# Review on the Acquisition of Lexical Bundles and its Role in the Production of Fluent Academic Writing<sup>(\*)</sup>

# Supervised by Professor Amira Agameya

#### Dina M. Nour

Faculty of Arts - Cairo University

#### **Abstract**

This article studies on the efficiency of multi-word units recognized as lexical bundles in the production of fluent academic writing by EFL learners. The paper begins by presenting the importance of acquiring chunks of words in the production of fluent first and second languages. The paper presents some definitions of lexical bundles, with elaboration on their functional types and roles; it also shows their effectiveness in the production of more native-like academic written discourse. The paper illustrates on some selected methods of instruction, and their effectiveness in the acquisition of lexical bundles and the enhancement of academic writing. It also highlights some important studies, which have investigated different means of teaching lexical bundles targeted for improving the writing production. Based on the results of these studies and the reviewed topics in this paper, it has been found that the acquisition of lexical bundles can be considered a perquisite of the production of fluent academic writing.

**Key words:** chunks, formulaic language, lexical bundles, explicit instruction, academic writing, writing fluency

<sup>(\*)</sup> Review on the acquisition of Lexical Bundles and its role in the Production of Fluent Academic Writing, Vol.10, Issue No.4, October 2021, pp.91-114.

## الملخص

يتناول هذا المقال المرجعي مدى فاعلية استخدام وحدات الكلمات المجمعة التي تسمى الحزم اللفظية في إنتاج لغة أكاديمية تتميز بالطلاقة لدارسي اللغة الإنجليزية بوصفها لغة أجنبية. يبدأ المقال بتوضيح مدى أهمية إكتساب كتل من الكلمات من أجل إحداث طلاقة في اللغة الأولى و الثانية. ثم يعرض في القسم الثاني بعض التعريفات للحزم اللفظيه، بالإضافة إلى شرح أنواع الحزم اللفظية و أدوارها الفعّالة خاصة في إنتاج كتابة أكاديمية تتميز بطلاقة مثل طلاقة مستخدمي اللغة الأصليين. أما عن القسم التالي فإنه يتناول بعض الطرق التعليمية المُستخدمة في تدريس الحزم اللفظية وفاعليتها في إكتساب تلك الحزم من أجل تحسين الكتابة الأكاديمية. يناقش القسم الأخير لهذا المقال بعض الدراسات التي تقصت طرق تدريس عديدة للحزم اللفظية وعلاقتها بتنمية الطلاقة التعبيرية. بُناءً على الموضوعات السابق ذكرها، فقد تبين أن إكتساب الحزم اللفظية قد يكون من الشروط الأساسيه لإنتاج كتابة أكاديمية تتميز بالطلاقة اللغوية.

# الكلمات المفتاحية

الكتل الكلامية، اللغة المعدلة، الحزم اللفظية، التعليم الصريح، الكتابة الأكاديمية، الطلاقة التعبيرية.

Many studies have investigated the influential role of vocabulary acquisition in the fluent production of oral and written discourse. The language, whether spoken or written, was defined by Ellis (1997) a sequence of more than one sound or symbol; accordingly, it was found necessary to split it into "chunks" to grasp its whole meaning. The acquisition of such word-sequences (chunks) has been widely investigated in many studies under the names of language phraseology and formulacity, which were the umbrella for other word groupings such as "lexical bundles," (Chen & Baker, 2010).

In the field of second language acquisition (SLA), word groupings, and not single words, drew the attention of language users to the comprehensive meaning and form of spoken and written languages, which depict more coherent texts (Ranjbar, Pazhakh, & Gorjan, 2012). Nevertheless, the acquisition of words in groups could have negative or positive impact on learners (since it is attributable to the production of proficient, accurate, complicated or fluent language), who aimed at acquiring a native-like foreign language (FL) (Paquot and Granger, 2012). Therefore, FL learners should use formulaic language proficiently in order to produce sophisticated academic writing; which also means that fluent academic writing relied on learning the use of lexical bundles appropriately (Li & Schmitt, 2009).

### The Acquisition of Words in Chunks and Language Fluency

The acquisition of word combinations has gained much interest in the field of foreign language studies in recent years. Some first language (L1) theories of acquisition have pointed out that children start by acquiring units of words before acquiring singular words (Appel, 2011). This acquisition process begins by storing and retrieving chunks of words, which recurrently exist in the input as recognizable meaningful units; then, children gradually compose longer multi-word units more quickly than composing word-by-word forms, which eventually leads to the fluency of the language produced (Appel, 2011).

Since languages consist of sequence of words (or chunks), speakers and writers draw on them when they produce the language, other than relying on single words (Allan, 2016; Gray & Biber, 2013; Kashiha & Chan, 2015). It has been pointed out that the production of words in chunks helps produce more meaningful language, and simplifies the learning process (Allan, 2016). As a result, once learners master the use of chunks, they can attain the competence of native speakers, since the memorization and internalization of units of words facilitate language production; not to mention that using ready-made units of language results in making FL learners sound like native speakers of the language (Kashiha & Chan, 2015; Allan, 2016).

Empirically, it has been found that the possession of lexical knowledge is essential in the evaluation of the degree of accuracy in the acquired lexis (Huang, 2015; Serrano, Stengers, & Housen, 2015). In other words, the acquisition of chunks is responsible for the appropriate production of the targeted language (TL), and consequently is a major step in the learning process (Burgos, 2015). To this end, since the acquisition of words occurs in chunks and not in single words in L1, then formulacity is central for the acquisition of languages, and at the same time is responsible for the production of fluent language through retrieving word sequences that are adequately stored in memory (Conrad & Biber, 2005; Perez-Llantada, 2014).

### Formulaic Language for Native-like Language Production

Formulaic language has been selected as a name for word sequences since they can be automatically retrieved as formulas by native speakers, who distinctively produce L1 word sequences with their different functional roles in discourse (Adel & Erman, 2011; Jaworska, Krummes, & Ensslin, 2015). There are many implications held in the use of formulaic sequences such as being used more by native speakers in the field of second language acquisition than by non-native speakers (Adel & Erman, 2011; Jaworska et.al., 2015). Also, the choices of the number and types of formulaic sequences are differently made by native and non-native users of the language (Adel & Erman, 2011). To add, it has been noted that the lack of formulaic language can be problematic for learners of advanced and intermediate levels since it obscures the production of a native-like language (Krummes & Ensslin).

Research in SLA has detected various benefits for the acquisition of formulaic language. Mainly, due to the fact that it is widely spread in any language and in many definitions, the acquisition and processing of formulaic language contribute to the effectiveness and efficiency of communication since comprehension and production of the language can be done smoothly, in other words fluently (El-Dakhs, Prue, & Ijaz, 2017). This assures the essentiality for learners to acquire and produce many formulaic sequences in order to produce a native-like language; however, it is necessary to keep into consideration that the incorrect use

of formulaic language results in miscommunication (Allen, 2010).

That is why the acquisition of formulaic language has not been easy for scholars or for academic writers, who do not belong to advanced proficiency levels (Adel & Erman, 2011). Add to this, the wrong learning directions of learners can sometimes obscure the acquisition of formulaic language, especially in the case when learners concentrate solely on producing appropriate grammatical forms of the words they are learning, which results in non-native production of the language; or when they misuse the TL by wrongly using the function of a multi-word unit, which consequently impedes language fluency (Krummes & Ensslin, 2015).

#### Lexical Bundles and Their Functional Role

Lexical bundles, which are one type of formulaic language, are known in the literature with various names such as "recurrent word combinations, clusters, phrasicon, n-grams" (Herrnandez, 2013, p.187). Coming in the form of incomplete structures, the term *prefabricated units* of language is also used to identify lexical bundles, which are not marked by certain positions in phrases or clauses (Allan, 2016; Conrad & Biber, 2005; Lenko-Szymanska, 2014). Extended collocations are one of the other names used to refer to lexical bundles since they are composites of a minimum of 3 words that co-occur statistically in a genre without being distinguished by their idiomaticity or structure (Allen, 2010; Huang, 2015; Lenko-Szymanska, 2014). Extended collocations also framework meanings in a specific context and results in making texts more coherent (Ranjbar, Pazhakh, & Gorjian 2012).

There is not a clear agreement on the distribution of lexical bundles in texts and the number of texts encompassing them. Columbus (2013) and Ranjbar et al. (2012) have agreed that a minimum of 10 occurrences of a frequently repeated lexical bundle has to be widely distributed in a one-million-word corpus. Flowerdew (2015), on the other hand, has specified a minimum of 40 occurrences in every one million-word academic text. As for the number of texts, it is pointed out that they

should occur in a number of not less than 5 various texts to avoid repetition (Amirian, Ketabi, & Eshaghi, 2013; Huang, 2015; Ranjbar et al., 2012).

Functionally, the analysis of lexical bundles relies on their place in texts. In many cases, they have an apparent function even if they are not in context such as *it is necessary to*, which refers to a formal obligatory attitude (Conrad & Biber, 2005). A bundle can also be ascribed to more than one function as in *the end of the* that can imply time or place (Conrad & Biber).

The qualitative analysis of lexical bundles in written discourse has categorized lexical bundles into three types, which are stance expressions, discourse organizers and referential expressions (Amirian et al., 2013; Kashiha & Chan, 2015; Paquot & Granger, 2012). The function of referential bundles is emphasizing the writer's input and elaborating on his/her perspectives; text organizers, on the other hand, function as linking phrases depicting the main points of a text; in addition to the way other linguistic elements are connected to them in the same text; the third type, which is stance lexical bundles, has the function of reflecting various views in texts (Perez-Llantada, 2014).

For more illustration, the functional role of a referential bundle such as *in a number of* is demonstrating an array of ideas presented in a text; while the function of the discourse organizer *in this essay I* is to list the main topics at the starting point of a text; the stance functioning lexical bundles such as *it can be argued* are used to precede the provision of different views (Paquot & Granger, 2012).

These three categories of lexical bundles can function in more than one way. For instance, stance expressions such as *to ensure that the* or is *likely to be* can have epistemic functions like demonstrating certainty or probability, and/or attitudinal ones by showing writers' tendencies; discourse organizers such as *in the next section* can be used for topics introduction, or others such as *in contrast to the* can be used provide more clarification to topics; referential expressions are used for

maintaining clarity while referring to place such as *in front of you*, or time such as *over a period of* (Conrad & Biber, 2005; Kashiha & Chan, 2015). Possessing different functional roles, as previously discussed, lexical bundles have been found effective in the production of cohesive and coherent texts, which indicates the production of fluent academic writing.

#### **Lexical Bundles in Academic Writing**

Fluent writing has been identified as an organized stream of words in a produced written discourse (Ranjbar et al., 2012). This requires learners to recognize the kind of chunks used in each writing genre, which is one major role of the teacher to plan the right input for learners including the repetitive exposure of learners to the targeted formulaic sequences (Burgos, 2015).

Empirical investigation has revealed three basic reasons for the vitality of lexical bundles to the production of fluent academic writing, which are their large prevalence in the language; the way they function as fundamental factors that shape academic texts, not to mention that the writers who do not use them adequately are characterized as unprofessional writers; finally, when FL learners use lexical bundles in writing, it improves their writing skill, and enhances the writing products of some selected genres since learners rely on word groupings and not single words (Cai, 2016).

Writing has been one complicated skill for L2 learners including the competent ones. The use of word combinations has been detected as one main complication by many learners since it gives value to the writing product of learners; this is in addition to distinguishing between well or poorly written work, or between the writing product of the native users or the non-native users of the language (Jafarpour, Hashemian, & Alipour, 2013; Kazemia, Katiraeib, & Rasekhe, 2014; Ucar, 2017). To elucidate, formulaic language makes it easy for speakers or writers to produce the language idiomatically, which results in making them competent users of a selected genre; nevertheless, there is the problem of

which formulaic sequences to select in order to attain proficiency and fluency in a given genre, most specifically academic discourse (Durrant & Mathews-Aydinli, 2011).

The improvement of second language learners' collocational repertoire has been found necessary to upgrade their proficiency level in writing, and this in turn mark their writing with fluency, precision and meaningfulness; in other words it makes it coherent (Jafarpour et al., 2013). A part of lexical bundles functional role is to add texture and organization to oral or written texts in accordance to "situations or contexts," which means it organizes scattered sentences, whether of written or spoken discourse, into one text marked with coherence (Ranjbar et al., 2012). Since a strong connection has been identified between the right use of word combinations and the production of coherent texts, it has been found necessary to develop learners' formulaic language repertoire of second language in order to have more proficient learners; as a consequence, coherence, accuracy, and significance are noticed in the writing production since learners have acquired the necessary word combinations (Ashouri, Arjmandi, & Rahimi, 2014).

Improving the writing skill through possessing vocabulary repertoire has been stressed since it helps communicate and reveal ideas, in addition to exchanging views; on the other hand, the inadequacy of vocabulary results in miscommunication more particularly in academic writing (El-Dakhs et al., 2017). Therefore, in order to produce fluent writing, it is necessary for writers to acquire the specific chunks of academic writing with all their functional and structural forms that can be complicated and divergent; it is also worth mentioning that any mistake in their usage is equivalent to not using them in the language, which consequently leads to producing unnatural or non-native discourse (Al-Hassan & Wood, 2015). Thus, the noticeable natural function of lexical bundles in academic discourse makes it a mark of competence for its users (Hyland & Tse, 2009).

Empirically, it has been shown that lexical bundles represent a solid foundation for mastering the formal writing skill (Al-Hassan &

Wood, 2015; Ucar, 2017). However, it has been noted that using formulaic language in academic writing can be problematic since it is not a skill that is used universally in languages and there is no specific method selected for teaching it, so it can be acquired by either being formally instructed, or via informal means (Perez-Llantada, 2014). Still, this does not deny another fact, which is that only more advanced writers, and not beginners, can use formulaic sequences appropriately to produce academic writing (Perez-Llantada, 2014).

Lexical bundles occur frequently in languages on a wide scale and almost in all genres (Columbus, 2013). It has been pointed out that for each type of academic genres there is a group of selected lexical bundles, which possess certain communicative functions in the genre where they are used (Hyland & Tse, 2009; Perez-Llantada, 2014). Following this, specifically in the English language, some lexical bundles are used for their characteristics, whether relevant to structure or function, to signify academic writing by reflecting how it is compressed grammatically, elaborated syntactically and the extent to which it is vivid (Perez-Llantada). Accordingly, developing a skillful academic writing is ascribed to the acquisition of lexical bundles due to many factors such as: their repetitive use in the genre, being an indispensible element of meaningful structures, marking writing with fluency due to its frequent use, and combining grammar and lexis, which are all basic factors for the correct production of the language (Ucar, 2017).

The appropriateness of selecting lexical bundles and their incorporation in language use have been proved vital to effectively and successfully produce the right register, since their various functions represent different registers (Allen, 2010; Latif & Afraz, 2015). Some studies have pointed out that unsatisfactory results could be detected in the production of formal writing registers due to the less frequent use of formulaic language by learners (Kazemia et al., 2014). It has also been noticed that the attainment of high proficiency in certain genres, such as academic writing, can be fulfilled by using formulaic language since it represents a basic functional part with different uses in the context of

academic writing (Cortes, 2007). The problem is that despite the fact that lexical bundles are widely selected by professional writers in various academic registers as an attempt to be persuasive especially while presenting argumentative ideas, it seems that these same word sequences that writers prefer using in their work are seldom, if not at all, used by learners of different proficiency levels who write in other fields (Kazemia et al., 2014).

It has also been empirically shown that using formulaic sequences mark a mature writing, consequently, lacking them indicates an immature one (Cortes, 2007). This makes lexical bundles use indispensible for formal writing since their technicality enables writers to produce complicated ideas economically; in addition to denoting to the extent of language formality (Cortes, 2007). Lexical bundles have also been found fundamental, when used efficiently, in setting bases for academic writing or in distinguishing one genre from another (Hyland, 2008). However, if learners of a second language do not have knowledge of formulaic language, they produce pieces of writing that are not natural or idiomatic (Cortes, 2007; Li & Schmitt, 2009; Qin, 2014).

To elaborate more on the crucial role lexical bundles play in producing fluent academic writing, Li and Schmitt (2009) pointed out that the acquisition of vocabulary should improve learners' writing skill, especially formulaic multi-word sequences. They have also stated that such formulaic sequences could be less complicated for second language learners as they deal with already grouped words instead of writing each word separately due to the fact that words are easily stored in memory as a unit, thus they can be easily recalled instead of having to go through a difficult process of working out grammatical rules to combine them (Li & Schmitt). Therefore, the frequent use of such combinations of words marks learners' writing with fluency (Li & Schmitt, 2009).

It has been found necessary for L2 learners to acquire the linguistic features and structures of academic genres to successfully produce formal written texts (Cortes, 2007). To this end, the use of lexical bundles has been found vital to attain proficiency in academic

writing since they act as one central component to this type of writing, which is signified by its saliency and functional role (Simpson-Vlach & Ellis, 2010). Regarding the importance of teaching them in academic writing classes, it has been detected that it is essential for second language beginner writers to acquire lexical bundles during their writing composition as a sign of their comprehension of the main aspects of academic writing and its organization (Ruan, 2017).

As a result of using the corpora to analyze different written texts, a clear relationship has been detected between formulaic sequences and the way texts are structured (Paquot & Granger, 2012). For example, every group of word combinations, which match in form and meaning and is generally responsible for organizing the main ideas of texts, reflects different rhetorical functions such as topic introduction, comparisons, causal relationships, summaries and conclusions, in addition to being successful in occupying readers with the main arguments discussed in texts (Paquot & Granger, 2012).

Taking the previous points into consideration, it is obvious that in spite of the influential role of the acquisition of lexical bundles in producing fluent and accurate formal writing, they have been proved problematic to be acquired by L2 learners. This could relate to a number of reasons, one of which is learners' limited lexical repertoire, besides the difficulty of identifying meaning, form or function of lexical bundles. Consequently, it is generally the case that L2 students cannot use lexical bundles appropriately the way L1 writers do and keep using only the lexical clusters they are familiar with, which makes it important for instruction to take place in order to help learners acquire lexical bundles necessary to produce fluent writing, at the same time instruction should find solutions for learners to deal with acquisition problems of lexical bundles (Li & Schmitt, 2009).

# **Teaching and Learning of Lexical Bundles**

The investigation of different instructional methods and teaching approaches of lexical bundles has been the concern of different studies

due to their importance to the production of fluent discourse. For example, the memorization method of learning was recommended, through which the mind stores word combinations of highly frequent occurrence to be restored later and easily processed as a sign of fluency (Durrant & Mathews-Aydinli, 2011). Ranjbar et al. (2012) also agree with this method and state that memorizing a great deal of lexical chunks would help learners recall them later in an automatic way, and as a consequence attain language fluency similar to that of native speakers.

Other studies show that novice learners of foreign or second languages may constantly use sequenced words while upgrading their proficiency level and their linguistic competence (Staples, Egbert, Biber, & McClair, 2013). For this reason, some recommendations have been made to help learners correctly use lexical bundles in writing such as focusing on memorization as a starting instructional method followed by "one-to-one form-function mapping" that gradually makes the learner produce the language more naturally (Staples et.al). With regard to the acquisition of lexical bundles necessary for academic writing, specifically for proficient learners, it has been suggested that it can be fulfilled by offering learners lists of the most relevant, functional and frequently used lexical bundles to be learnt in order to enhance their writing production (Kazemia et al., 2014).

Although there is an assumption that children acquire L1 vocabulary naturally through exposure to oral input without being instructed explicitly on it, this does not apply to acquiring L2 vocabulary due to the fact that it does not occur naturally but relies on learners' frequent exposures to written texts (Eckerth & Tavakoli, 2012; Kazemia et al., 2014; Kweon & Kim, 2008). After being exposed to texts on regular basis, learners gain knowledge of some words, later, when they start their oral or written production, their language selection relies on the words they have been repetitively encountered with in previous texts that have similarity to the recent ones they are using, and then acquisition takes place (Hyland & Tse, 2009). Consequently, a better learning outcome of lexis can be accomplished as a result of exposing learners

repeatedly to rich input of word combinations, which also highlights the words associated in a bundle and help learners recognize semantics and word collocations (Kweon & Kim, 2008; Allen, 2010; Boers & Lindstromberg, 2012)

Explicit teaching of lexical bundles relies on tasks demanding the highlighting and underlining of formulaic sequences in original texts, which requires the use of dictionaries and corpora as tools necessary to analyze the structure of these sequences (Boers & Lindstromberg). Regarding the use of dictionaries, although they include information about the meaning and use of selected words, there is no guarantee that learners' memories restore these words to be used later except after several encounters (Boers & Lindstromberg, 2012); besides, dictionaries do not give all possible information needed about the phraseological units under investigation like their function in different genres (Boers & Lindstromberg, 2012; Kayaoglu, 2013).

By means of corpus analysis, the prevalence of formulaic sequences and their impact on attaining fluency in spoken and written language have been detected (Allan, 2016). Recently, there has been a continuous reliance on corpus to detect word-patterns by investigating big amounts of spoken and written discourse (Adel & Erman, 2012). The reason of this kind of attention to corpora has been due to the complication of formulaic language acquisition encountered by learners and academic writers, who are not proficient enough; add to this the fact that the measurement and identification of formulaic sequences in natural settings have been proved problematic (Adel & Erman).

# Investigation of the Acquisition of Word Groupings and Writing Fluency

The investigation of the effectiveness of the acquisition of lexical bundles in the production of fluent writing has drawn attention in the field of SLA; however, the focus is different from one study to another. For instance, some studies gave more attention to the method of teaching applied to attain the acquisition of lexical bundles in order to guarantee their correct use in writing. The number of the words combined in the bundles under investigation and the level of writing aimed for production (sentence or paragraph level, for instance) also differed in studies. Apart from this, there has been some interest in the corpus analysis of native and non-native pieces of writing to differentiate between their uses of lexical bundles. Also, some studies investigated the influence of instruction on the acquisition of lexical bundles to attain fluent writing.

The benefit of the instruction of lexical bundles in the enhancement of writing abilities was examined by Kazemia et al. (2014) on a group of Iranian TEFL learners, whose perspective was sought about the helpfulness of the acquisition of lexical bundles in the development of writing skills. The subjects of the study, who belonged to two Iranian universities, were 20 master's students with BA degree in various TEFL fields with English as their major. The experiment lasted for a month and included 4 sessions, an hour and half each. During the sessions, corpus-based instruction was applied on 40 lexical bundles that were most frequently and functionally used in relation to students' fields of writing. Due to their advanced level, it seemed that learners did not have problem grasping meanings of the targeted bundles. Their instruction included highlighting the vitality of these bundles and how they should be used frequently and appropriately in an advanced stage of academic writing. By applying corpus-based instruction, paired students drew analysis on a selection of contextualized bundles from journal articles in the field of applied linguistics to elicit function and use of these bundles, after which they did various activities on the material they had learnt such as completing the missing parts, correcting errors of misused bundles or multiple-choice. The data was analyzed by drawing a comparison between a pre- and a post-writing test, in addition to a questionnaire about students' evaluation of how helpful lexical bundles were in improving their writing abilities. After statistically analyzing the results, and in spite of the short period of the experiment, the writers concluded that with the help of instruction, a noticeable positive influence of the acquisition of lexical bundles was detected and its

influence on the improvement of students' writing skills was also clear. This was shown in the advancement in the scores attained at the posttest compared to the pre-test. Regarding the questionnaire, nearly all students agreed on the necessity of comprehending and using lexical bundles in FL learning.

The influence of corpus-based instruction based on printed out concordances on the acquisition of near-synonymous collocated pairs versus traditional explicit instruction was investigated by Jafarpour et al. (2013). The subjects of this study were studying English as a second language, and were divided into an experimental group, on whom the corpus-based approach was applied, and a control group that received explicit traditional teaching of the targeted collocations. The participants took a pretest and wrote about a topic of their interest that they selected, which was considered a prewriting, then the erroneous collocations resulted from the prewriting were used as basis for another collocation test. During the experiment, the treatment group went through patterns of contextualized words in printed out concordances. Their task was to find collocations matching the new vocabulary they were handled and their synonyms. Regarding the control group, they received an explicit traditional instruction on the targeted near synonyms collocations. At the end of the experiment, the participants were given a posttest containing same items of the pretest, but there were changes in their places. After statistically examining the written production of the pre and posttests for both groups, it was found that the experimental group produced more fluent L2 writing, which was due to the authenticity of L2 offered by corpus. Further, when learners searched the corpus on their own, they hardly forgot what they learnt and could spot their errors. Finally the study concluded that corpus-based instruction was shown to be more efficient than traditionally applied methods in acquiring word combinations and enhancing the writing abilities of the learners of a second language.

Another study conducted by Al-Hassan and Wood (2015) examined the effectiveness of focused instruction of extended

collocations in enabling learners of a second language to generate more skillful academic writing. The study investigated how academic writing of reports on economics can be manipulated via mastering a variety of prefabricated chunks. The study lasted for 10 weeks and included a sample of 12 learners, who did not share the same native language or proficiency level. The participants received focused instruction on extended collocations for a period of 15 hours during the whole experiment. During the experiment, the targeted chunks were taught explicitly via raising learners' consciousness about them, which demanded going through 2 stages: presentation of the newly instructed material, then practicing it. In more detail, by applying focused instruction, important forms and characteristics of the selected bundles were vividly discussed with students drawing their attention to how frequent or less frequent each of them could be in the language. Next, the use and function of these chunks, as well as their significance in preventing repetitiveness in writing, were stressed as basic tools to attain coherence and cohesiveness. In the final stage students went through some tasks such as producing statements used in introduction or conclusion, in addition to other activities of matching and completing sentences encompassing the targeted chunks. The data analysis in this study involved 3 writing tests: a pretest, a posttest and a delayed test. Results showed that more formulaic language was used compared to the pretest, particularly discourse organizer bundles; this is in addition to the noticeable progress in the content and linguistic properties of report writing, which was shown in the texts produced because they were marked by coherence and cohesiveness. These findings highlight the vital role of focused instruction in facilitating the acquisition of word combinations necessary for fluent writing.

Electronic corpus-based instruction was investigated by Chatpunnarangsee (2013) to identify its influence on the acquisition of collocated words during the editing stage of a writing course. It was a case study applied on twenty four university students with different proficiency levels and took place in a Thai university setting. The new

teaching method was applied while the learners were editing their writing tasks, they were firstly asked to spot the wrong collocations and then go through electronic concordance to find the correct ones. The data analysis of this study relied on quantitative and qualitative techniques. To elucidate, statistical comparisons were drawn on pre-tests, which were taken before the application of corpus based instruction, and posttests that were given after the application of the new method of instruction. Both kinds of tests included different questions such as multiple choice questions and matching. Regarding the qualitative part, it relied on the analysis of questionnaires and verbal transcribed data taken from thinkaloud records of the students describing the outcome of their new learning experience. Another section of the qualitative analysis was done on the data taken from focus interviews with students about their learning experience and views of the use of lexical bundles in writing; and with the teachers, who described their teaching experience and offered suggestions about how to make more improvements. Results of the study showed that about 91% of the participants scored better in the posttests compared to their pre-tests and showed progress in their use of collocations. As for the qualitative analysis results, one finding showed that the higher the proficiency level of the student, the better their performance was with regard to corpus utilization for the selection of the right collocation. Another finding reported participants' knowledge of the benefits and drawbacks of concordance as a tool of learning. From the teachers' perspective, concordance was considered beneficial in the way it could enhance learners' editing skills.

#### Conclusion

Research has shown that the acquisition of lexical bundles is necessary for the production of fluent academic writing, provided that they are used accurately and frequently. For this purpose, different methods of instruction have been investigated seeking the most effective one in teaching lexical bundles. According to the findings of many studies, explicit focused instruction has been found more effective in the acquisition of lexical bundles, and the production of fluent academic

writing, compared to other means of instruction. One of the most influential features of explicit teaching has been shown in the repeated exposure of learners to contextualized examples of lexical bundles. Apart from the instructional methods, the selection of the types of lexical bundles relevant to academic writing, and the proficiency level of the participants, have been found fundamental for the generation of fluent academic writing.

#### References

- Adel, A., & Erman, B. (2011). Recurrent word combinations in academic writing by native and non-native speakers of English: A lexical bundles approach. *English for Specific Purposes*, 31, 81–92. Doi:10.1016/j.esp.2011.08.004
- AlHassan, L., & Wood, D. (2015). The effectiveness of focused instruction of formulaic sequences in augmenting L2 learners' academic writing skills: A quantitative research study. *Journal of English for Academic Purposes*, 17, 51-62. Retrieved from http://dx.doi.org/10.1016/j.jeap.2015.02.001
- Allan, R. (2016). Lexical bundles in graded readers: To what extent does language restriction affect lexical patterning? *System*, *59*, 61-72. Retrieved from http://dx.doi.org/10.1016/j.system.2016.04.005
- Allen, D. (2010). Lexical bundles in learner writing: An analysis of formulaic language in the ALESS learner corpus. *Komaba Journal of English Education*, *1*, 105-127. Retrieved from http://park.itc.utokyo.ac.jp/eigo/KJEE/001/105-127.pdf
- Amirian, Z., Ketabi, S., & Eshaghi, H. (2013). The use of lexical bundles in native and non-native post-graduate writing: The case of applied linguistics MA theses. *Journal of English Language Teaching and Learning*, 11, 1-29. Retrieved from https://www.researchgate.net/publication/278329958\_The\_Use\_of\_Lexical\_Bundles\_in\_Native\_and\_Non-native\_Postgraduate\_Writing\_The\_Case\_of\_Applied\_Linguistics\_MA\_Theses
- Appel, R. (2011). Lexical bundles in university EAP exam writing samples: CAEL test essays (master's thesis). Retrieved fromhttps://curve.carleton.ca/system/files/etd/7b696a05-9e7e-4450-af47-c00c37a1f8a6/etd\_pdf/1484e943a6159c1f6e309bb3069d98fa/appellexical bundlesinuniversityeapexamwritingsamples.pdf. (978-0-494-83147-2)
- Ashouri S., Arjmandi, M., & Rahimi, R. (2014). The impact of corpusbased collocation instruction on Iranian EFL learners' collocation

- learning. *Universal Journal of Educational Research*, 2(6), 470-479.Doi: 10.13189/ujer.2014.020604
- Boers, F., & Lindstromberg, S. (2012). Experimental and intervention studies on formulaic sequences in a second language. *Annual Review of Applied Linguistics*, 32, 83-92.Doi: 10.1017/S0267190512000050
- Burgos, E. G. (2015). First year university students' use of formulaic sequences in oral and written descriptions. *Profile*, *17*(1), 25-33. Retrieved from http://dx.doi.org/10.15446/profile.v17n1.43438
- Cai, L. J. (2016). An exploratory study on an integrated genre-based approach for the instruction of academic lexical phrases. *Journal of English for Academic*, 24, 58-74. Retrieved from http://dx.doi.org/10.1016/j.jeap.2016.09.002
- Chatpunnarangsee, K. (2013). *Incorporating corpus technology to facilitate learning of English collocations in a Thai university EFL writing course* (Doctoral dissertation, Indiana University). Retrieved from https://search.proquest.com/docview/1377283083 UMI Number: 3562624
- Chen, Y.-H., & Baker, P. (2010). Lexical bundles in L1 and L2 academic writing. *Language Learning & Technology*, 14(2), 30–49. Retrieved from http://llt.msu.edu/vol14num2/chenbaker.pdf
- Columbus, G. (2013). In support of multiword unit classifications: Corpus and human rating data validate phraseological classifications of three different multiword unit types. *Yearbook of Phraseology*, *4*(1), 23–43. Doi: 10.1515/phras-2013-0003
- Conrad, S., & Biber, D. (2005). The frequency and use of lexical bundles in conversation and academic prose. *Lexicographica*, 20, 56-71. Doi:10.1515/9783484604674.56
- Cortes, V. (2007). Teaching lexical bundles in the disciplines: An example from a writing intensive history class. *Linguistics and Education*, 17, 391-406. Doi: 10.1016/j.linged.2007.02.001

- Durrant, P., & Mathews-Aydınlı, J. (2011). A function-first approach to identifying formulaic language in academic writing. *English for Specific Purposes*, *30*, 58–72. Doi:10.1016/j.esp.2010.05.002
- Eckerth, J., & Tavakoli, P. (2012). The effects of word exposure frequency and elaboration of word processing on incidental L2 vocabulary acquisition through reading. *Language Teaching Research*, *16*(2), 227–252. Doi: 10.1177/1362168811431377
- El-Dakhs, D., Prue, T., & Ijaz, A. (2017). The effect of explicit instruction of formulaic sequences in pre-writing vocabulary activities on foreign language writing. *International Journal of Applied Linguistics & English Literature*, 6(4), 21-23.Doi:10.7575/aiac.ijalel.v.6n.4p.21
- Ellis, N. C. (1997). Vocabulary acquisition: Word structure, collocation, word-class, and meaning. In M. McCarthy, & N. Schmidt (Eds.). Vocabulary: description, acquisition and pedagogy (pp. 122-139). Cambridge: Cambridge University Press. Retrieved form http://www-personal.umich.edu/~ncellis/NickEllis/Publications\_files/VocabCha pMcCarthySchmidtFinalPrePrint.pdf
- Flowerdew, L. (2015). Corpus-based research and pedagogy in EAP: From lexis to genre. *Language Teaching*, 48(1), 99-116.Doi: 10.1017/S0261444813000037
- Gray, B., & Biber, D. (2013). Lexical frames in academic prose and conversation. *International Journal of Corpus Linguistics*, 18(1), 109-135.Doi:10.1075/ijcl.18.1.08gra
- Hernández, S. (2013).Lexical bundles in three oral corpora of university students. *Nordic Journal of English Studies*, *13*(1), 187-209. Retrieved from http://ojs.ub.gu.se/ojs/index.php/njes/article/view/1802/1576
- Huang, K. (2015). More does not mean better: Frequency and accuracy analysis of lexical bundles in Chinese EFL learners' essay writing. *System*, *53*, 12-23.Doi:.org/10.1016/j.system.2015.06.011

- Hyland, K. (2008). Academic clusters: Text patterning in published and postgraduate writing. *International Journal of Applied Linguistics*, 18(1), 41-62.Doi: 10.1111/j.1473-4192.2008.00178.x
- Hyland, K., & Tse, P. (2009). Academic Lexis and Disciplinary Practice: Corpus Evidence for Specificity. *IJES*,9(2), 111-129. Retrieved from http://revistas.um.es/ijes/article/view/90781/87581
- Jafarpour, A. A., Hashemian, M., & Alipour, S. (2013). A corpus-based approach toward teaching collocation of synonyms. *Theory and Practice in Language Studies*, *3*(1), 51-60. Doi: 10.4304/tpls.3.1.51-60|?7
- Jaworska, S., Krummes, C., & Ensslin, A. (2015). Formulaic sequences in native and non-native argumentative writing in German. International *Journal of Corpus Linguistics* 20(4), 500–525. Doi:10.1075/ijcl.20.4.04jaw
- Kashiha, H., &Chan, S. H. (2015). A little bit about: Differences in native and nonnative speakers' use of formulaic Language. *Australian Journal of Linguistics*, 35(4), 297-310.
  - DOI: 10.1080/07268602.2015.1067132
- Kashiha, H., & Heng, C. S. (2014). Structural analysis of lexical bundles in university lectures of politics and chemistry. *International Journal of Applied Linguistics & English Literature 3*(1), 224-230. Doi:10.7575/aiac.ijalel.v.3n.1p.224
- Kayaoğlu, M. N. (2013). The use of corpus for close synonyms. *The Journal of Language and Linguistic Studies*, 9(1), 128-144. Retrieved from http://www.jlls.org/vol9no1/128-144.pdf
- Kazemia, M., Katiraeib, S.,& Rasekhc, A. E. (2014). The impact of teaching lexical bundles on improving Iranian EFL students' writing skill. *Procedia-Social and Behavioral Sciences*, *98*, 864 869. Retrieved from https://doi.org/10.1016/j.sbspro.2014.03.493
- Krummes, C., & Ensslin, A. (2015). Formulaic language and collocations in German essays: From corpus-driven data to corpus-based

- materials. *The Language Learning Journal*, 43(1), 110–127. Retrieved fromhttp://dx.doi.org/10.1080/09571736.2012.694900
- Kweon, S.-O., & Kim, H.-R. (2008). Beyond raw frequency: Incidental vocabulary acquisition in extensive reading. *Reading in a Foreign Language*, 20(2), 191–215. Retrieved from http://nflrc.hawaii.edu/rfl/October2008/kweon/kweon.html
- Latifi, M. A., &Afraz, S. (2015). The effect of explicit instruction of lexical bundles on developing writing skill in pre-Intermediate EFL Learners. *International Journal of Review in Life Sciences*, 5(8), 84-94
- Li, J., & Schmitt, N. (2009). The acquisition of lexical phrases in academic writing: A longitudinal case study. *Journal of Second Language Writing*, 18, 85–102. Doi:10.1016/j.jslw.2009.02.001
- Leńko-Szymańska, A. (2014). The acquisition of formulaic language by EFL learners. *International Journal of Corpus Linguistics*, 19(2), 225–251. Doi: 10.1075/ijcl.19.2.04len
- Paquot, M., & Granger, S. (2012). Formulaic language in learner corpora. Annual Review of Applied Linguistics, 32, 130–149.Doi: 10.1017/S0267190512000098
- Pérez-Llantada, C. (2014). Formulaic language in L1 and L2 expert academic writing: Convergent and divergent usage. *Journal of English for Academic Purposes*, 14,84–94. Retrieved from http://dx.doi.org/10.1016/j.jeap.2014.01.002
- Qin, J. (2014). Use of formulaic bundles by non-native English graduate writers and published authors in applied linguistics. *System*, 42, 220–231. Doi:10.1016/j.system.2013.12.003
- Ranjbar, N., Pazhakh, A., & Gorjian, B. (2012). The effect of lexical bundles on Iranian EFL learners linguistic production fluency. *International Education Studies*, *5*(4). Doi:10.5539/ies.v5n4p243
- Ruan, Z. (2017). Lexical bundles in Chinese undergraduate academic writing at an English medium university. *RELC*, 48(3), 327–340. DOI: 10.1177/0033688216631218

- Serrano, R., Stengers, H., & Housen, H. (2015). Acquisition of formulaic sequences in intensive and regular EFL programmes. *Language Teaching Research*, 19(1) 89–106. Doi: 10.1177/1362168814541748
- Simpson-Vlach, R., & Ellis N. C. (2010). An academic formulas list: New methods in phraseology research. *Applied Linguistics*, *31*(4), 487-512.Doi: 10.1093/applin/amp058
- Staples, S., Egbert, J., Biber, D., & McClair, A. (2013). Formulaic sequences and EAP writing development: Lexical bundles in the TOEFL iBT writing section. *Journal of English for Academic Purposes*, 12, 214–225. Retrieved from http://dx.doi.org/10.1016/j.jeap.2013.05.002
- Ucar, S. (2017). A corpus-based study on the use of three-word lexical bundles in the academic writing by native English and Turkish non-native writers. *English Language Teaching*, *10*(12), 28-36. Doi: 10.5539/elt.v10n12p28