nation and the schools at large. *In addition to that*, the government should come to our aid to supply my school with a school bus for my school to also participate the sports and national science and math quiz'.

From Extract 5, the student is making an argument about the need for the government to help his school that is facing some challenges, especially in the area of transportation. The lexical bundle, *in addition to that*, is placed at the point of making further arguments to attract sympathy.

#### 4.3.1.3 Quantification lexical bundles

As the name suggests, quantification lexical bundles provide information about the number, amount, or variety of the elements following them. They indicate measures, quantities, proportions, and changes thereof, for example, *total volume of, a large number of, the ratio of, or a decrease in*. This category is a means of making an assessment of a pronouncement or position in increasing or voluminous relevance but not necessarily numerical. Some examples found in the students' writings are *to add up* and *to add insult to injury*. These are shown in Extracts 6 and 7:

##### Extract 6

Kindly permit me space in your esteemed newspaper to comment on the problems confronting my school and some suggested solutions for addressing the problems. It is rather unfortunate that Accra Wesley Girls Secondary School which is known for its great performance academically and good morals, has gradually retarded in its academic performance and other notable performance, due to the numerous problems facing the school. *To add insult to injury*, this problem has been a thorn in the flesh of the school for ages with no intervention and hope.

In the above extract, the student is traumatized by the seeming helplessness associated with the falling standards of academic work in the school, and the placement of the lexical bundle gives a clear indication that there is more to be said that will further aggravate the already dire situation, incrementally. According to

Salazar (2010), quantification features a wide variety of prepositional phrases and noun phrases. They may appear in small numbers but Salazar maintains that, they contribute to discourse by aiding in finding, measurement or proportions.

### **Extract 7**

Another example of the use of location bundles is seen in Extract 7:

Even Dad, have you forgotten the scholarship I received was for economics, so economics had given me the award and the scholarship has made me popular as best student in economics in my school. *To add up*, the course you are asking me to study is a course for students who are qualified and you surely know that apart from the integrated science that talks about the basic science, I did not offer [neither] biology, chemistry, nor physics. So it will be very difficult for me to understand the topic when I even accept the offer to go to the university because of I lack the details of science.

In Extract 7, we see a student trying very hard to convince the Father about the need to focus on his strength academically and not necessarily what the Father thinks or wants for the student. He makes the argument and decides to compound and strengthen his argument by the use of the lexical bundle, *to add up*, this is to make a weighty argument hopefully to convince the father.

#### **4.3.1.4 Descriptive lexical bundles**

These bundles are used to describe settings of an event or a narration as it occurs. According to Johnson, (2017), they are used very often in applied linguistics and are used to describe elements or concepts following them. Only one example of such bundles was found in the data and this is *to throw more light*. This is illustrated in Extract 8 as follows:

### **Extract 8**

To keep this fire burning, another major problem my school faces is being confronted with is, unavailability of water supply. *To throw more light* on the point stated, this has also been another major factor in my school, which has really made life in the boarding house very difficult and stressful, most especially the girls. There are no sources of water supply in my school and this as a result makes the students wake up very early at dawn in search of water outside the school, in order to take a bath before going to classes.

The extract seeks to explain the challenges that students of a particular school face in their efforts in preparing for every morning class. In painting a vivid picture of what pertains in their school, the writer tries to draw sympathy to their situation by means of the lexical bundle, *to throw more light*, on the issue being discussed.

#### 4.3.1.5 Grouping lexical bundles

This category of lexical bundles throws light on the usage of language to describe a host or collection of data set ranging from a point to another point. The exact nature of the data sets could be statistical data, numeric data, a collection of items or persons, a temperature range or a performance range. An example of this found in the data is *on behalf of*. This is shown in Extract 9:

### **Extract 9**

Due to how they are organized to study, teachers are not able to complete the syllabus which leads to the disadvantage of the student. I will plead *on behalf of* the Ministry of Education, to try their best to construct building for my school which will help improve teaching and learning and again help the students in terms of academic.

The student is seeking to put across challenges they are facing but in a jumbled manner, there are challenges to academic work and needs help in resolving them. The lexical bundle is under the category of grouping and its use tells the reader that he or she is pleading or making the arguments with the backing of a group of persons. In a similar study, Spottl and McCarthy (2003) found that students presented with unfamiliar texts or corpus, tended to tend to focus on lexical verbs or nouns. The resorted to grouping the bundles by use of keywords. From this, the authors concluded that there is a new perspective to be gained by grouping the bundles, using keywords. According to Hyland (2008a) and Salazar (2014), the widespread use of research-oriented bundles is a reflection of the fundamental concern of research articles, that of giving an objective, unbiased and precise account of procedures, so that the subsequent data interpretation can be established as verifiable, reproducible and grounded in empirical reality.

#### **4.3.2 Participant-oriented bundles**

These categories of bundles tend to focus on either the writer or reader of the written discourse. Participant-oriented bundles, which are used to express different stance meanings and encode engagement features (Hyland, 2008a, 2008b), were the least used in comparison to the research-oriented bundles. Generally, it seems that such bundles are not very pervasive in academic writing. They tend to play a more interpersonal role by reflecting different kinds of attitudinal, and interactional meanings. The types found in the data are stance bundles and engagement bundles.

##### **4.3.2.1 Stance lexical bundles**

These bundles tend to express the writer's beliefs and attitudes. They seek to express the feelings of the writer towards an issue under discussion or in making pronouncements on a developing matter. This forms the prelude to the entire

discussion or write-up to the point where the writer needs to make a decision or begins to make an effort at making an assessment or an evaluation on a series of situations. Examples found are *we all know that* and *bring them back to me*. These are presented in Extracts 10 and 11 respectively:

#### **Extract 10**

On the day of their burial, I stood and watched all these things follow them to their graves and there was nothing I could have done to *bring them back to me*. After the burial, I knew I had to think of the inevitable, my parents were gone and I had no known relatives to turn to, and the sad thing was that, my father did not will any of his property to my name, so I was left with nothing except the house.

From the extract, the student is recapping his feeling upon seeing the burial of his or her parents and the ominous feeling it generated in him or her. The lexical bundle in the extract was uttered out in desperation and this gives an idea of the state of mind of the student. According to Cortes (2004), stance markers are linguistic devices that carry meanings such as certainty, probability, they give are an effective means for writers to communicate their own assessments on issues they raise in their discourse.

Another example of the use of location bundles is seen in Extract 11:

#### **Extract 11**

Moreover, mum if you allow Sister Gina to marry Mr. Agbavitor, it will promote unity and togetherness among us and the family of Mr. Agbavitor and other members around us. Mum, as we all know, a group of broom is not easy to break but a single broom can be broken easily, so you must make up your mind to accept her decision. *We all know that* being united with one another



will draw us closer to Jehovah and it makes move freely on earth without having any bad intension on others. As a result of this Mum God will bless us more.

The student is seen pleading with the mum to accede to the desire of her elder sister's intention of marrying a man of her choice, devoid of all the mischievous and baseless concerns. The student is making a passionate argument through the lexical bundle and it sounds almost like a definitive statement by the student. There is an interesting link between stance bundles and text- oriented bundles, where several bundles simultaneously perform these two functions. In some cases, some bundles incorporate the first-person plural pronoun *we*, and the inferential meaning makes a direct stance (Hyland, 2008a).

#### 4.3.2.2 Engagement lexical bundles

This type is used to engage the readers directly; they are widely used in professional corpus. Engagement bundles seek to engage the reader directly, as a means of grabbing their attention throughout the writing. This strategy is useful where the reader is spoilt for choice and needs to make a choice as to what to read and at what time. As a result, the writer tends to adopt a conversational approach or tact. Two examples were found in the data and these are *fell on deaf ears* and *I hope all is well*. Their use is illustrated in Extracts 12 and 13:

##### Extract 12

I wasn't regular in class and I didn't take advice from my teachers and colleagues. Some advised me on how these days, one must not rely on others but instead work hard to achieve success, all the advice they gave *fell on deaf ears*. As I entered my third year and near to writing my final examination, I

was suspended from school for some time, due to my laziness until I was allowed to write the WASSCE.

The extract seeks to engage the reader by taking him or her down memory lane, as the student recaps a story by narrating an event that has placed him or her in a current situation. From this, we realize that engagement markers seek to involve readers in developing arguments by addressing them directly. They seek to ask the reader to take a position while requesting them to focus on certain points, thereby persuading them to take the writer's stance (Thompson & Thetela, 1995).

### **Extract 13**

I am filled with much pleasure to write to you this letter, I hope by God's grace you are fine? How's studies? *I hope all is well?* I am writing this letter to you to tell you at least three unfortunate occurrences that happened in my school. Firstly, there was a fire outbreak that attacked two traditional halls of my school.

From the extract, the student is directly addressing his reader, getting acquainted with him or her and proceeding to make some statements about the current state of the school. Hyland (2008a) makes the argument that the formulaic engagement markers tend to give a precision view about the materials they are embedded in. Byrd and Coxhead (2010) also remark that learning to use stance and engagement markers poses not only linguistic challenges but cultural challenges as well to non-native learners and writers. Several studies conducted indicate that non-native writers have problems expressing their judgements and the expected degrees of qualification and certainty in their written discourse (Ajimer, 2002; Hyland & Milton, 1997; Neff & Bunce, 2006; Salazar & Verdaguer, 2009). It is therefore imperative that deliberate

pedagogical approaches to infusing stance and engagement bundles into academic work is undertaken.

### **4.3.3 Text-oriented bundles**

According to Hyland (2008a), text-oriented bundles are “concerned with the organization of the text and its elements as a message or argument” (p. 13). Hyland classifies them into transition, resultative, structuring, and framing signals. Hyland mentions that text-oriented bundles form nearly half of all target bundles, making them the most represented of all bundle categories. A relatively large number of bundles in research articles have a more discursive function of marking the relationship between prior and coming discourse (text-oriented bundles), lending support to Hyland’s position (2008a, 2008b) that lexical bundles in research articles serve textual functions to a large extent. These bundles are heavily used to provide familiar and shorthand ways of engaging with the literature, connecting ideas, directing readers around the text, and specifying limitations. These bundles were used diversely to act as transition markers, to show causative relations, to mark text stages, to interpret, limit, and specify the textual conditions, and to rephrase the preceding arguments (Hyland, 2007). Salazar has subsequently modified Hyland’s categorization and introduced additional subgroupings. According to her, framing signals, which are usually realized by prepositional phrase structures, are used for linking ideas and identifying conditions, while inferential bundles, help to introduce or underscore results which usually take the form of adverbial clause fragments and passive structures combined with prepositions and serve as text reflexive guides for readers. The types of text-oriented bundles found in the data are for addition, inference, cause, framing, and structuring.

#### 4.3.3.1 Additive lexical bundles

This category looks at the relationship that exists between different parts and aspects of an unfolding narration through the linkages that lexical bundles provide, for example, the lexical bundle, *in other words*, serves as a pivot between previously made comments and what is about to be said subsequently, either in terms of summarization, elaboration or clarification. It also serves notice of a possible brevity use of words to accomplish what has already been said in previous pronouncements. Bundles found within this subgroup are *as well as* and *in other words*. These are shown in Extracts 14 and 15 as follows:

##### Extract 14

Moreover, lack of furniture is also another problem in my school. Students now absent themselves from school because even when they come to school to study, because there is inadequate furniture for them to sit on, students then find it difficult to come to school, *as well as* the total number of desk in the school is not equal to the total number of student in the classroom and it makes learning very difficult for students.

The extract depicts an inclusive situation whereby a previously made statement is compounded by an additional situation yet to be made, the placement of the lexical bundle in the extract, gives the awareness that, there is going to be an additional information that is an addition to the previously stated challenge.

The use of *in other words* is seen in Extract 15:

##### Extract 15

On the other side of the coin, most people do practice self-medication whenever he or she is sick and cannot afford to cater for the hospital bills due to lack of money. Many people in Ghana do not benefit from the NHIS due to

self-medication. Many people die for not being able to pay high medical bills. Some people do not have enough resources or *in other words*, do not have money to pay his or her hospital bills.

Here, the student is drawing attention to the dangers of self-medication and the advantage the NHIS offers the subscriber. The student however makes the point that due to inadequate financial wherewithal, people are not able to pay their medical bills, the use of the bundle, in other words, is placed to give the understanding of further explanation of the point made, in case it is not clear enough.

#### 4.3.3.2 Inferential lexical bundles

These bundles signal inferences and conclusions drawn from data. This category examines the sequential sets of pronouncement or activities that are about to be made as a consequence of previously made comments. In the area of statistical analysis, this means an examination of data; in the area of English summary, it means intelligent deductions made from previously read passages. Examples found in the data are *in this case*, *in view of this*, and *as a result of this*. Two of these are illustrated in Extracts 16 and 17:

##### **Extract 16**

Furthermore, my school experiences flood whenever it rains. Whenever it rains in my school, we experience flood which enters into the dormitories and destroy belonging or others. Also, if this occurs in the morning it prevents some people from going to class because the whole place will be flooded with water. *In this case*, I suggest that, there should be proper drainage system in my school to prevent all these from happening again.

The extract shows an inferential situation, where the student is referring the reader to a situation that keeps recurring and inferring from that situation that, the consequences that follow are unpleasant and serve as hindrances for academic work.

**Extract 17**

Therefore environmental pollution can lead to loss of life and also famine, when layouts are not properly arranged. Environmental pollution can also cost the Government funds in restoring all these things. Therefore, *in view of this*, I think layout should be properly arranged to allow easy flow of water through the society and also allow citizens to also have access to easy movement from one location to another’.

The student in the extract is making an inference from the previous situation whereby poor layouts have led to environmental destruction and make the inference that remedial actions need to be taken to resolve it. In the opinion of Hyland (2008a), Inferential bundles are used by researchers to convey interpretation of data and relevant information to highlight conclusions both reader and writer (student) can draw from the study.

4.3.3.3 Causative lexical bundles

These bundles mark cause and effect relations between elements. As such, an activity must have occurred to cause a series of resultant decisions to be taken; it is almost as a reaction to a previous occurrence. The previous position serves as an impetus for the next series of actions to be taken. Examples of such bundles found in the data are *due to that fact* and *the reason why*. These are seen in Extracts 18 and 19 respectively:

**Extract 18**

To begin with, the use of infertile and unproductive land for farming activities. In order for a state to produce a high level of food for all, the land for producing the raw product for it to be processed should be fertile. ***Due to that fact***, certain farmers are not well educated on the type of land to use for the right crop, they therefore cultivate food crops at wrong places which yield very low foods in the state.

From the extract, the writer alludes to the fact that the farmers tend to have poor yields from their farms, and the cause is that, they have poor farming knowledge, techniques, and skills.

#### **Extract 19**

I hope after reading this letter, you will now realize ***the reason why*** my school is excelling in academic work. Please don't forget to extend my greetings to mum and dad and your siblings, especially Ruballah and Abubakar.

In the extract, the student is drawing the attention of the reader (the recipient) to the reasons why his or her school is performing well in examinations, the causative factor for the improved performance is yet to be stated but indication has been made to that effect. Hyland (2008a) intimates that causative bundles have a unique feature whereby they highlight the relationship between two variables. They indicate the cause and effect relationship that exist between two variables.

#### **4.3.3.4 Structuring lexical bundles**

These are text-reflexive markers that organize stretches of discourse or direct the reader elsewhere in the text. Such types include *as described previously*, *as shown in figure*, and *in the materials and methods section*. They serve as referral points in a writing or an article, where the reader is being given ample direction to observe closely a figure, an occurrence, or an event based on the observation of that singular

or multiple issues, for which certain decisions are made. An example found in the data is *in the poem* and is illustrated in Extract 20:

#### **Extract 20**

The poem “The Dining Table” is a poem which talks about war, devastation and child soldiers. A dinner table is a table where meals are consumed on. *In the poem*, the dining table is a land, a dangerous land where “guerillas walk the land while crocodiles surf” as stated in the second stanza. Actually the poem is referring to a war that occurred in Sierra Leone. A war fought in order to get food.

Here, the student describes the poem, written by Elvis Hallowel, as a depiction of war and destruction which is structured to give a vivid and clear picture of the effect of war on the land and its inhabitants.

#### **4.3.3.5 Framing lexical bundles**

Framing lexical bundles present a scenario where a series of points or arguments are made within certain bounds and certain limitations. They present an argument or a position of the writer based on certain previously made points upon which further analysis of pronouncements are to be made. Examples found are *the fact that* and *it was a fact*. These are shown in Extracts 21 and 22 as follows:

#### **Extract 21**

Technology has given bullies even more avenues to torment their victims, through social networking, texting and other virtual interactions as evidenced by the number of suicides that can be directly traced to bullying event. *The fact that* laws are still fuzzy regarding cyber bullying adds to the challenge, since parents, teachers and administrators are unsure of how to legally handle such issues.



In the extract, the student talks about the challenges of modern-day technology uses and social media ethics and the victims and perpetrators of such acts.

**Extract 22**

*It was a fact* that the cost of health care was very expensive and so it was only accessed by the rich in our society and very few middle-class people in the society, back then when the health scheme was not introduced into the nation. It made the cost of healthcare very much expensive that most people sought for other means to get access to healthcare’.

The extract talks about the challenges of the health system in relation to cost and the impact that health insurance schemes have had on healthcare delivery.

According to, Arani, & Jalali, & Moini (2015), about 17% of text-oriented bundles in medical sciences were used to frame arguments, make connections, specify cases, and refer to limitations. It is worth mentioning that most of these framing bundles were made up of prepositional phrases + of. The results of this study are also similar to those of Hyland (2008b) in which he found that framing devices comprised a high proportion of text-oriented bundles. Based on his findings, writers in disciplines of applied linguistics and business studies mostly used text-oriented bundles. Salazar (2010) also notes that these bundles are essential to the effective elucidation of arguments. In effect, they tend to lend coherence to written discourse by using them to connect, clarify and contextualize ideas. Through the use of these bundles, there is the ability to communicate interpretation of data. Text-oriented bundles also allow readers to ease into the processing of articles by creating logically structured arguments and providing well placed textual signposts.

#### 4.4 Summary

For the third research question in this study, it was realized that out of 222 identified lexical bundles, 17% of all the lexical bundles fell under the research-oriented bundles, translating into 38 different lexical bundles. Seventeen percent (17%) of all identified lexical bundles, translating into 38 different lexical bundles, fell under the text-oriented bundles. Lexical bundles under the participant-oriented bundles were 30 in number and translated into 14% of all identified lexical bundles. Students used research-oriented bundles as equally as they used text-oriented bundles, in the research-oriented bundles, sub-categories, 9 lexical bundles were identified under location, 7 under procedure, 2 under quantification, 7 under description and 13 under the grouping sub-category. Some of the lexical bundles could not be captured in any of the three patterns, and so they were classified as others. One hundred and sixteen (116) bundles representing 52% fell under this category. Within the text-oriented bundles, additive functions had 4 lexical bundles, inferential functions had 5, and causative functions had 2. Also, structuring functions had 6, while framing functions had 8. The stance sub-category was the highest used participant-oriented bundles, with 18 lexical bundles while engagement had 12 bundles.

#### 4.5 Conclusion

Lexical bundles are fragmented in nature, but they give an insight into the cognitive framework of the author, writer and persons in a discourse, either verbal or written. Discourse, as a product of communication and interactivity is categorized into research, text and participatory, but these categorizations is not made by the initiator of the discourse, the writer or author is just expressing a view, a point or an opinion, but that opinion is categorized into three different aspects. The categorization is done

depending on the, intent of the author, the context of the discourse, the effect or impact the author seeks to communicate, either deliberately or coincidentally. It was also observed that, there are lexical bundles of discourse that strides two categories in the terms of its functions. Lexical bundles are also embedded in a variety of communications, regardless of the discipline in question, in sports, medicine, academic world, newspaper editorials, in articles and journals or in everyday oral communication that we tend to gloss over, because it's become part of everyday discourse.

Two hundred and twenty-two (222) different lexical bundles were extracted from the discourse or writings of the five schools, from both second year and third year students. It is worth noting that, the number of lexical bundles one is able to incorporate into his or her writings is not as a result of the year group one belongs to in the Senior High School, but the proficiency of one in the English language or the ability to use these lexical bundles one has been able to acquire over time. With regards to the use of tokens, Form 2 students produced 137 tokens, whereas, Form 3 students produced 62 different tokens. It was also found that 3-word bundles were found to be used slightly more frequently with 89 different 3-word lexical bundles out of the 222. This generally supports the findings of Salazar (2014), who found that most of the frequently used bundles in her work were composed mainly of 3-word lexical bundles.

Structurally, the types of lexical bundles found in the data can be grouped under noun structure, verb structure, prepositional phrase fragment, and others, and these categories have sub headings under them. Noun structure (noun phrase + phrase fragment, noun phrase with other post-modifier fragments, other noun phrase); verb structures (passive + preposition-phrase fragment, other passive fragments, verb

phrase with personal pronoun we, other verbal fragments); prepositional phrase fragments (prepositional phrase + of, other prepositional phrase (fragments), other structures (verb or adjective to clause fragment, verb phrase or noun phrase + that – clause fragment, adverbial-clause fragment, copula be + adjectival phrase, other adjectival phrase, anticipatory it + verb or adjectival phrase, other expression). From the analysis, noun structures were the most used by writers, followed by verb structures. This is indicated in percentage terms, noun structures had 34% of total lexical bundles, verb structures, 33%, prepositional structures, 24% and others, 9%. The functional analysis of lexical bundles is essential to their value as teaching items. Even though bundles are largely incomplete units that include words already familiar to most students, their functions afford them a certain degree of face validity for teachers and students. From the analysis, it was realized that students used the three functional sets of lexical bundles, as highlighted by Hyland (2008a). These are research-oriented, text-oriented, and participant-oriented bundles. There were five (5) research-oriented bundles and they were used to show location, procedure, quantification, description, and grouping. The participant-oriented bundles were two (2) in number and they were used for stance and engagement. Finally, there were five (5) text-oriented bundles used for addition, inference, to show cause, structure, and for framing.

## CHAPTER FIVE

### SUMMARY, RECOMMENDATIONS AND CONCLUSION

#### 5.0 Introduction

This chapter presents a summary of the findings, the role of lexical bundles in the writings of second language learners' or L2 learners, and suggestions for further research. Majority of the scripts or essays which contained the writings of students were drawn from selected schools, from different courses and different classes, so the structures identified in the research is not pre-planned. The lexical bundles identified are acquired bundles over the years, which come naturally to the students.

#### 5.1 Summary of findings

This study examined the use of lexical bundles in the writings of students' using one hundred and sixty-eight (168) students, twelve (12) course areas from five (5) senior high schools in the Accra Metropolis. This research approach was qualitative and the design was study was a case study; it allowed for the exploration and understanding of issues pertaining to the writings of students at the level of pre-tertiary education. The analysis adopted was identification, categorization and textual analysis of data. Irrespective of the course and the year group, the expectation was that specific courses could have thrown up specific bundles, that are course-specific, but that did not happen as expected, especially in technical, science, and business

courses. The findings of this study are presented according to the research objectives outlined in Chapter 1.

### **5.1.1 Frequency of occurrence of lexical bundles in the writings of students**

With regards to the first research question, the following findings were made; a total of seventy-five thousand, six hundred (75,600) word corpora, from five (5) schools, twelve (12) courses and one hundred and sixty-eight (168) scripts. This generated 222 different lexical bundles, with the lexical bundles that recurred the most, recurring twenty (20) times, meaning it was used 20 different times by different students, in different schools, among two different year groups (Forms 2 and 3). The bundles identified cut across, schools, courses and year group, and some of these bundles used are not special to a particular course but the bundles rather reflected their educational level as Senior High School students.

Out of the 222 lexical bundles produced by the students, form 3 students produced the most lexical bundles; they produced a total of 124 lexical bundles while Form 2 students produced 81 lexical bundles in their writings. While the bundles identified appeared unique to each form, there were 17 other bundles that were common to students in both groups. The ability to accurately and appropriately produce and use lexical bundles is dependent on the proficiency of the students in English language. The types of lexical bundles identified in this study comprised 89 three-word bundles, 87 four-worded bundles, 30 five-word bundles, 13 six-word bundles, and three (3) seven-word bundles. The numbers suggest that three-word lexical bundles were the most used by students; this constitutes 40% of identified lexical bundles, four-word bundles were the second most widely identified bundles, and this translated into 39%. Five-word lexical bundles constitute into 14% of the

identified bundles, six-word bundles constitute into 6% of identified bundles, and seven-word bundles, constituting 1% of the lexical bundles.

The most frequently used lexical bundle by Form 2 students was *last but not the least*; this occurred 11 times, comprising 52% rate of occurrence of all identified lexical bundles. The lexical bundles *first of all* and *due to the fact, that* occurred a total of 5 times. Similarly, to the Form 2 group, the most frequently used lexical bundle by Form 3 students was *last but not the least* and it occurred a total of nine times, constituting 41% rate of occurrence of identified lexical bundles. The lexical bundles, *to begin with* and *how are you doing*, occurred a total of 7 and 6 times respectively, giving a combined percentage of 7.

Tokens show the number of times a particular bundle occurred throughout writing by students. The total number of tokens identified in the writings of Form 2 students was 137. The total number of tokens identified in the writings of Form 3 students was 135. The total number of lexical bundles identified to have been used by both groups of students in their writings was 17. The total number of tokens that reoccurred in all writings were 272. In terms of percentages, the lexical bundle token distribution among both forms was almost the same at 50%. The Form 2 students had 50.2% of the token usage, and the Form 3 had 49.8% of token usage. The lexical bundles that occurred the most and identified in the writings of only Form 2 students were *the last but not the least* (11 times), *to begin with* (10 times), *first of all* (5 times), *due to the fact that* (5 times). The identified bundles that occurred the most and identified in the writings of only Form 3 students were *last but not the least* (9 times), *to begin with* (7 times) and *how are you doing?* (6 times).

### 5.1.2 Structural patterns of lexical bundles in the writings of students

With regards to the second research question, the lexical bundles are structured or classified into four main categories as follows: **Noun structure** - *Noun phrase + phrase fragment, noun phrase with other post-modifier fragments and other noun phrase*. **Verb structures** include *passive + preposition-phrase fragment, other passive fragments, verb phrase with personal pronoun we, other verbal fragments*. Another kind of structure of lexical bundles is **Prepositional phrase fragments**: *Prepositional phrase + of, other: prepositional phrase (fragments)* and **Other structures** such as *verb or adjective to clause fragment, verb phrase or noun phrase + that – clause fragment, Adverbial – clause fragment, copula be + adjectival phrase, other adjectival phrase, Anticipatory it + verb or adjectival phrase, and other expression*.

Out of the 222 lexical bundles, 70 were classified as noun-based structures (34%), 67 verb-based structures (33%), 50 preposition-based structure (24%) and 18 classified as others (9%). Within the noun-based structures, noun phrase + of- phrase fragment, had 11 lexical bundles constituting 8%, noun phrase with other post-modifier fragments had 5 constituting 4%, and other noun phrase, had 8 lexical bundles translating into 6%. Under verb-based structures, passive + preposition-phrase fragment had 10 lexical bundles translating into 8%. Other passive fragments had 8 bundles translating into 6%, verb-based with personal pronoun *we* had 5 lexical bundles constituting 4%, and other verbal fragments had 7 lexical bundles constituting 5%. With preposition-based structures, prepositional phrase + of had 6 bundles, making up 5%, and other prepositional phrase (fragments) had 33 lexical bundles, translating into 25%.



Under the *others* structure, verb or adjective to clause fragment had 18 lexical bundles making up 14%, verb phrase or noun phrase + that – clause fragment had 2 lexical bundles comprising 2%, adverbial – clause fragment had 2 bundles translating into 2% use, copula be + adjectival phrase and other adjectival phrase sub categories had 1 lexical bundle each and 1% of all lexical bundles. The rest are anticipatory it + verb or adjectival phrase (11; 18%), and *other* expression with 4 lexical bundles constituting 3% of all lexical bundles use. The study indicates that majority of the writings of the students' essays can be classified as *noun-centric* (Pickering & Byrd 2008), meaning that majority of the writings of students had noun-based bundles in their writings. What this also means is that nouns were the most important word or idea in any sentence formation of students' writing, while the rest of the sentences supported the nouns. The implication of such an approach means that anything of vital importance must be *nounified* for it not to lose its relevance in the writing.

According to Salazar (2014), noun structures feature 129 different keywords; the widest variety among all other lexical bundles' structures. This study found most of the noun-based structures used are commonly used to denote qualities, degree, existence, to describe events, to indicate measurement, quantities, to mark location, and to signify groupings and group membership. The students have grammatical challenges, so structurally, some of them omit or delete subjects or appropriate modifiers that must usually go with the lexical bundles.

### **5.1.3 Functions of lexical bundles in the writings of students**

Turning to the third research question that sought to look at the functions of the identified lexical bundles, Hyland's (2008a) functional taxonomy was adopted. Thus, the following were identified: research-oriented bundles, made up of those that show/describe location, procedure, quantification, description, and grouping. The

second group constitutes text-oriented bundles performing the following functions: additive, comparative, inferential, causative, structuring, framing, citation, generalization, and objective. Participant-oriented bundles form the third group and contain those that were used to show stance and engagement. The analysis revealed that with lexical bundle use among students in the Accra Metropolis, there were 38 research-oriented bundles constituting 17%, 38 were text-oriented bundles, making up 17%, and 30 participant-oriented bundles, constituting 14%, with 116 bundles classified as *others*, making up 52% of all identified bundles,

## **5.2 The importance of lexical bundles in the teaching and learning of English**

Lexical bundles serve as an important indicator for determining the success of language users within specific discourse community. The main discourse functions of lexical bundles can be summarized as they present arguments and frame attributes through referential expressions. Lexical bundles also organize texts through discourse organizers, for example, '*on the other hand*' and convey attitudes. Lexical bundles reflect how academic writing is formed by a particular discourse community (Cortes, 2004; Hyland, 2008). They are very important in students' academic writing because students' academic writing is made up of its formal structural requirements that mostly feature in these writings. Although the academic writings of students may vary according to the course they offer, on the whole, the bundles help to achieve the same effect of unity and coherence (Hyland, 2008; Wood, 2015).

## **5.3 Pedagogical implications**

According to Nation (2001), there are three general processes of acquiring lexical bundles; noticing, retrieval, and generation. It has been designed and adopted and used for creating effective awareness of lexical bundles and other multi word units. This segment seeks to explain how the study of lexical bundles can be

effectively incorporated and infused into materials that are targeted at non-native speakers, with a series of activities that aim to promote learners noticing, retrieving, and generation of lexical bundles. There are other forms of activities that can be introduced and executed, that will seek to help students in the process of identifying lexical bundles, these include, comprehension tasks, filling gaps in a text extract, rewriting whole paragraphs using a given set of bundles and writing entire essays (Nation, 2001)

The first step in creating awareness or enlightening second language learners under phraseology, according to Nation, is the process of noticing and identifying the lexical bundles, this step or stage is very important as the making or spotting of lexical bundles are not exactly the easiest thing for students to make out in an extract or prose. One simple way by which teachers can draw attention to lexical bundles is by using typographical enhancements such as, italics, Bolden them, underlining, highlighting or colour coding (Jones & Haywood, 2004; Meunier, 2012; Okeefe, McCarthy & Carter, 2007).

The second step in enhancing learners' procedural acquisition of bundles, according to Nation's (2001) is the retrieval process. This is the form-meaning mapping that occurs during language production. To foster effective retrieval of lexical bundles, students can be instructed to keep track of lexical bundles they have learnt by recording them in note books (Byrd & Coxhead, 2010; Nation, 2001; O'Keeffe, McCarthy & Carter, 2007; Schmitt, 2000). Redman (1991) suggests leaving spaces at the bottom of each page of the learners' notebook to write down three or four recently acquired expressions to make easy revisions at a later date. The educators of the various classes must be innovative and creative in their pedagogical approach to generate and introduce exercises and task that will give learners the

opportunity to retrieve recently acquired knowledge of bundles from memory and enables the learners to strengthen this knowledge, especially in an area like grammar.

The last of the three processes that lead to the acquisition of phrases, is generation. Nation (2001, p. 105) defines this process as follows: “generative processing occurs when previously met words are subsequently met or used in ways that differ from the previous meeting with the word”. For example, if a learner has met the word **cement** used as a verb as in “we cemented the path” and then meets *we cemented our relationship with a drink*, the learner will need to rethink the meaning and uses of cement and this will help firmly establish the memory of this word. Generative use is not restricted to metaphorical extension of word meaning and can apply to a range of variations from inflection through collocation and grammatical context to reference and meaning.

There are activities that this generative stage can be exemplified with; it has been shown that figurative meanings are usually acquired later than the concrete meanings, leading to the difficulty of non-native speakers’ use of figurative language. Adjectival or adverbial modifications can be used in exercises, whereby curriculum designers can develop learners’ materials through rewriting and gap-filling tasks. There is also the substitution task, where the learner is given a sentence with phrases underlined and he or she is supposed to replace the underline phrase with his or her own similar phrase that will not change the context of the sentence or he or she will select from a bunch of prior provided phrases or bundles.

#### **5.4 Suggestions for future research**

Further studies into the impact class readers have on the ability of students to develop lexical bundles should be considered and this should help trigger further research. There were also very minimal lexical bundles identified with

specific discipline, as in course area or programme-specific lexical bundles, yet these course areas have textbooks of all kinds. An investigation of why there was a gap between course areas and specific lexical bundles could help build capacity in the area of lexical bundles in general. This study dwelt and focused on lexical bundles usage in the English Language, there can equally be a study conducted into phraseology in Ghanaian Languages.

## **5.5 Conclusion**

The study of lexical bundles and phraseology in general is a developing field. It is important to acknowledge that lexical bundles are just one piece in a large phraseological puzzle and one essential task for those interested in in this type of multi-word units. It is necessary to take the phraseology research to the classroom itself, so that the teaching approaches being proposed can be evaluated and improved. It is only through this that teachers and learners can fully benefit from all the ground-breaking advances in the study of multi-word units. It is hoped that this study that explored the frequency of occurrence, the structure of lexical bundles, and the functionality of lexical bundles, and proposed pedagogical implications represents a significant contribution towards reaching a complete understanding of the role played by lexical bundles in written and spoken academic communication.

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## APPENDICE

## LIST OF IDENTIFIED LEXICAL BUNDLES

SN	IDENTIFIED LEXICAL BUNDLE	TYPE	TOKEN		
			FORM 2	FORM 3	TOTAL
1	Last but not the least	1	11	9	20
2	To begin with	1	10	7	17
3	First of all	1	5	3	8
4	How are you	1	3	4	7
5	Fit as a fiddle	1	1	6	7
6	In a nutshell	1	4	2	6
7	Due to the fact that	1	5	-	5
8	In this case	1	2	2	4
9	First and foremost	1	2	2	4
10	To set the ball rolling	1	-	4	4
11	To continue with	1	2	2	4
12	How are you doing	1	3	1	4
13	It has been a longtime	1	2	1	3
14	In view of this	1	2	-	2
15	To add up	1	2	-	2
16	I hope all is well	1	1	1	2
17	It is known that	1	1	1	2
18	To put an end to	1	1	1	2
19	Draw your attention	1	1	1	2

20	As a result of	1	1	1	2
21	Beating around the bush	1	1	-	1
22	Spill the beans	1	1	-	1
23	In addition to	1	-	1	1
24	In the book	1	1	-	1
25	The reason why	1	1	-	1
26	In this act	1	1	-	1
27	This line talks about	1	1	-	1
28	On the other hand	1	-	1	1
29	Would come to pass	1	1	-	1
30	Have a bad feeling	1	1	-	1
31	Fell on death ears	1	1	-	1
32	Came out with flying colours	1	1	-	1
33	Keep the fire burning	1	1	-	1
34	To throw more light	1	1	-	1
35	To add insult to injury	1	1	-	1
36	Thorn in the flesh	1	1	-	1
37	To address the problem	1	1	-	1
38	It is my hope	1	-	1	1
39	The way forward	1	1	-	1
40	Don't have to	1	1	-	1
41	We don't have to	1	1	-	1
42	Bring to your notice	1	1	-	1
43	To hit the nail on the head	1	1	-	1
44	Most at times	1	1	-	1
45	I am very glad	1	-	1	1
46	The fact that	1	1	-	1
47	As of now	1	1	-	1
48	As far as am concerned	1	1	-	1
49	Hand in hand	1	-	1	1
50	In the meantime	1	1	-	1
51	It is topsy turvy	1	-	1	1

52	Light at the end of the tunnel	1	-	1	1
53	In the poem	1	-	1	1
54	To commence with	1	-	1	1
55	Can you imagine that	1	-	1	1
56	For your information	1	-	1	1
57	Piss her off	1	-	1	1
58	As we all know	1			
59	Did not know	1	-	1	1
60	Over the years	1	1	-	1
61	Did not know much	1	1	-	1
62	It was a fact	1	1	-	1
63	As we know	1	1	-	1
64	To report to	1	-	1	1
65	He had not been	1	-	1	1
66	Most of them	1	-	1	1
67	In the course of	1	-	1	1
68	Set off at	1	-	1	1
69	On his way out	1	-	1	1
70	In a week	1	-	1	1
71	Thirty years ago	1	-	1	1
72	Did not turn out	1	-	1	1
73	At that time	1	-	1	1
74	I was able to	1	-	1	1
75	Come to pass	1	1	-	1
76	Days went by	1	1	-	1
77	As far as	1	1	-	1
78	Fell on deaf ears	1	1	-	1
79	Few days later	1	-	1	1
80	It was late in the evening	1	-	1	1
81	Bumped into her	1	-	1	1
82	These three friends	1	-	1	1
83	Day after day	1	-	1	1

84	One evening after school	1	-	1	1
85	Little by little	1	-	1	1
86	She woke up	1	1	-	1
87	In the first place	1	1	-	1
88	In case of	1	1	-	1
89	A whole lot	1	1	-	1
90	Rules of each game	1	-	1	1
91	He is doing well	1	-	1	1
92	A series of test	1	-	1	1
93	We solve a lot of	1	-	1	1
94	Make sure that	1	-	1	1
95	Students make sure that	1	-	1	1
96	You are doing well	1	-	1	1
97	Is one of the best	1	1	-	1
98	Due to the donation	1	-	1	1
99	The reason why	1	-	1	1
100	As well as	1	-	1	1
101	Who do not understand	1	-	1	1
102	In our class	1	1	-	1
103	So that we know	1	1	-	1
104	We have about thirty trophies	1	-	1	1
105	He had a dream	1	-	1	1
106	Would go to farm to	1	-	1	1
107	As early as	1	-	1	1
108	As a teacher	1	-	1	1
109	As far as I was concerned	1	-	1	1
110	Back in high school	1	-	1	1
111	Turned against me	1	-	1	1
112	Bring them back to me	1	-	1	1
113	In my heart	1	1	-	1
114	In this expression	1	-	1	1
115	In this line	1	-	1	1

116	The use of apostrophe	1	-	1	1
117	It can be said that	1	-	1	1
118	In the Bible	1	1	-	1
119	It will be done	1	-	1	1
120	A lot of money	1	-	1	1
121	To throw more light on	1	-	1	1
122	Process of teaching and learning	1	-	1	1
123	It is an obvious answer	1	1	-	1
124	The issue of bedbugs	1	-	1	1
125	With no intervention	1	-	1	1
126	There are few suggestions	1	-	1	1
127	We never met	1	-	1	1
128	I did not miss my mother	1	1	-	1
129	Left without a penny	1	-	1	1
130	On an empty stomach	1	-	1	1
131	Dropping the woman off	1	-	1	1
132	It was her turn	1	-	1	1
133	It was okay	1	1	-	1
134	One of them	1	1	-	1
135	I felt dizzy and passed out	1	-	1	1
136	We were all behind our books	1	-	1	1
137	We walked slowly	1	1	-	1
138	It took a while	1	1	-	1
139	We got there	1	1	-	1
140	I am in school	1	1	-	1
141	We all know that	1	1	-	1
142	This can help me	1	1	-	1
143	On a piece of paper	1	-	1	1
144	It is an honour	1	-	1	1
145	Apart from all this	1	-	1	1
146	We all know	1	-	1	1



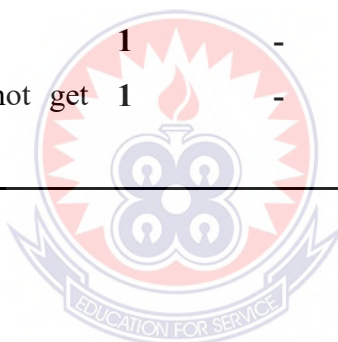
147	The fact is	1	-	1	1
148	With all his heart	1	-	1	1
149	In the end	1	-	1	1
150	To be given	1	-	1	1
151	In our country	1	-	1	1
152	In other words	1	1	-	1
153	Go to the hospital	1	1	-	1
154	With the help of	1	1	-	1
155	Has been very poor	1	1	-	1
156	Take drugs to compete	1	-	1	1
157	This will lead to	1	-	1	1
158	Should be closed down	1	-	1	1
159	Moved out of	1	-	1	1
160	Have been placed in	1	-	1	1
161	You cannot walk alone	1	-	1	1
162	For this reason	1	-	1	1
163	In this era	1	1	-	1
164	I know for a fact that	1	1	-	1
165	As much as you can	1	1	-	1
166	Is in three parts	1	1	-	1
167	Out of the blue	1	-	1	1
168	Had written to me	1	-	1	1
169	The main reason	1	-	1	1
170	To promote unity	1	-	1	1
171	To make sure	1	-	1	1
172	It will promote	1	-	1	1
173	This is one reason	1	-	1	1
174	It will bring smiles	1	-	1	1
175	Is getting married	1	-	1	1
176	Never happens to anyone	1	1	-	1
177	Have not fallen on deaf ears	1	1	-	1
178	Will have a change of	1	1	-	1

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	mind				
179	To know that	1	1	-	1
180	Also has a	1	1	-	1
181	In scene two	1	-	1	1
182	In act four	1	-	1	1
183	They were involved in the	1	-	1	1
	war				
184	The dangers of war	1	-	1	1
185	To be an agent of peace	1	-	1	1
186	She did not say much	1	-	1	1
187	Let me tell you a story	1	-	1	1
188	Little did I know	1	-	1	1
189	On a calm evening	1	1	-	1
190	On your own	1	1	-	1
191	Love for music	1	1	-	1
192	The event was supposed	1	-	1	1
	to be				
193	It happened so quickly	1	-	1	1
194	Going down alone	1	-	1	1
195	Is a group of people	1	-	1	1
196	One is able	1	-	1	1
197	One is able to save	1	-	1	1
198	Kick the bucket	1	1	-	1
199	To be given the	1	1	-	1
	opportunity				
200	To assist some members	1	1	-	1
201	Suffice to say that	1	1	-	1
202	I wasn't able to reply	1	1	-	1
203	It all started	1	1	-	1
204	Couple of months ago	1	-	1	1
205	Due to the effect	1	-	1	1
206	For that matter	1	-	1	1
207	Is to walk miles away	1	-	1	1

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<b>208</b>	To solve this	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>209</b>	I didn't pass in my Math test	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>210</b>	Due to this problem	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>211</b>	Is a very good one	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>212</b>	As a result of poverty	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>213</b>	For that reason	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>214</b>	I am very sure	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>215</b>	I want you to know	<b>1</b>	<b>1</b>	-	<b>1</b>
<b>216</b>	Is one of the	<b>1</b>	<b>1</b>	-	<b>1</b>
<b>217</b>	Things could be avoided	<b>1</b>	<b>1</b>	-	<b>1</b>
<b>218</b>	Send my regards	<b>1</b>	<b>1</b>	-	<b>1</b>
<b>219</b>	The causes of all these	<b>1</b>	<b>1</b>	-	<b>1</b>
<b>220</b>	As a result of fear	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>221</b>	This is really sad	<b>1</b>	-	<b>1</b>	<b>1</b>
<b>222</b>	Most people do not get access	<b>1</b>	-	<b>1</b>	<b>1</b>



## FUNCTIONAL CLASSIFICATION OF LEXICAL BUNDLES

<b>RESEARCH-ORIENTED BUNDLES</b>	<b>TEXT-ORIENTED BUNDLES</b>	<b>PARTICIPANT-ORIENTED BUNDLES</b>
<b>Helps writers to structure their activities and experiences of the real world</b>	<b>Concerned with the organization of the text and its meaning as a message or argument</b>	<b>Focused on the writer or reader of the text.</b>
<p><b>Location</b>  <b>Indicate place, extremity and direction, for example,</b>  <i>In a nutshell</i>  <i>In the book</i>  <i>In our class</i>  <i>In my heart</i>  <i>In the Bible</i>  <i>In this line</i>  <i>I am in school</i>  <i>In our country</i>  <i>In this era</i></p>	<p><b>Additive</b>            Establish additive links between elements, for example,  <i>On the other hand</i>  <i>To add insult to injury</i>  <i>As well as</i>  <i>In other words</i></p>	<p><b>Stance</b>            Convey the writer's attitudes and evaluation, for example,  <i>Would come to pass</i>  <i>We solve a lot of</i>  <i>Make sure that</i>  <i>Due to the donation</i>  <i>So that we know</i>  <i>Would go to farm to</i>  <i>Bring them back to me</i>  <i>The issue of bedbugs</i>  <i>We never met</i>  <i>We all know</i>  <i>Due to the effect</i>  <i>Due to this problem</i>  <i>Is one of the</i>  <i>This line talks about</i>  <i>The fact that</i>  <i>To put an end to</i>  <i>To address the problem</i>  <i>It is known that</i></p>
<p><b>Procedure</b>  <b>Indicate events, actions and methods, for example,</b>  <i>To continue with</i>  <i>In addition to</i>  <i>In the meantime</i>  <i>As we all know</i>  <i>In the course of</i>  <i>One evening after school</i>  <i>For that matter</i></p>	<p><b>Comparative</b>            Compare and contrast different elements, for example</p>	<p><b>Engagement</b>            Address readers directly, for example,  <i>Fell on death ears</i>  <i>As far as am concerned</i>  <i>The reason why</i>  <i>I hope all is well</i>  <i>Draw your attention</i>  <i>It has been a longtime</i>  <i>We don't have to</i>  <i>Have a bad feeling</i>  <i>It is my hope</i>  <i>It is topsy turvy</i>  <i>To commence with</i>  <i>I hope you are fine</i></p>
<b>Quantification</b>	<b>Inferential</b>	<b>Acknowledgement</b>

<p><b>Indicate measures, quantities, proportions, and changes thereof, for example,</b>  <i>Most at times</i>  <i>To add up</i>  <i>To add insult to injury</i></p>	<p>Signals inferences and conclusions drawn from data,  <i>In this case</i>  <i>In view of this</i>  <i>As a result of</i>  <i>There are few suggestions</i>  <i>For this reason</i></p>	<p>Recognize people or institutions that have participated in or contributed to the study, for example,</p>
<p><b>Description</b>  <b>Indicate quality, degree and existence, for example,</b>  <i>This line talks about</i>  <i>To throw more light</i>  <i>As of now</i>  <i>As far as am concerned</i>  <i>Can you imagine that</i>  <i>As far as I was concerned</i>  <i>To throw more light on</i></p>	<p><b>Causative</b>          Mark cause and effect relations between elements, for example,  <i>Due to the fact that</i>  <i>The reason why</i></p>	
<p><b>Grouping</b>  <b>Indicate groups, categories, parts and order, for example,</b>  <i>Most of them</i>  <i>These three friends</i>  <i>A series of test</i>  <i>Students make sure that</i>  <i>One of them</i>  <i>We were all behind our books</i>  <i>We walked slowly</i>  <i>We got there</i>  <i>We all know that</i>  <i>Is in three parts</i>  <i>Is a group of people</i>  <i>To assist some members</i>  <i>Most people do not get access</i></p>	<p><b>Structuring</b>          Text-reflexive markers that organize stretches of discourse or direct the reader elsewhere in the text, for example,  <i>In this act</i>  <i>In the poem</i>  <i>In this expression</i>  <i>The use of apostrophe</i>  <i>In scene two</i>  <i>In act four</i></p>	
	<p><b>Framing</b>          Situate arguments by specifying limiting conditions, for example  <i>The fact that</i>  <i>It was a fact</i>  <i>The fact is</i>  <i>I know for a fact that</i>  <i>In this case</i>  <i>To hit the nail on the head</i>  <i>Bring to your notice</i>  <i>In the meantime</i></p>	
	<p><b>Citation</b>          Cite sources and supporting data, for example,  <b>Generalization</b>          Signal generally accepted fact or statements, for example,  <i>It is known that</i>  <i>Draw your attention</i>  <i>Have a bad feeling</i>  <i>Most at times</i>  <i>To be given</i>  <i>To know that</i></p>	



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**Objective**

Introduce the aims, for example,

*To address the problem*

*To make sure*

*To report to*

*To promote unity*

*To be an agent of peace*

*To be given the opportunity*

*To solve this*

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