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**Investigating Students' Use of Computer Assisted
Language Learning in Learning English Collocations
Case of Study: EFL Learners in Algeria**

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Dedication

This work is dedicated to:

My beloved parents for their endless support, encouragement and affection,
my dear brothers for their love,
my lovely niece Arwa and my nephews Racim and Adem
my best friend Zineb with whom I cherished five years of good memories,
and everyone who helped me one day.

Imane

I dedicate this humble work to:

My dear parents who believed in me through the years like no one ever did and gave
me their support and affection, and encouraged me to fulfill my dreams,
to the second father I was blessed with, my beloved brother Nabil who was a rock-
solid shoulder I leant on all my life,
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to my dearly loved brothers: Samir and Mohamed,
to my precious, unique and beautiful niece: Oumyma,
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Dina and firas,
to my partner and bestfriend Imane, the person with whom I have accomplished this
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Abstract

Teaching and learning collocations have received a great attention over the years, because of their importance in the field of learning languages. However, with the advance of technology, new ways of teaching collocations have emerged and made a great shift in the educational sphere. The present dissertation is intended to investigate the use of Computer Assisted Language Learning in learning collocations among EFL learners of Algeria. Hence, it is assumed that EFL students in the Algerian universities use some applications to develop their collocations. Therefore, to answer the research questions and test the assumption, quantitative and qualitative descriptive data, as mentioned in the methodology, were collected through a questionnaire submitted to 204 students of English from 26 universities. The obtained results revealed that EFL students of Algeria are using different kinds of Computer Assisted Language Learning applications; however, most of the students went for social media applications. These applications are not specialized in developing one's collocations but rather are applications used by all of people and for different purposes. Besides, time constraints and the small number of representatives were the major limitations during the accomplishment of this work. Eventually, the research work provides recommendations for pedagogy and future research with the purpose of drawing more attention to learners' and teachers' awareness of using specialised CALL applications in order to develop collocations.

Key words: Computer Assisted Language Learning, Computer Assisted Language Learning applications, Collocations, Collocation Learning, EFL students.

List of Abbreviations

Covide19: Corona Virus Disease 2019

EFL: English as a Foreign Language

ESL: English as a Second Language

ESP: English for Specific Purposes

etc: et cetera

e.g: example

i.e.: it means

L2: Second Language

Q: question

Vs.: versus

%: percentage

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General Introduction

1. Background to the Study

David Wilkins (1976) stated that without grammar little can be conveyed; without vocabulary nothing can be conveyed. Acquiring a large vocabulary is of great importance in mastering any second/foreign language. However, linguists and scholars in the field of word combinations noticed that words in isolation are not sufficient to convey full meaning, but rather when they are put together. Therefore, significant emphasis must be placed on teaching/learning collocations as a major part of vocabulary in order to achieve fluency. With the advance of technology, new ways of teaching collocations have emerged and made a great shift in the educational sphere.

The use of computer-based technology in teaching and learning foreign languages has opened the door towards newer opportunities for applying audio-visual, cognitive and communicative approaches, which effectively support the development of new skills. Computer assisted language learning (CALL) is considered as both an approach and a methodology into teaching and learning languages, which has spread worldwide. One of the advantages of CALL is that it serves as both a self-learning tool and a classroom-based instruction, due to the fact that students and teachers are able to access the language materials anywhere and anytime. (Hamada, 2013)

2. Statement of the Problem

In April 2021, a questionnaire has been submitted to EFL learners of second year, third year, master one and master two. 75 students answered the questionnaire that was formed in Google forms a period of two weeks. The participants were from different universities of Algeria (Taref, Jijel, Mila, Blida, Algiers, Oran, Naama, Oum El bouwaqi,

Batna, Setif, Constantine, Bourj Bouaririj, Ouargla, Ain Defla). The questionnaire was aiming to find out some problems that EFL learners face in learning collocations (see Appendix A). The vast majority of students claimed that they use only videos in oral expression session in order to develop collocation. Based on these findings, one observed problem is that the majority of EFL teachers tend to use the same technological devices in oral expression to teach English collocations, although there are plenty of choices that can be helpful, easy to use and within the learners reach. This creates a problem of boredom and lack of interest in learning collocations which are considered a major element of the communicative skill in learning English as a second/foreign language.

3. Aim of the Study

The present study aims to find out whether EFL learners in Algeria use technological applications to learn collocation outside class or not, and to investigate the variety of technologies they use.

4. Research Questions

The current study addresses the following research questions:

- Do EFL learners in the Algerian universities tend to develop collocations outside the classroom?
- Do they use CALL technology to learn collocations?
- What are the applications students use the most?
- Do students find these applications beneficial or not?

5. Research Assumption

In accordance with the previous questions, it is assumed that EFL learners in the Algerian universities use some CALL applications to develop their collocations.

6. Means of Research

In order to reach the research aims and answer the research questions, the descriptive method has been selected using a students' questionnaire which helps obtain the information required for the completion of this work.

The students' questionnaire was administered to EFL learners of second year, third year, master one and master two of twenty six universities, which are (university of Mila, Setif, Blida, Skikda, Algiers, Oran, Constantine, Msila, Batna, Ourgla, Naama, Oum Bouaki, Jijel, Relizane, Djelfa, Guelma, Bedjaia, Beskra, Tlemsan, Ain Defla, Annaba, Moustaganem, El Oued, Adrar, Ain Temouchent and Tiaret). The sample with which the questionnaire was concerned consists of 204 students. It was formed with the aim of investigating students' use of CALL in learning collocations.

7. Structure of the Study

The current dissertation falls into two main chapters. The first chapter is concerned with the theoretical part of this research, while the second chapter is devoted to the practical part.

The first chapter is separated into two sections. Each section offers some theoretical insights into the variables of the study which are CALL and collocations. Therefore, to start with, the first section is initiated with defining collocations in order to familiarise the reader with the notion of collocations, their origins and their importance in language learning in addition to the different types of collocations and their position among other phraseological concepts; idioms, compounds, free combinations and phrasal verbs. This section closes up by mentioning some collocations' dictionaries and teaching collocations as a major part in learning second/foreign languages.

As for the second section, it is devoted to the concept of CALL, where a brief definition of CALL and its pedagogical evolution was introduced, besides its role as both a

tool and a tutor and its tools and devices. Finally, relevant studies about the use of CALL in learning collocation were presented.

The second chapter is devised to provide a description of the fieldwork of the present research. It was designed to answer the research questions and reach the aims that have been set before. This part is also divided into two sections.

The first section was dedicated to explain the research methodology and data collection, in addition to the analysis of students' questionnaire whereas the second section was devoted to the main findings and discussion, where the major findings need to be discussed. This chapter ends up with mentioning the major limitations of the study and recommendations for further researcher.

Chapter One: Theoretical Work

Introduction

In today's continuously globalized world, technology has taken over every aspect of human life and made a greater shift in the educational sphere. By that, using technology in both teaching and learning became a must and not an option. Computer assisted language learning (CALL) environment has been discussed widely in order to find a better way to integrate computer-based activities in the classroom. Since collocations are considered as one

of the main significant areas in acquiring any second/foreign language, the rapidly advanced technology assists learners to learn and improve collocations in and out of the classroom.

The present chapter is divided into two main sections. The first section is entitled collocations. This section aims at familiarizing the reader with the notion of collocations, their origins and their importance in language learning. In addition to that, presenting types of collocations and its position among other phrase-logical concepts; idioms, compounds, free combinations and phrasal verbs are presented. The end of this section will speak about collocations' dictionaries and teaching collocations as a major part in the learning process. The second section is entitled technology enhanced language learning. This section starts with introducing a brief definition of CALL and its pedagogical evolution, where different eras of CALL and its history and development will be presented. Besides, mentioning the role of CALL as both a tool and a tutor. The final part of this section will shed the light on some CALL devices and tools that are used in learning in addition to presenting some relevant studies in the field.

Section One: Collocations

1.1.1. Definition of Collocations

The word collocation refers to a pair or group of words that are usually used together. It refers to the way English words are associated with each other; for example, the word 'fast' goes with 'food' and the word 'quick' goes with 'meal'. Although 'quick' and 'fast' are close

in meaning to each other, the two words cannot be used interchangeably. The meaning of the word collocation can be found in the word itself; co means together and location means place. That is to say, collocations are words that are located together (Kenneth, 2020).

The combinations of words seem natural for native speakers. However, for non-native speakers or EFL learners it requires more effort in order to learn them because they are hard to guess. Therefore, some combinations just sound wrong to native speakers. For example, the use of the adjective 'fast' with 'glance' sounds wrong, we have to say 'quick glance' and not 'fast glance'. Some combinations may not be very wrong, people can get the meaning however, they may not be natural, as in saying I did a mistake instead of I made a mistake. The message is clear but the combination is not natural to native speakers (O'Dell and McCarthy, 2017).

In other words, some combinations fit together and others do not. These combinations are natural and there are no specific rules to combine them. The important factor to be considered with these collocations is that there is no explanation why such words do occur with each other.

1.1.2. Origins of Collocations

Long time ago, scholars and linguists noticed that words usually do not convey full meaning when they are put in isolation, but rather when they are put together. Hence, the meaning of words, sometimes, may rely on other words or lexical units with which they take place. As a result, scholars and linguists decided to investigate the meaning of collocation or lexical units. The history of collocations began in the nineteenth-twentieth centuries in Greece, "the Greek Stoics related collocations to semantics and used the concept of collocation to study the meaning relationships between words" (Namvar et al. 2012 cited in Qader, 2018, p.42). Robins (1976) argued that "words do not exist in isolation, and they may

differ according to the collocation in which they are used” (cited in Qader, 2018, p.42). Therefore, J. R. Firth (1957) who agreed with Greece scholars stated that “words are mutually expectant and mutually comprehended” (cited in Qader, 2018, p.42).

Nevertheless, the word collocation comes from “The Latin verb ‘collocare’, which means to set in order/to arrange” (Muller, 2008 cited in Qader, 2018, p.42). That is to say, collocation or to collocate means to make or create a meaningful lexical unit via putting words or lexical units together. Discovering collocations long ago led to the recognition of their importance or their significant role in learning/teaching English as a second/foreign language.

1.1.3. The Importance of Collocation in Language Learning

Teaching and learning collocations were highly recommended by both teachers and linguists, because of their great impact on developing L2 vocabulary, communicative competence and fluency.

Generally, words are not used in isolation, but rather in combination with other words. They always collocate with other words. Using a given word with certain words and not with others makes the language more specific and correct. People talk of ‘addled eggs’ but ‘rotten meat’ and ‘rancid butter’. They say ‘a slice of meat’ referring to a piece of meat but ‘a loaf of bread’ referring to a piece of bread. Therefore, learning English is not a matter of acquiring vocabulary but also knowing how to use words together correctly i.e. in collocations. Thus, the reason behind learning new words is to use them in real and practical use to create correct sentences. This idea was advanced in the introduction of Oxford Collocations Dictionary for Students of English (2003, p.vii) where it was stated that “for the student, choosing the right collocation will make his speech and writing sound much more natural, more native-speaker-like, even when basic intelligibility does not seem to be at

issue". learning collocations is important in learning English and the publication of many specialized dictionaries showed the significance of their learning.

Collocations may also help learners in memorizing new words, because words are better learned in association with other words and in a given context. Nation (2004, p.38) suggested that "words which are naturally associated in context are learnt more easily than those not so associated; vocabulary is best learned in context; context alone is insufficient without deliberate association...." Hence, context and deliberate association or collocations provide the learner with better and deeper understanding of the word's meaning as well as adding new words to the actual vocabulary. Furthermore, without any awareness of collocation, learners will make up something not native or even unacceptable (Duan, 2012).

Bolinger (1968, 1976) echoed the aforementioned view manifesting that we learn and memorize words in chunks rather than in isolation. He believed that when learning a language people do not memorize morphemes as such, but they memorize phrases. For example, the phrase 'indelible ink' will be stored as a phrase, but few people will notice that the word 'indelible' is having a morpheme 'in-' as a prefix (Bolinger, 1968, p.106).

Brown (1974) was among those who stood for the idea that collocations are important in learning second/foreign languages. He suggested that raising student' awareness and familiarity of collocations come with improving their oral and listening comprehension and their reading speed. In other words, learning collocation helps non-native speakers to improve their style of writing and speaking in a more natural way as native speakers do (cited in Korichi & karouche, 2018). In addition to that, the more learners acquire collocations the more they find alternative ways of saying something without repeating words. For example, they start saying bitterly cold in referring to very cold and pitch dark to express very dark (O'Dell and McCarthy, 2017).

1.1.4. Types of Collocations

Linguists and scholars divided collocations into different types, each from their own perspective and point of view. Some classified them according to the context where they do exist; others classified them according to their strength, while others classified them according to the arrangement of their parts. As a result, they come up with different types of collocations.

1.1.4.1. *Lexical versus Grammatical Collocations*

According to Lewis (2000, p.134) collocations are either lexical or grammatical. Grammatical collocations include a noun, an adjective or a verb, plus a particular grammatical word such as a gerund, an infinitive, a preposition, a clause and the like. The BBI Dictionary (Benson et al, 1986) divided grammatical collocations into eight major types as shown in the following table.

Table1. Grammatical Collocations by Benson, et al. (1986)

Code	Pattern	Examples
G1	Noun + preposition	Blockade against, apathy towards.
G2	Noun + to infinitive	It was a pleasure to do it.
G3	Noun + that clause	He took an oath that he would do his duty.
G4	Preposition + noun	In agony, at anchor, by accident.
G5	Adjective + preposition	Angry at, fond of, deaf to.
G6	Predict adjective + to infinitive	It was necessary to work, it was stupid to go.
G7	Adjective + that clause	It is necessary that he be replaced immediately, she was afraid that she would fail.
G8	Consists of 19 English verbs	Send (dative movement transformation) He sent the book to his brother.

In contrast to grammatical collocations, lexical collocations do not consist of prepositions, infinitives or clauses; they consist of nouns, adjectives, verbs and adverbs. That is to say, a lexical collocation does not include grammatical elements but they include only content words. Benson et al. (1986) categorized lexical collocation into seven major types as shown in the following table.

Table2. Lexical Collocations by Benson, et al. (1986)

Code	Pattern	Examples
L1	Verb + noun	Compose music, fly a kite, and launch a missile.
L2	Verb (eradication or nullification) + Noun	Break a code, revoke a license, and crush resistance.
L3	Adjective + noun	Reckless abandon, strong tea, crushing defeat.
L4	Noun + verb	Blizzards rage, blood circulates, bees buzz.
L5	Noun + noun	A herd of buffalo, a school of whales, an act of violence.
L6	Adverb + adjective	Hopelessly addicted, sound asleep, keenly aware.
L7	Verb + adverb	Apologize humbly, argue heatedly, and appreciate sincerely.

1.1.4.2. Strong vs. Weak Collocations

According to Hill (2000), collocations are to be considered as weak if they are made up with words that may collocate with many other words, making different other collocations. For instance, the adjective ‘big’ can be used with a wide range of words, such as big car, big house, big chance, big apartment and so on. However, collocations will be counted as strong when they consist of words that are almost always associated with each other, and rarely collocate with other words e.g. rancid butter. For him, collocations are categorized according to their strength onto unique collocations, strong collocations, weak collocations and medium-strength collocations.

a) Unique Collocations: Unique collocations differ from others as they are fixed. “Several commentators have pointed out the uniqueness of foot used as a verb in the collocation/foot the bill. We cannot imagine footing the invoice, or footing the coffee. Similarly, we shrug our shoulders, but no other part of our anatomy” (Hill, 2000, p.63). Hence, these two collocations are unique because they can be used only within this structure.

b) Strong Collocations: A large number of collocations are not unique but they are strong or very strong. Different examples could be given in this case such as trenchant criticism and rancid butter, but this “does not mean that other things cannot be trenchant or rancid” (Hill, 2000, p.63).

c) Weak Collocations: Since many things can be appropriate or inappropriate, possible or impossible, white or black, there are many weak collocations. EFL and ESL learners find these collocations easy to learn because they may make different and new combinations with the same word like in: blue shirt, red car, white wine, black hair...etc. in addition to that, EFL and ESL learners can use colors in English the same way they used to do in their mother tongue.

d) Medium-Strength Collocations: This type of collocations is neither strong nor weak. According to Hill, they are “those many thousands of collocations which make up a large part of what we say and write. Most intermediate students will know the words hold and conversation, but may not know that you can hold a conversation. They know the words make and mistake, but have not stored make a mistake in their mental lexicons as a single item” (Hill, 2000, p.64). As a result, both teachers and learners should pay more attention to this type of collocations.

1.1.4.3. *Open Collocations vs. Restricted collocations*

Cowie and Howarth (1996) made a distinction between two types of collocations, which are ‘open’ and ‘restricted’. Open collocations refer to the combination of words that keep the literal meaning, i.e. its meaning is the same as the meaning of the words that compose it, for instance, ‘inclement weather’. An open collocation can be freely combined with other words because their elements are used literally.

In contrast, restricted collocations are where the combinations of words hold a ‘figurative meaning’ such as in saying ‘black man’ referring to his ‘black skin’. The components of restricted collocations can be also combined with other words; however, unlike open collocations, one of the components of restricted collocations is not used in its original literal meaning.

1.1.4.4. *Technical vs. Academic Collocations*

Technical collocations and academic collocations differ from grammatical and lexical collocation in that; technical collocations are used in a specific field within a specific register i.e., in English for Specific Purposes (ESP), whereas academic can be found in both General English and ESP. According to Fuentes (2001), collocations are different in accordance to the subject domains (cited in Qader, 2018).

Technical collocations are used in particular subjects matter, and for that reason we find different kinds of English dictionaries such as: medical dictionaries, business dictionaries, legal dictionaries and so on, which give learners the opportunity to acquire a specific language use. “The importance of collocations in the textual collections has been highlighted as collocations play a crucial role in the description of this specific language usage” (Qader, 2018, p.45). Fuentes (2001) stated that “the salient condition is that elements function uniquely in their corresponding field, describing the restricted setting” which means that the level of technicality is according to the subject domain (cited in Qader, 2018).

1.1.5. Collocations and Other Phraseological Combinations

The co-occurrence of two or more words together is not always to be counted as collocations, i.e. not all the combinations that consist of two or more words are collocations. Many linguists and scholars such as Aisentadt (1979), Benson et al, (1986), Cowie and Howarth (1996) and others were interested in differentiating between these word combinations. Consequently, they made a distinction between phraseological combinations; collocations, free combinations, idioms, proverbs, phrasal verbs and compounds. In order to avoid confusion among learners and users of such combinations a clear distinction between them should be done.

a) Collocations and Free Combinations: In order to understand collocations and use them correctly, it is helpful to distinguish them from free combinations. The co-occurrence of two or more words in a given sentence is to be considered as a free combination if their arrangements do not consist of syntactic and grammatical rules, as well as the components of these combinations can be easily replaced by others. In the ‘BBI Combinatory Dictionary of English’, Benson et al, (1986) argued that free combinations “consist of elements that are joined in accordance with general rules of English syntax and freely allow substitution” (p. xix). That is to say, the elements of free combinations are not fixed and capable of being replaced, e.g. the noun murder can be used with many verbs: to analyze, boast of, condemn, describe, disregard, film, forget, and remember and so on. Moreover, the meaning of free combinations depends on the literal meaning of the elements they are made up of. Thus, by removing a part from the combination, the remaining part will not convey the full meaning of the combination and it would not be understandable.

Free combinations may not be found in dictionaries as collocations do. Also, there are many dictionaries specified in collocations as it is believed that “Collocations should be

included in dictionaries; free combinations, on the other hand, should generally not be included” (Benson et al. 1986, p.xix).

b) Collocations, Idioms and Proverbs: According to Gairns & Redman (1986, p.35) “An idiom is a sequence of words which operates as a single semantic unit, and like many multi-word verbs, the meaning of the whole cannot be deduced from an understanding of the parts e.g. never mind, hang on, under the weather, etc”. Hence, when someone says: We gave the guests a red carpet. She/he does not mean that they really gave their guests a red carpet to walk on, but rather they have given them a warm welcome.

In The BBI Combinatory Dictionary of English: A Guide to Word Combinations (2009), the word collocation is compared to other fixed expressions in the following definition: “In English, as in other languages, there are many fixed identifiable, non-idiomatic phrases and constructions. Such groups of words are called recurrent combinations, fixed combinations, or collocations. Collocations fall into two major groups: grammatical collocations and lexical collocations”(Benson et al, 2009, p. xix).

In other words, idioms are fixed in both meaning and structure, and their meaning does not reflect the basic literal meanings of their constituents. Learning a variety of idioms may help in raising fluency among EFL and ESL learners, but since their meaning is not derived from the literal meaning of their components, learners are required to make more efforts in learning idioms. However, there are many other fixed combinations that are not idioms but rather collocations.

Hill (2000) discussed the relation between collocations, idioms and phrasal verbs, stating that “in one sense all collocation is idiomatic and all idioms and phrasal verbs are collocations --- predictable combinations of different kinds” (p.50). He believed that “fixed expressions range from the totally fixed (An apple a day keeps the doctor away), through the

semi-fixed (What I'm saying/suggesting/proposing is . . .), to the fairly loose yet still predictable (go on holiday).”(p.50)

Therefore, idioms are totally fixed expressions with no chance of change, whereas collocations can be fixed in the case of strong collocations, as their components can be substituted in the case of weak collocations. Furthermore, regardless of the similarities between the two, the focus of idioms is different from the one of collocations. “Idioms focus mainly on the meaning of the whole, while collocation is concerned with combinations of words which do or do not occur” (Lewis, 2000, p.132).

Proverbs are also fixed or frozen combinations, but they differ from idioms in many things. First, unlike idioms proverbs meaning can be “literal or nearly literal”. Second, proverbs “convey folk wisdom or an alleged general truth” e.g. a bird in the hand is worth two in the bush, he who hesitates is lost. Third, proverbs are “usually complete sentences; idioms often represent parts of sentences”. Finally, proverbs are usually “more frozen than idioms” (Benson et al. 1986b, p.253).

c) Collocations and Phrasal Verbs: Phrasal verbs represent another important category of word combination that has a relation to collocations. Phrasal verbs are very common in English especially in the spoken language. Hill (2000) stated that “Phrasal verbs contain a verb plus one or more particles: make up a story, put the light out. The meaning may or may not be obvious from the individual words” (p.51). The meaning of phrasal verbs can be sometimes understandable from the literal meaning of their components, but this is not always the case. Sometimes their meaning is hard to guess, e.g. meaning in the phrasal verb ‘sit down’ can be easily understood from the meaning of its elements, however other phrasal verbs may have several meanings such as ‘pick up’ it can mean lift, acquire, collect ,etc. (Hill, 2000; Gairns and Redman, 1988).

Gairn and Redman (1988) also argued that “It is the last category which creates most difficulty and contributes to the mystique which surrounds multi-word verbs for many foreign learners” (p.33) which means the meaning of such phrases can rarely be guessed from their individual elements, and this is what poses a kind of difficulty for EFL and ESL learners.

d) Collocations and Compounds: Many adjective + noun combinations are completely frozen combinations; no variations at all are possible. Such combinations are clearly identified from other combinations and are known as compounds.

“Compounds are units of meaning formed with two or more words. Sometimes the words are written separately, sometimes they have a hyphen and sometimes they are written as one word” (O’Dell and McCarthy, 2017, p.6). Usually the meaning of compounds can be understood from the meaning of its individual elements, such as in post offices, car parks, teapots and many other examples.

e) Collocation and Colligation: The terms collocations and colligations are close to each other in both spelling and structure, which lead to a confusion between the two. Collocation as it was defined in this written work before is the co-occurrence of two or more lexical units together that represent a single semantic unit, while colligation is the co-occurrence of a cluster of words which are syntactically connected. Hoey (2000, p.234) defined colligation as “the grammatical company a word keeps and the positions it prefers; in other words, a word’s colligations describe what it typically does grammatically”.

Lewis (2000) believed that the ‘entire grammar/vocabulary dichotomy’ is invalid, and language ‘lies on a spectrum between what is fixed and what is variable’. As there are different degrees of ‘fixedness’ and there are different degrees of ‘generalization’, that is why he states “colligation generalizes beyond the level of individual collocations. So, a bunch of

grapes/bananas/flowers are three separate collocations, but the last one can be generalized to a bunch of (flowers), and so generate a bunch of roses/daffodils/ (any other kind of flower)” (p.137).

1.1.6. Collocations Dictionary

Oxford collocations dictionary for students of English (2002) stated that monolingual dictionaries or bilingual dictionaries consist of a list of words, which are ordered alphabetically and give the meaning of individual words or the equivalent of such words in other languages. Such dictionaries are very powerful in terms of cutting up the meaning of texts into segments. However, “Its power is more limited when it comes to constructing texts” (P. viii). Normal dictionaries may help learners in language use, as well as provide them with a clear explanation of grammar patterns and words that may replace a given word in a given context.

Conversely, modern dictionaries are trying to give more attention to word combinations or collocations. “But they are still hampered by trying to provide a whole range of information about any word besides its collocations.” (p. viii). As a result, collocation dictionaries were needed. In other words, unlike normal dictionaries, collocational dictionaries do not try to give a word-by-word meaning but rather to cover the whole meaning or at least a huge part of it. “By focusing on the specific rather than the general, a collocations dictionary is also able to ‘pre-digest’ a lot of the grammar involved, presenting collocates in their most typical form in context, even if this is not the usual dictionary citation form.” (p. viii).

In this vein, although teachers and EFL classes are trying nowadays to raise learners’ awareness of collocations and provide them with very helpful information about

them, it is still not enough in developing learners' collocational competence, and here the extremely important role of collocational dictionaries appears.

1.1.7. Teaching Collocations

Word combinations generally and collocations specifically are one of the major problems that face both EFL and ESL learners in their learning process, and this can be as a result to the lack of attention paid on them in teaching English as a second/foreign language. Subsequently, teachers are required to pay more attention to teaching collocations while teaching vocabulary, in order to enhance learners' interlanguage and help them to produce idiomatic English. Teaching new words or new vocabulary must not be in isolation but in a given context. Teachers have to raise the students' awareness about the exact context such a word can be used in. Moreover, encouraging them to remember the collocation where the new word occurs rather than remembering words as single elements. The importance of learning languages in general and English in particular demands that learners develop good habits of memorizing collocations, on the one hand, and teachers should help and guide their students in memorizing words in combination and finding the correct collocation for every word they learn, on the other hand.

Many teachers nowadays comprehend the great significance of teaching vocabulary in EFL/ESL classes; however, there are still different perspectives on the way they should teach vocabulary. Some teachers do believe that vocabulary can be acquired via extensive listening and reading; consequently, there is no need to spend much time teaching vocabulary explicitly in class. This view is contradicted by other teachers who perceive it as a big mistake; they consider teaching explicit vocabulary inside the classroom is of great significance. Therefore, students need to be encouraged to listen to and read original English

spoken and written by natives for the aim of developing a good sense of English, as well as a good sense of collocations.

Today's learners have more chances to get in touch with numerous rich resources of dictionaries and the internet. Many excellent collocation dictionaries can be obtained easily, such as 'Oxford Collocations Dictionary for Students of English'. As it was found in the preface of the dictionary, "no matter how convinced learners are in principle of the importance of collocation, it is difficult for them to put these principles into practice without the benefit of an up-to-date, corpus-based dictionary of collocation." The dictionary can be useful for both teachers and learners. Whenever they face difficulties in understanding a collocation, they should just check out the key word of the collocation in the dictionary. For example, learners may wonder about saying 'introduction of' and 'introduction to', which one is the correct collocation. To find an answer to their question they have just to check the dictionary.

Nowadays, many free corpora on the Internet are available to help learners in learning how to use words in combinations, in other words collocations. It requires you to enter the word you want to investigate and its part of speech. Choose whether you want to see words that appear to the left or to the right of that word and their part of speech, and you will be provided with an answer immediately.

In this sense, British National Corpus (BNC) is a good example. Learners may easily get access to the corpus by searching for it via "Google". "The first item "Exploring Vocabulary: Collocation" is the program for exploring collocation."(Duan, 2012) Again with the example of introduction, first you enter the word introduction, then you choose the part of speech you want to investigate (introduction + preposition in this case), and then all the sentences that consist of "introduction + preposition" pattern in the BNC appear on the screen.

Finally, both teachers and learners have to pay more attention to collocations, besides being fully conscious and aware of the importance of learning collocations in acquiring a second/foreign language. Teachers are always required to guide and help learners improve collocations and idiomatic expressions, while learners are asked to make efforts and put them in real practice and real usage (Duan, 2012).

Section Two: Technology- Enhanced Language Learning

1.2.1. Definition

The use of technology has become one of the most important elements in EFL/ESL teaching and learning. Since learning languages is an ongoing development that takes place not only inside the classroom, technology has taken the learning experience to the next level. Today, learning from electronic materials is the new trend including the use of various technological devices that could be used everywhere such as mobiles, tablets, or computers. Mainly, the integration of computer-based technology in language teaching is referred to as CALL.

CALL is an acronym for computer-assisted language learning which is defined by Brown (1997) as “computer programs designed specially to teach language” (cited in Murray, 2007, p.748). In the 1980s, the acronym TELL, which stands for technology-enhanced language learning, emerged as an alternative to the term CALL, which was felt to provide a more accurate description of the activities which fall broadly within the range of CALL (Brown, 1988; Bush & Terry, 1997, as cited in Davies et al.,2012). The earliest documented use of the term CALL was first found in a conference paper by Davies and Steel (1981). CALL appears to have originated in the United Kingdom, reflecting a student-centered focus on learning rather than instruction which fosters learners’ autonomy i.e helps them be independent and take charge of their learning. Apart from that, the adaptation of CALL instruction into language learning has the possibility of enhancing and raising the quality of the learning experience (Thomas et al, 2013).

In addition, CALL helps teachers be more up-to-date in terms of using technology and also diversifies the materials and instructions presented in order to break the bridge of boredom and bring variety to the class. CALL is also defined by Levy as "the search for and study of applications of the computer in language teaching and learning"(1997, p. 1). However, CALL comes in many varieties that can be applications, or software and

hardware programs that act as a mediator that helps and facilitates achieving learning objectives.

1.2.2. The Pedagogical Evolution of Computer Assisted Language Learning

Alongside with the historical developments in second language acquisition theories, the evolution of CALL witnessed major shifts and variations and has gained the interest in numerous areas, especially, in education. Throughout history, CALL was characterized by Warshauer (1996, as cited in Thomas et al, 2013,) into Behavioristic CALL, Communicative CALL, and Integrative CALL.

1.2.2.1. Behavioristic CALL

During the 1960s and 1970s, the application of CALL in language instruction was influenced by Skinner's behavioristic ideas of learning and structural linguistics. According to skinner (1938), learning was viewed as a set of habit formation via the repetitive stimulus presented to learners. The essence of behavioristic CALL at that period was to represent the same materials, repeated drills, and some informational exercises. Programs were primarily designed to replace the tutor and relieve teachers of the repeated tasks in the classroom since the machine does not get bored or tired from repeating the same material numerous times. The main focus was on language itself by providing grammatical and lexical drills in an interactive relationship between the student and the computer. Furthermore, the program consists of text reconstruction like, filling in the gaps or writing the appropriate answer to a set of displayed questions. Then, the computer replies with immediate feedback by either providing evaluation to their answers (true or false) or even a sophisticated response as highlighting where the students made mistakes (Dudency & Hockly, 2007, as cited in Benkrama, 2018).

Among the prominent projects at this period were the PLATO project (Programmed Logic for Automated Teaching Operations) (Hart, 1995) at the University of Illinois, and the TICCIT project (Time-shared Interactive Computer Controlled Information Television) (Anderson, 1976 & Jones, 1995, as cited in Davies et al, 2013) at the University of Texas and Brigham Young University (BYU).

The PLATO project began in the 1960s with its first version of PLATO which consisted of a single terminal. Later in the early 1970s, the PLATO IV version with over 900 terminals combining some of the best CALL features was developed. After, in the 1970s, the TICCIT project (Time-shared Interactive Computer Controlled Information Television) was introduced to be the first computer system that integrated text, audio, and video multimedia (Le Baron-Erale, 2013, as cited in Bennacer, 2019). Generally, the main aim behind these projects was to introduce and integrate the computer into the educational sphere. However, its linear programs require learners to follow a scale of tasks with ranging difficulties to receive feedback was identical to the tasks given to the learners in the traditional textbooks, which means it did not use and profit from the features of the computer.

Another major weakness of this period is that although the instructions' major focus was the learner, the learner's needs were not given any type of consideration. Also, the communicative competence of the learners and their ability to use the language in real interactions with real people was neglected. Language elements were taken separately and more attention was paid to repeating grammatically correct sentences. In other words, behaviouristic CALL did not reach the expected results in learning (Thomas et al, 2013).

1.2.2.2. *Communicative CALL*

The communicative CALL came as a reaction to behaviouristic CALL. Unlike the behavioristic CALL, the communicative CALL in 1975 was influenced by the ideas of

Vygotsky which entail that learning appears as a result of social interactions with members of the society. Brown (2000) declared that “social constructivist perspectives drew our attention to language as communication across individuals [...] foreign language learning started to be viewed not just as a potentially predictable developmental process but also as the creation of meaning through interactive negotiation among learners” (p.245).

The communicative approach at that time has helped to make several shifts at the level of education and computer use. The focus was on developing learners’ communicative competence and paying attention to meaning and fluency rather than the form to aid learners to use the language and encourage them to involve and carry out interactions, yet with characters not humans. The focus shifted to learner-centered rather than teacher-centered pedagogy; therefore, the role of the computer changed to a tool that facilitates interaction (Brett & González-Lloret, 2009, as cited in Benkrama, 2018).

With the advent of technology at this period, the invention of CD ROM, videodisc storage system, and many software activities, the process of learning has become more facilitative with the integration of videos, illustrations, and images (Thomas et al, 2013). Learners finally had the chance to interact and be involved in an authentic learning environment by interacting with real-life characters through videos and using authentic materials such as maps and newspapers.

Although CALL in the communicative period has gained popularity in education due to the salient efforts made in terms of authenticating the learning contexts and materials, the characters and video interactions were only simulated. Consequently, CALL was only beneficial in developing the learners’ linguistic competence and intercultural competence was neglected (Le Baron-Earle, 2013, as cited in Bennacer, 2019). Moreover, Grammar was also

targeted indirectly which led CALL to be criticized to aim for some side learning objectives rather than targeting the main aims and skills in language learning.

1.2.2.3. Integrative CALL

The emergence of two innovations was the definition of this period. By the mid of 1990s, multimedia and internet use became prominent in education. Unlike the communicative approach which provides learners with simulated interactions, the integrative approach made authentic communication between the teacher and the learner and also with real people possible via the use of the internet, in addition to, providing access to a large amount of data and information. Warschauer (1996) stated that “CALL activities were no longer limited to interaction with the computer and with other students in the class but included communication with learners in other parts of the world” (p. 23). In other words, the use of the internet has helped learners to explore and engage in interactions where they are allowed to exchange knowledge and use the language with learners from all around the world. The use of multimedia and hypermedia also helped to create a suitable authentic learning environment through the integration of media like videos, sounds, texts, and animation. Warschauer (1996) maintained that:

Hypermedia provides a number of advantages for language learning. First of all, a more authentic learning environment is created, since listening is combined with seeing, just like in the real world. Secondly, skills are easily integrated, since the variety of media make it natural to combine reading, writing, speaking, and listening in a single activity. Third, students have great control over their learning, since they can not only go at their own pace but even on their own individual path, going forward and backward to different

parts of the program, honing in on particular aspects and skipping other aspects altogether. Finally, a major advantage of hypermedia is that it facilitates a principle focus on the content, without sacrificing a secondary focus on language form or learning strategies (p. 3).

The aforementioned quote shows that hypermedia and multimedia are also of paramount importance in giving learners a quality learning experience, access to various links, and encouraging students with different learning styles to engage in learning, thus making it interesting and easy for them to learn.

The integrative period of CALL expanded the use of technology into education by introducing new ways of learning and teaching that are based on a more constructivist approach by encouraging learners to take responsibility and be autonomous in their learning targeting the four skills (listening, speaking, reading and writing), as well as, switching the teacher's role from being the authority in class to become a facilitator that helps and guides in the learning process (Chapelle, 2001).

1.2.3. The Role of the Computer

The role of the computer in language teaching and learning can be distinguished into two, both as a tutor or a tool (levy, 1997). The computer in many cases takes the role of a tutor through the evaluation of the learners' performance of certain activities by providing immediate feedback. Taylor's (1980) definition of a tutor is the computer that provides contents and exercises then evaluates the learner. In this case, the learner is guided and instructed by the computer in a directive predetermined learning process. Eventually, the tutor role of the computer can be traced back to the behaviouristic era. Recently, with the advancement of technology the role of the computer has changed to be used more as a tool.

However, the role of the computer as a tool is designed to assist learning in parallel with classroom activities either to enhance the efficiency of the teacher's work or the learners' achievement. "The tool role for the computer is fundamentally non-directive. Tools are neutral, and how they are used is not predetermined. Since guidance is not available via the computer program, if language learners use tools, they will need to learn how to use them to best effect" (Levy, 1997).

Unlike the role of the tutor, using the computer as a tool is conducted autonomously with or without directive feedback from the part of the teacher. The learner takes full responsibility and control side by side with the classroom instructions and activities in order to achieve specific learning outcomes. Generally, there is no feedback to the learner; the only feedback provider is the teacher. Using the computer as a tool in the educational field can be done either for writing any type of academic work mainly by using the computer Word processing software; or it can be used as a presentation tool via the use of Microsoft PowerPoint. Eventually, the computer with its tremendous capacity of storing, retrieving, processing a large amount of data and information, as well as, assessing the user with the vast variety of programs and characteristics has made it the number one need in conducting research (Nagamurali, 2015).

1.2.4. Computer Assisted Language Learning Tools

According to Levy (1997, as cited in Nagamurali, 2015), CALL is the search of and study of computer application in language teaching and learning context. This application, as submitted in a report by International Classification of Functioning (ICF), represents any sort of procedure to employ the computer or any type of electronic device, and consoles to improve the language competence. Hubbard (2009) and Levy (1997, as cited in Nagamurali, 2015) stated that CALL includes:

Applications or software, as language-learning tools, for instance, for phonetics, pronunciation, vocabulary, grammar, and clause analysis which may contain a text-to-speech function or speech recognition, and often influence interactive and directed tasks; Email, text-based computer-mediated communication (synchronous and asynchronous), social media, or voice/video conferencing, etc. (p.5146).

These tools assist the learners to acquire the language from more authentic resources through online environment and communication with foreigners either virtually or via text messages. The availability of video clips, games, and animation contribute in making the learning experience interesting and funny. Moreover, communication between the teacher and learners, besides communication among learners themselves via online tools has given more opportunities for both of them to keep in touch and updated to the classroom activities.

1.2.4.1. *Software and Hardware*

Software and hardware are the two elements that constitute the computer. The hardware is the physical structure of the computer that contains many concrete devices, such as Processor (CPU), Memory (RAM), and Storage devices. Each component of these devices has a different function from the other one, whether accepting inputs, storing data, or sending outputs.

The software represents all the nonphysical parts of the computer, mainly a set of programs installed on the computer's hard drive. These programs assist learners to mediate and organize knowledge, to store a large amount of data and be creative in their learning. Blake (2008, p. 100) gave an example of software by stating that "PowerPoint is a software tool application that can be used to create content-teaching aids or produce interactive games". Besides, teachers benefit from the software programs in their teaching in terms of creating quality content and make sure to have the best content delivery.

1.2.4.2. *Internet*

Warschauer, Mark, Shetzer, and Meloni (2003) posited that “there are five main reasons to use the Internet for English teaching [...] authenticity, literacy, interaction, vitality, and empowerment” (cited in Chapelle, 2003, p.75). The internet provides learners the accessibility to a variety of data stored online, and most importantly they can approach authentic materials easily at any time.

In addition, the internet is also a medium of communication since it aids learners to interact with each other online and also with students from all over the world and exchange knowledge which helps them make connections between what they learn in the classroom and what to expect outside the classroom. Hence, learners will have a sense of awareness and joy within the context of learning, and eventually, they will be more motivated to learn.

1.2.4.3. *E-mail Exchange*

The email represents a connecting tool between the teachers and the learners as well as between the learners themselves for educational purposes. The essence of email is SMS-based interaction where learners can connect with each other, or even across the globe via the access to the internet in order to exchange, learn and develop their language through communication.

Moreover, using Email enables learners to be more curious and motivated towards their learning. As Warschauer (2009) explained, students are motivated for three main reasons. First, motivation stocks in their belief that using E-mails helps them in developing their language. Second, they simply enjoy communication with others. The last reason lies in their feeling of ease and empowerment due to the use of technology. Therefore, using such a medium of communication in learning is beneficial for both teachers and learners. (Cited in Brett & Gonzàlez-Lloret, 2011, p.354)

1.2.4.4. *Blogging*

Looking back into decades ago, there were only 23 blogs on the internet (Blood, 2000, as cited in Sayad, 2019). Nowadays, there are thousands of blogs and the number is still increasing. Blogging has introduced a new way of language learning with the use of the internet, and recently has gained popularity in the field of education. “A blog is an electronic journal where readers post their thoughts and opinions on a regular basis”(Lewis, 1997 as cited in Sayad, 2019, p.42). Blogs offer the students the possibility to communicate in the form of comments and are always updated; this is what makes them different from the other traditional websites (Morris, 2018).

Investigations on the impact of blogs on students’ learning skills have shown that using blogs enhances learners’ writing and reading efficiency (Apple, 2006). Wagner (2005) confirmed also that the use of blogs also aids vocabulary enhancement. According to (Morris, 2018), blogging boosts learners’ creativity and enables them to develop their thinking and reflection upon their thoughts in a collaborative way with their peers. It also gives them the confidence to engage in an authentic purposeful and interesting learning environment where they can create their own space either within the classroom bridges or on their own.

1.2.4.5. Podcast

The term podcast is a result of the combination of two words iPod and broadcast. It includes videos and audio files which are broadcast by the internet which can be downloaded on a mobile or a computer (Çakir, 2016, as cited in Sayad, 2018). Podcasts can be used as a personalized tool that learners can benefit from in their daily practice and learning which can be easily used frequently. Lately, the extent it can be beneficial in education has gained the interest of scholars.

Hence, podcast seems to be a helpful tool in terms of enhancing vocabulary within an up-to-date process that attracts the learners’ interest and motivate them to learn (Farshi & Mohamadi, 2013; Lowman, 2014; Mashhadi et al., 2016, as cited in Sayad, 2018). With the

advent of computers and mobile phones, the internet became accessible everywhere and anytime which paves the way to broader use of podcasts in learning. Since the use of podcasts is personalized and not limited, boosting learners' autonomy is the targeted aim in order to give learners a sense of awareness and responsibility towards learning.

1.2.4.6. Games

Combining learning and entertaining is definitely the key to a better learning result; as a result, the use of games has opened the door towards new ways of learning, especially acquiring vocabulary. Today with the availability of CALL devices like computers, Mobile Phones, or Tablets learners are capable of learning and enjoyably developing their skills either with peers or by themselves.

The use of games has helped learners to switch from the traditional ways of learning that can be boring sometimes like memorizing or rehearsing. Therefore, online games can create a different learning environment full of excitement and up to any learners' needs and interests. Miller (2008, as cited in Sayad, 2018) highlighted in his book different definitions of the word game according to a number of scholars. For instance, Gredler (1996) defined games as "competitive exercises" in which "the objective is to win and players must apply subject matter or other relevant knowledge in an effort to advance in the exercise and win"(p.571). For Heinich et al. (as cited in Squire, 2004, para. 8) games are referred to as "activities" in which "participants follow prescribed rules that differ from those of real-life as they strive to attain a challenging goal". Thus, Games in education are seen as a set of activities that are guided by a number of goals that correspond to the general role of language learning.

1.2.4.7. Applications

The rapid advances of technology in language teaching and learning have brought considerable resources and opportunities into learning vocabulary through the use of a range of software applications that facilitate the acquisition of vocabulary (Chapelle & Shannon, 2017). The use of applications via CALL devices has helped innovatively shaping the way students approach their learning; therefore, the way instructors teach, plan and present the teaching materials also has changed. Recently, studies on the use of applications in learning have gained popularity and significance regardless its limited number in the research area.

Wu (2015) created an application that aims to teach vocabulary items called Word Learning-CET6. The study was conducted with 70 Chinese College students divided into two groups; the experimental group and the controlled group. While the control group was only reminded to revise vocabulary on their own, the experimental group was using the application. Consequently, at the end of the experiment, there were significant differences between the two groups in acquiring vocabulary. Wang and Shih (2015) also used in their study mobile vocabulary learning applications and concluded that the experimental group scored significantly better than the control group who used paper-based learning materials (Basal et al., 2016).

Therefore, using CALL software applications facilitate the learning practices considerably, and help learners continuously develop their skills and figuring out their learning styles. In the sense that, CALL software applications are based on the learners' needs. It also provides them with limitless access to the language elements such as grammar, vocabulary, pronunciation, etc. Moreover, the various software applications are advantageous in language teaching and learning since it acts as an interactive tool, where learners can receive immediate feedback and reinforcement in a task-centered control learning environment (Kalaiarasan & Somasundaram, 2015).

1.2.5. Computer Assisted Language Learning Devices

CALL is a form of computer-based learning which denotes the use of any sort of electronic devices to improve one's foreign language competence including computer, mobile phone, and tablet PCs (Nagamurali, 2015).

1.2.5.1. Computer

The computer is an electronic device that is used to process, store and retrieve information. The first computers were used for numerical calculations only. However, soon people realized that computers are capable of information processing (Pottenger, 2021). Later in recent years, the interest in using computers for language teaching and learning has flourished. Before, the integration of computers in language classrooms was only used in few numbers of specialties; however, the role of the computer now has gained a vital role with the advancement of multimedia and the internet (Nagamurali, 2015). Computers assist in improving the quality of learning outcomes in education via the use of a variety of aids, such as videos, audios, and graphics to prepare lessons, and the use of Microsoft Powerpoint to perform presentations which helps to create an interactive environment inside the classroom.

Furthermore, the use of multimedia presentations creates easiness on the part of the teacher in the delivery of instructions because it saves time and helps to manage the classroom as well as making the lesson more productive and interesting for the learners to engage, be a part of their learning and making it less boring (Matthew et al., 2019).

1.2.5.2. Mobile phone

The growing trend of using mobile phones for educational purposes has emerged as a new technological achievement in the learning process. Therefore, mobile phones seem to attract learners' attention in many ways, especially in education. Mobile phones contain many

features and applications that can be utilized and helpful in language learning, including general software, such as Word, Excel, and PowerPoint (Mtega et al, 2012, as cited in Mohammadi et al, 2020). Applications such as language learning applications, games communication applications, mathematical problem-solving software, and many others (Alzaza Yaakub, 2011, as cited in Mohammadi et al, 2020).

In addition, many features of the Mobile phone make it the most desirable and used device by learners. They are generally portable and flexible in the sense that they can be used in a variety of activities, as “it can increase the value of existing learning styles” (Liaw et al, 2010, as cited in Mohammadi et al, 2020, Introduction section, para.2). Also, it is the numberone mediating tool that connects the learners and the teachers in terms of sharing information and communication.

1.2.5.3. *Tablet PCs*

The first invention of the tablet as a technological aid was at the beginning of the 1970s, since then new developments and features of Tablet has emerged. In 2010, tablet computers were introduced to the world with a variety of functions as Tablet computers. Gregersen (2021) described this invention by saying “Computer that is intermediate in size between the laptop computer and a Smartphone” (para.1). Today, people use tablet PC almost to accomplish anything that can be done using laptop computers due to their usability and easiness to carry around. Tablet PCs are becoming prevalent and preferable among people of all ages which made it an area of investigation for many researchers (Ozkale & Koc, 2020).

Recently, the improvement of Tablet computers has also received a great interest in the field of education. Ono and Ishihara’s (2011, as cited in leis, 2014) reported that regardless of the difficulties they thought learning would be via the use of iPod touch due to its small screen size, it was effective in improving students’ language skills. Çakir (2016, as cited in Sayad, 2019) listed numerous benefits in using Mobile technologies in teaching and

learning. For instance, Tablet PCs help to deliver an engaging learning experience full of multimedia digital context. It also makes the delivery of the curriculum much easier through utilizing power point presentation, Word docs, and spreadsheets and mark digital class work and homework. Besides, it saves time and money, in the sense that instructions can be digital, reducing papers and converting digital notes to text without having to retype them, etc.

1.2.5. CALL and Collocations

Collocational knowledge is considered an essential part of language learning in the sense that, it helps learners use and produce language naturally and sound more authentic and native-like in real conversations as well as in writing. It is also widely approved that collocational competence students develop is a crucial element to obtain fluency (Chang et al. 2008; Hill, 2000; Laufer, 2011; Nesselhauf, 2003; Wu et al., 2010, as cited in Basal, 2019).

Ahmet Basal (2019) conducted a research in order to investigate the effectiveness of creating a collaborative dictionary using online tools while teaching adjective-noun collocations where he used four online tools in combination to promote collaboration among the learners, present input about collocations, and increasing their awareness of collocations. Two groups were under investigation “the control group” and “the experimental group”. The control group was taught via the traditional activities while the experimental group was taught using online tools. The results of the study showed that the experimental group scored significantly better in both the immediate and delayed post-tests in comparison to the traditional group. Based on the findings of the study, teaching collocations with the use of online tools is more effective than the traditional way. Hence, technology-oriented tasks help language learners to overcome their difficulty of learning collocations. In addition, online tools help speeding learners’ process of collocation learning and help teachers be more effective in teaching collocations and construct collocational knowledge collaboratively among learners.

In addition, another study was conducted by Basal et al (2016). The study aimed to investigate the effectiveness of mobile applications on teaching 40 figurative idioms from the Michigan Corpus of Academic Spoken English (MICASE) corpus compared to traditional activities. The data were collected via a Quasi-experimental research employing a pre-test and post-test in order to determine the difference between the control and the experimental group in terms of achievements. The results obtained showed the significant difference in the post-test scores on the part of the experimental group that was thought via sending them 10 MMS messages every week using WhatsApp application. That is to say, the study demonstrated the effectiveness of the mobile application in learning idioms. Furthermore, more studies were conducted by Plana et al. (2013); Al Saleem (2014); Castrillo et al. (2014) to test the efficiency of WhatsApp application in learning English vocabulary. All these studies reported positive attitudes of students towards the use of WhatsApp in vocabulary learning.

Similarly, Mahmoud Amer from West Chester University of Pennsylvania conducted a study in order to explore how four groups of language learners used a mobile software application for learning idiomatic expressions and collocations. The mobile application that was used in this study is Idiomobile application which contained three main components: A game, a quiz, and a flash-card. The application is specially made to help the users acquire idiomatic expressions and develop collocational knowledge via using characters portraying different situations from everyday life. In order to obtain the findings of this study, data collection were based on two types of tools: A questionnaire and an interview. In addition to that, the results of the participants' score through using the application were taking into consideration in the data collection. The results showed that, the participants who took part in the study do have a strong attitude towards using Idiomobile application in terms of developing collocations and idioms learning (Amer, 2014).

Alex et al (2016) for instance described a system called FLAX which allowed teachers to design collocational application games that are based on texts taken from Wikipedia. FLAX games can be controlled by teacher and be updated whenever teachers wanted to supply new materials to their learners. These applications are available in Google Play Store for students to download and learn collocations in a funny way in collaboration with their teachers and peers.

Conclusion

Learning collocations is a key component in mastering a foreign language. Furthermore, EFL learners are required to be aware of such combinations in order to enhance their vocabulary knowledge. Today's advancement of technology provides learners with the opportunity to encounter a variety of resources which enables them to develop their collocational competence anytime and anywhere. For that reason, this chapter presented the key literature areas that are relevant to our thesis. We shed light on the different types of collocations and their significance in language learning, in addition to, different types of CALL tools and devices.

Chapter Two: Data Collection and Results

Introduction

In a world full of technology, where things can be done quickly and easily without even moving from one place to another, and with plenty of technological choices that may help learners improve their acquisition/learning of foreign languages, including collocations, the majority of Algerian EFL teachers tend to use the same devices over and over in teaching collocations. For that reason, the present study aims to investigate different types of technologies that EFL learners in Algeria may use for learning collocations. Unlike the first chapter that dealt with the literature review of the variables of the present research, this chapter is devoted to the practical part. It also aims at testing our assumption through the analysis of the results obtained from the students' questionnaire. The chapter is divided into two main sections. The first section is devoted to the methodology of this research and data analysis; this section is concerned with the description of the participants who contributed to this study and the analysis of the findings. The second section is dedicated to the discussion of findings, limitations of the study, in addition to recommendations for further research.

Section One: Data Collection and Analysis

2.1.1. Research Methodology

2.1.1.1. *Participants*

The present study is conducted with the aid of EFL learners from different universities in Algeria belonging to Institutes of Letters and Languages and Departments of Foreign Languages. The population with which the study is carried out is EFL learners of second year, third year, master one and master two students from 26 universities which are: Mila, Setif, Blida, Skikda, Algiers, Oran, Constantine, Msila, Batna, Ourgla, Naama, Oumbawaki, Jijel, Relizan, Djelfa, Guelma, Bedjaia, Beskra, Tlemsan, AinDefla, Annaba, Moustaganem, El Oued, Adrar, AinTemouchent and Tiaret. The participants are of both genders, males and females among the population which consists of 204 students from the sample of the study. The reason behind our decision to not work with first year students is their unfamiliarity with the notion of collocations. They are still beginners and have no experience or knowledge about collocations. In contrast, the term collocation is more known with the other levels that are opted for this research.

2.1.1.2. *Research Method*

The quantitative approach has been utilized in analyzing the data of the current study. We opted for this method due to the COVID 19 pandemic and the circumstances the whole world is going through, in addition to the fact that we are collecting data from a variety of universities. We have chosen to collect the data of this research applying the quantitative method via online questionnaire as the data collection tool, it was submitted to EFL learners of Algeria via Google form format (<https://forms.gle/RySCnSw6KHtcKPHJ7>) in order to obtain the necessary information. It is worth mentioning that the method selection is related to the nature of the research that aims to investigate the students' use of CALL in learning

collocations, by highlighting different applications they may use to improve their collocation acquisition and use.

2.1.1.3. *Student Questionnaire*

The questionnaire has been formed in Google form and administered to EFL learners of Algeria via Facebook and Email. The questionnaire is divided into four sections made of 23 questions that are a mixture of close ended questions, multiple choices and open ended questions. Moreover, it was provided with a small definition of collocations at the very beginning to help students.

The first section is entitled “General Information”. The students were asked about their university, gender, grade, whether they have a computer or a smartphone, the time they spend using the internet, and if they like using technology outside the classroom. This section aims at investigating personal information about the participants. “The Collocation development” section consists of six questions, two Yes/No questions and four multiple choice questions. In this section, learners were asked a set of questions about their knowledge of collocations and improving them outside the classroom. The third section, “Computer/Mobile usage among EFL learners” contains four Yes/No questions and one multiple choice question, is about using Computer/Mobile applications in developing the learners learning skills. The fourth section, “Computer/Mobile Applications in Learning Collocations.” is composed of seven questions two Yes/No questions, two multiple choice questions and two open ended questions, concerning the students’ frequency of using a variety of applications, as well as their point of view about them in learning collocations.

2.1.1.4. *Administration of the Student Questionnaire*

The questionnaire was designed in Google form format in the academic year 2020/2021. Since the case of this study is EFL learners in Algeria, it was nearly impossible to visit all the universities that do exist in Algeria to gather answers. For that reason, it has been

opted for two ways of sharing the questionnaire among learners. The first one was via email and the second was through sharing the link of the questionnaire on Facebook pages of different universities. The process of collecting data has taken about three to four weeks to reach the current sample number, which is 204 students. Due to the limitation of time we could not collect a larger sample.

2.1.2. Data Analysis

At the level of this part, the collected answers via the online questionnaire that has been distributed to EFL students of Algeria from different universities will be quantitatively and qualitatively analyzed.

2.1.2.1. Section One: General Information

Question 1: Students' University

Table3. Students' University

Options	Number	Percentage
Mila	28	13.7%
Setif	20	9.8%
Blida	7	3.4%
Skikda	8	3.9%
Algiers	8	3.9%
Oran	5	2.6%
Constantine	17	8.3%
Msila	10	4.9%
Batna	7	3.5%
Ourgla	11	5.4%
Naama	7	3.4%
OumBouaki	5	2.6%
Jijel	11	5.4%
Relizane	4	2%

Djelfa	3	1.5%
Bedjaia	7	3.4%
Beskra	5	2.6%
Tlemcan	3	1.5%
AinDefla	6	2.9%
Annaba	3	1.5%
Moustaganem	3	1.5%
El Oued	7	3.4%
Adrar	5	2.6%
Aintemouchent	4	2%
Tiaret	6	2.9%
Guelma	4	2%
Total	204	100%

Table 3 above shows the answers of two hundred and four 204 EFL students from twenty six 26 universities of Algeria as the following:

28 from Mila, 20 from Setif, 7 from Blida, 8 from Skikda, 8 from Algiers, 5 from Oran, 17 from Constantine, 10 from Msila, 7 from Batna, 11 from Ourgla, 7 from Naama, 5 from Oumbouaki, 11 from Jijel, 4 from RelizanE, 3 from Djelfa, 4 from Guelma, 7 from Bedjaia, 5 from Beskra, 3 from Tlemsan, 6 from AinDefla, 3 from Annaba, 3 from Moustaganem, 7 from El Oued, 5 from Adrar, 4 from AinTemouchent and 6 from Tiaret. The short period in which the study was conducted was not enough for getting more answers and to reach other representatives from other universities.

Question 2: Students' Gender

Table4. Students' Gender

Options	Number	Percentage
Male	41	20.1%

Female	163	79.9%
Total	204	100%

The responses were from both genders 'Males and Females'. The table 4 above demonstrates that out of 204 participants, 163 which represent 79.9 % are females whereas 41 participants which represent 20.1% are males. This result reflects the fact that more females are found in departments of foreign languages.

Question 3: Students' Grade

Table5. Students' Grade

Options	Number	Percentage
Second year	38	18.6%
Third year	48	23.5%
Master one	51	25%
Master two	67	32.8%
Total	204	100%

The aim behind asking this question is to know the level of the informants. Table 5 above reveals that the participants belong to different levels, second year, third year, master one and master two. 38 participants which represent 18.6% are second year students. 48 which represent 23.5% are third year students. 51 or 25% are master one and the remaining 67 are master two representing the majority of the respondents 32.8%, which is equivalent to 67 students. First year students were excluded from the sample of the study due to their unfamiliarity of the notion collocation. Since they are still beginners, we have chosen the other levels as shown in the table due to the fact that they may have sufficient knowledge of collocations.

Question 4: Do you have a computer or a smartphone?

Table 6. Students' Ownership of a Computer or a Smartphone

Options	Number	Percentage
Yes	200	98%
No	4	2%
Total	204	100%

Our aim from this question is to know whether or not all students possess technological devices such as computer and mobile. Table 6 shows that 200 participants which represent 98% of the whole subject do have a computer/smartphone, whereas only 4 students or 2% do not have. Thus, the overwhelming majority of EFL students in Algeria do have a computer or a smartphone device but regardless of the small number, there are still some students who do not have. This can direct our attention to the fact that there is still a problem of lack of technological materials among EFL students of Algeria.

Question 5: How many hours per day do you spend using the internet?

Table 7. The Time Students Spend Using Internet

Options	Number	Percentage
From one to two hours	17	8.3%
From three to four hours	40	19.6%
More than four hours	147	72.1%
Total	204	100%

The main aim behind asking this question is to know how much time students spend on using internet per day. Table 7 above indicates that 8.3% which represent 17 respondents use the internet from one to two hours per day. 19.6% which represent 40 participants spend from three to four hours surfing the internet while most participants that represent 72.1% or 147 from the whole sample spend more than 4 hours using the internet. Therefore, the

majority of students have access to internet and spend more than four hours per day using it. According to the results obtained from the previous question and this question we can assume that the majority of EFL students do have daily access to the internet as well as having a computer/mobile device which can help rising their chance of accessing different types of applications for different purposes for a decent amount of time.

Question 6: Do you like using technology in learning outside the classroom?

Table 8. Students' Opinion about Using Technology in Learning outside the Classroom

Options	Number	Percentage
Yes	198	97.1%
No	6	2.9%
Total	204	100%

The last question of the first part of the questionnaire has been put to have a direct answer about whether students like using technology in learning outside the classroom or not. 198 which represent 97.1% of the students responded positively, while only 6 students or 2.9% of the whole sample responded by no. Thus, the great majority of the participants enjoy using technology outside the classroom for learning purposes. Since the majority of the participant said that they enjoy learning outside the classroom using technology this may indicate that they may use a variety of applications when it comes to acquiring collocations.

2.1.2.2. Section Two: Collocation Development

Question 1: Do you develop collocations inside the classroom?

Table 9. Students' Development of Collocations inside the Classroom

Options	Number	Percentage
Yes	173	84.8%
No	31	15.2%

Total	204	100%
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The first question of the second section is targeted to know whether EFL teachers in the Algerian universities tend to develop learner's collocations inside the classroom or not. As table 9 shows, out of 204 students, 173 participants which represent 84.8% responded by yes, while the rest which represents 31 or 15.2% of the whole informants responded by no. These results indicate that the vast majority of students develop their collocations inside classes. However, regardless of their importance, there are still a small number of students which is about 1/6 of the sample who claimed that they do not learn collocations in the classroom. This shows that EFL teachers work to develop learners' collocations inside the classroom, but the problem is 31 can be seen as a considerable number which represents students who responded negatively.

Question 2: If yes, how often?

Table 10. Students' Frequency of Developing Collocations inside the Classroom

Options	Number	Percentage
Always	14	8.3%
Sometimes	134	77.5%
Rarely	25	14.2%
Total	173	100%

This question was devised for students who selected 'yes' in the previous question aiming to know students' frequency of developing collocations outside the classroom. As it is illustrated by table 10 above, 134 respondents which represent 77.5% said that they 'sometimes' develop their collocations inside the classroom. 25 students that represent 14.2% of the participants answered by 'rarely' Whereas, the remaining 14 students, or 8.3% answered by 'always'. By asking our sample such a question, we aimed at investigating the

frequency of EFL teachers' development of learners' collocations inside the classroom. Based on the results of our informants' answers, we found out that EFL students tend to develop collocations inside the classroom sometimes and rarely. It could be due to the limitation of time provided for the teachers to finish the curriculum at the programmed time or may be due to numerous factors including differences in learning styles, social and psychological factors such as anxiety or motivation towards learning collocations inside the classroom which may create an effective barrier towards their acquisition.

Question 3: Do you tend to improve collocations outside the classroom?

Table 11. Students' Improvement of Collocations outside the Classroom

Options	Number	Percentage
Yes	153	75%
No	51	25%
Total	204	100%

This question aims to know if EFL learners rely on themselves to improve collocations outside the classroom. Table 11 above indicates that 153 students out of 204 participants which represent 75% tend to develop their collocations outside the classroom, while the rest 51 students that represent 25% declared their non-improvement of collocations outside the classroom. From this, we assume that the ignorance of some students of the major importance of collocations lies behind the fact that they care less for acquiring it outside the classroom.

Question 4: If yes, how often?

Table 12. Students' Frequency of Improving Collocations outside the Classroom

Options	Number	Percentage
Always	13	14.2%

Sometimes	122	66.7%
Rarely	18	19.1%
Total	153	100%

This item sought to gather students' frequency of developing their collocations outside the classroom. The majority of the students which represent 66.7% of the participants who responded by 'Yes' in the previous question claimed that they improve their collocations outside the classroom only 'sometimes'. However, 19.1% declared that they rarely develop collocations outside the classroom. Finally, 14.2% responded by 'always'. According to the students' answers, it is noticed that regardless of the importance of collocations in second language acquisition, 19.1% that can be seen as a considerable number 'rarely' tend to develop their collocations outside the classroom. This question was designed specifically for the informants who claimed their development of collocation outside the classroom but the results obtained shows that those who responded by 'sometimes' and 'rarely' represent the majority which means that the majority of EFL students are not consistent in terms of working on their collocation acquisition outside the classroom.

Question 5: Do you find collocations easy or difficult to learn?

Table 13. Students' Rate of Collocations Easiness

Options	Number	Percentage
Easy	131	64.2%
Difficult	73	35.8%
Total	204	100%

This question is concerned with the aim of knowing whether students find collocations easy or difficult to learn. Out of 204 participants, 131 students which represent 64.2% of the answers reported that collocations for them are easy to learn while on the

contrary, 73 students, or 35.8% declared the difficulty of learning collocations. According to their answers, not all students are able to develop collocations outside the classroom because for some they are difficult to acquire.

Question 6: How do you rate their importance for EFL learners?

Table 14. Students' Rate of Collocations Importance

Options	Number	Percentage
Very important	72	35.3%
Important	126	61.8%
Not important	6	2.9%
Total	204	100%

In order to highlight students' rate of collocation importance, the present question was administered. As the table 14 shows, 126 of the participants which is estimated as 61.8% responded by important. 72 students that represent 35.3% stated that collocations are very important. However, only 6 students which represent 2.9% find learning collocations not important for EFL learners. That is to say, the majority of EFL students of Algeria are aware of the significance of learning collocations yet they are not consistent in learning them outside the classroom, but there are still a small number of students who ignore their importance.

2.1.2.3. Section Three: Computer/Mobile Applications Usage among EFL Learners

Question 1: Do you use computer/mobile applications to develop your learning skills?

Table 15. Students' Usage of Applications in Developing their Learning Skills

Options	Number	Percentage
Yes	189	92.2%
No	16	7.8%

Total	204	100%
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Aiming at exploring the EFL learners' usage of computer/mobile applications to develop their learning skills in Algerian universities, this question was administered. Table 15 above shows that the vast majority of students, 92.2%, use computer/mobile applications to develop their learning skills. The rest of the participants, 7.8%, do not use them. The results reveal that most EFL learners in Algeria use their computers and mobile phones to learn English as a foreign language.

Question 2: Do you enjoy learning through the use of computer/mobile applications?

Table 16. Students' Enjoyment of Learning Using Computer/Mobile Applications

Options	Number	Percentage
Yes	191	93.1%
No	14	6.9%
Total	204	100%

The eighth question aims to check whether students enjoy learning through the use of computer/mobile applications. The greater part of the participants, 93.1%, answered approvingly. They declared that learning through the use of computer/mobile applications is enjoyable. In contrast, the minority, 6.9%, of the subject reported that they do not enjoy learning through using computer/mobile applications. Therefore, technology is not everybody's cups of tea, not all the learners like using computer/mobile applications in learning foreign languages or maybe they do not know how to use it, for that, they do not prefer its use.

Question 3: If yes, do you find it effective?

Table 17. Effectiveness of Using Computer/Mobile Applications in Learning

Options	Number	Percentage
Yes	183	95.6%
No	8	4.4%
Total	191	100%

This question was designed for students who opted for the ‘yes’ answer in the previous question. Thus, 190 students answered the question instead of 204 students. Out of the table 17, 183 representing 95.6% confirmed the efficiency of computer/mobile applications in second/foreign language acquisition, whereas the remaining 8 students which represent 4.4% of the subject denied its efficiency. That is, the majority of participants do believe that using computer/mobile applications is effective in learning English.

Question 4: Do you usually use computer/mobile applications for learning purposes outside the classroom?

Table 18. Students’ Usage of Applications for Learning Purposes outside the Classroom

Options	Number	Percentage
Yes	190	92.6%
No	15	7.4%
Total	204	100%

The data represented in table 18 reveal the students’ attempt towards using computer/mobile applications for learning purposes outside the classroom. 92.6% of the sample responded by ‘Yes’. The remaining fifteen participants which is equivalent to 7.4% said ‘no’. The results suggest that the overwhelming majority of the respondents use computer/mobile applications for learning purposes.

Question 5: If yes, how much time do you spend using computer/mobile applications for learning?

Table 19. The Time Students Spend Using Applications for Learning

Options	Number	Percentage
Less than one hour	9	4.7%
From one to two hours	157	82.6%
From three to four hours	19	10%
More than four hours	5	2.6%
Total	204	100%

This question is devised to explore the amount of time EFL students spend using their computer/mobile applications for learning purposes. 82.6% claimed that they use them from one to two hours. 10% declared that they spend from three to four hours using their computers or mobiles for learning, whereas only 2.6% of the participants said that they use them more than four hours per day. The remaining 4.7% of the informants said that they use them for less than one hour per day. It can be inferred that, the majority of the students who admitted their use of applications for learning purposes in the previous question spend a short amount of time using their computer/mobile applications for learning mainly from one to two hours a day.

2.1.2.4. Section Four: Computer/Mobile Applications in Learning Collocations

Question 1: Do you use computer/mobile applications in learning collocations?

Table 20. Students' Usage of Applications in Learning Collocations

Options	Number	Percentage
Yes	136	66.2%
No	69	33.8%
Total	204	100%

The aim behind devising this item is to know if EFL students are using applications in learning collocations. As shown in the table 18, 66.2% of the subject which represent 135 informants admitted that they use their computer/mobile applications to learn collocations. Conversely, 33.8% which represent 69 informants responded by 'No'. In general, most of the students are using computer/mobile applications to learn collocations but it cannot be ignored that 33.8% among the whole sample of the study is a significant percentage. In the previous questions the overwhelming majority of the participants who responded 'Yes' estimated their frequency of using applications for learning purposes outside the classroom by one to two hours per day but the results obtained from this item show that 33.8% of the whole sample do not use these applications at all in learning collocations.

Question 2: If yes, how often do you use them?

Table 21. Students' Frequency of Using Applications in Learning Collocations

Options	Number	Percentage
Always	11	10.8%
Sometimes	92	62.3%
Rarely	33	27%
Total	136	100%

The second question in this section was directed to the participants who responded by 'Yes' in the first question. 62.3% declared that they sometimes use computer/mobile applications in learning collocations. Also, 10.8% reported that they 'always' learn collocations by using computer/mobile applications. Finally, the last 27% expressed that they 'rarely' use them. The results show that the largest numbers of participants use computer/mobile applications 'only' sometimes and rarely to learn collocations.

Question 3: What kind of applications do you use in learning collocations?

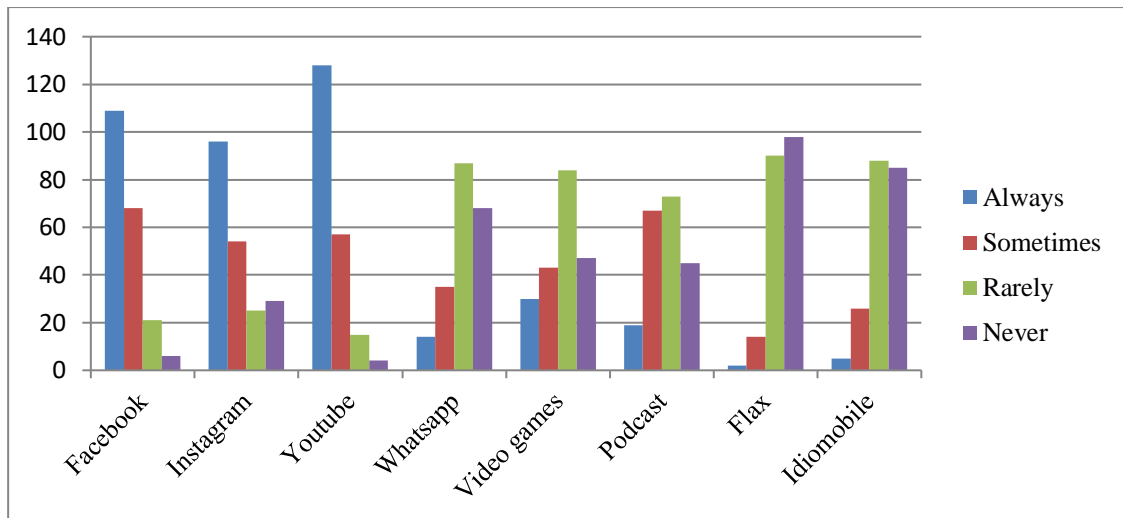
Table 22. Different Kinds of Applications Students Use in Learning Collocations

Applications	Number	Percentage
Social media (YouTube, Facebook, Twitter,Instagram, WhatsApp)	59	28.9%
None	50	24.5%
Duolingo	12	5.8%
Idiomobile	3	1.5%
Podcast	3	1.5%
Wordup	1	0.5%
Pinterest	1	0.5%
Cake	1	0.5%
Learn English	1	0.5%
Tiktok	3	1.5%
Games	3	1.5%
Reddit	1	0.5%
Snaptube	1	0.5%
Movies/Videos/BBC radio	10	4.9%
IELIS collocation	5	2.4%
Multiple applications of English learning	32	15.6%
Google websites and dictionaries	9	4.4%
Webtoon	3	1.5%
ELSA	1	0.5%
Zamerican	1	0.5%
Bussu	1	0.5%
Elevate	1	0.5%
Hello English	1	0.5%
British conceal	1	0.5%

Total	204	100%
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This question is meant to investigate the applications that are used by EFL students of Algeria to learn collocations. The table 22 shows that the vast majority of the sample, 28.9%, are using a variety of social media applications such as Facebook, Youtube, Instagram, Whatsapp, and Twitter. Nevertheless, a significant percentage which represents 26.5% of the whole sample opted for none. 15.6% claimed that they use different applications depending on their need. Only one participant which represents 0.5% opted for each of the following applications, Reddit, Learn English, Wordup, Cake, Pinterest, ELSA, Snaptube, Zamerican, Elevate, Bussu, Hello English and British conceal. Whereas, three participants which represent 1.5% opted for each of Tiktok, Games, Idiomobile, Webtoon, and Podcast. 4.4% of the participants confessed that they use Google websites and E-dictionaries. 5.9% went for Duolingo, while 2.5% added IELIS collocation to the list of the applications. Finally, 4.9% stated that they learn collocation through watching videos, movies, and listening to BBC radio. Thus, it can be noticed that the majority of EFL learners are using a variety of applications to learn collocations. The applications are a mixture of specially-made applications for developing collocations and others are not such as social media, games, and English learning applications. Also, we cannot ignore the result shown in the table that 50 informants are not even using any applications.

Question 4: Please choose the best matching answer



Graph 1. Students' Frequency of Using a Set of Applications

This question aims to investigate the students' frequency of using a set of applications which are, Facebook, Instagram, YouTube, WhatsApp, Videogames, Podcast, and idiomobile. First Facebook, The figure 18 shows, 109 respondents claimed that they 'always' use Facebook. 68 responded by 'sometimes'. 21 responded by rarely while six students said that they never use Facebook. Second Instagram, 96 participants chose 'always'. 54 responded by 'sometimes' and 25 by 'rarely'. Finally, 29 students claimed their non-usability of this application. Third YouTube, 128 informants which represent the majority of the answers asserted their use of YouTube by 'always', Whereas 57 said they rarely do. In addition to that, only four students responded by 'never' and the remaining 15 respondents evaluated their frequency of using YouTube by 'rarely'. Fourth WhatsApp, in contrast to the three previous applications only 14 students said they 'always' use WhatsApp while the overwhelming majority went for 'rarely' by 87 and 68 for 'never'. The rest 35 informants stated that they 'sometimes' use it. Fifth video games, 84 respondents confessed that they 'rarely' use this application which represents the majority of the subject. 47 responded by 'Never'. Moreover, 30 students asserted their 'always' use of video games while the remaining 43 went for 'sometimes'. Sixth Podcast, out of the overall number of participants, 73 said they 'rarely' use Podcast. Alternatively, 67 claimed that they 'sometimes' use it.

Also, 45 informants responded by ‘never’ and 19 by ‘always’. Seventh Flax, for this application only two students approved its ‘always’ use. Conversely, 98 respondents asserted that they ‘never’ use Flax, and 90 responded by ‘rarely’. The remaining 14 students went for ‘sometimes’. Last but not least, Idiomobile. The vast 88 majority of participants confirmed that they ‘rarely’ use this application and 85 ‘never’ do. In contrast, 26 informants responded by ‘sometimes’ and the rest five students asserted their use of this application by ‘always’. According to the results, EFL students are ‘always’ using Facebook, Instagram, and Youtube among the other applications, whereas Flax and Idiomobile are the least frequently used applications. Finally, Whatsapp, video games, and Podcast got the average amount of usage via EFL students of Algeria. Thus, the majority of EFL students are always spending their time using social media rather than specialized applications in learning collocations.

Question 5: Do you find them effective in developing collocations?

Table 23. Students’ Evaluation of Applications in Terms of Learning Collocations

Options	Number	Percentage
Yes	176	85.9%
No	29	14.1%
Total	204	100%

The table 23 indicates, the highest number of informants which represent 85.8% confirmed the effectiveness of the previous applications in developing collocations. However, 14.2% denied their efficiency in learning collocations. Based on the results, it can be inferred that though 29 students claimed that using these applications is not effective in learning collocations, the overwhelming majority agreed upon their efficiency in collocation learning.

Question 6: Which application you find very beneficial?

Table 24. List of Applications Students Find Beneficial

Options	Number	Percentage
Facebook	45	22.1%
Youtube	90	44.1%
Instagram	19	9.3%
Whatsapp	3	1.5%
Podcast	6	2.9%
Flax	1	0.5%
Video games	1	0.5%
Idiomobile	1	0.5%
None	21	10.3%
I do not know	9	4.4%
All the same	8	3.9%
Total	204	100%

As it is shown in the table 24 above, most of the informants went for Facebook and Youtube as the most used applications in learning collocations. However, few participants opted for the other applications as mentioned in the table. Thus, the results confirm the usability of Facebook and Youtube among EFL learners in Algeria to learn collocations. 21 of the remaining 56 participants declared that none of the previous applications are useful, 9 informants claimed that they do not know which one is beneficial, while 8 participants stated that all of them are of the same benefit. The results obtained could be due to the students unawareness of specialized collocation-applications utility.

Section Two: Discussion of Findings, Limitations and Recommendations

2.2.1. Discussion of Findings

After the analysis of the students' questionnaire which aimed to investigate students' use of CALL in learning collocations, the current study comes to the part of research results and discussions.

The students' answers showed that on the one hand, the vast majority of EFL students possess a computer/mobile. Moreover, they claimed that they use the internet more than four hours per day. Consequently, it is obvious that students are in touch with technology and have access to the internet since almost all the subjects assumed that they use the computer. On the other hand, most of them expressed their tendency towards using technology outside the classroom which strengthens the idea that learners are enjoying using technology outside the classroom.

The obtained results revealed that most of EFL learners in the Algerian universities are aware of the great importance of collocations in learning English as a foreign language as 61.8% stated that collocations are important and 35.3% rated them as very important. As a result, the majority of EFL learners tend to develop their collocations outside the classroom.

Moreover, the great majority of the studied sample asserted that they use computer/mobile applications for learning purposes, and to develop their learning skills outside the classroom. Therefore, more than 93% of the whole sample reported their enjoyment towards using a variety of applications in learning a language, adding that such applications are very beneficial and effective. However, a large part of the sample are spending from one to two hours or less than one hour per day for learning though most of them stated before that they are surfing the internet more than four hours per day. The results obtained from these questions highlight the idea that students are using technology to

improve their language skills but not very much in comparison with the overall time of using technology.

The results showed also that EFL learners of Algeria use a variety of applications in order to improve their collocations outside the classroom such as YouTube, Facebook, Twitter, Instagram, WhatsApp, Games, Duolingo, Bussu, Hello English, British conceal, Elsa, Cake, Elevate, Wordup, Podcast, Pinterest, Learning English, Tiktok, Reddit, Snaptube, IELIS Collocation, Webtoon, Zamerican, and other websites and dictionaries for learning collocations . A large proportion of students tend to sometimes use these applications for the aim of improving their collocations as a major part of learning English, and they also stated that these applications are effective in terms of learning collocations. The most used applications among EFL learners are YouTube at the first level, followed by Facebook at the second level and ending up with Instagram at the third level whereas, specialized applications such as Flax and Idiomobile are rarely used by only few students.

The main findings of the students' questionnaire showed that the assumption that has been set at the beginning of the present research, which is that EFL learners in the Algerian universities use some CALL applications to develop their collocations, is partially confirmed in the sense that students are using applications in order to learn collocations. However, these applications are not specialized in developing collocations; in addition to that, almost all of the informants went for social media which can be used by every one for several reasons not only for learning collocations.

2.2.2. Recommendations for Students and Teachers

The use of technological devices alongside with the access of internet in education has gained a great attention from many EFL learners to develop their learning skills. Furthermore, CALL devices including mobile phone, computer and tablet PCS have become

an essential part in learners' lives. The present study suggests the following recommendations:

- CALL devices seem to be great tools for promoting EFL learners autonomy when implemented outside the classroom. Therefore, EFL students of Algeria need to be acquainted with more specialized applications for learning collocations rather than relying only on social media.
- CALL can be used as a developing tool for mastering other language skills rather than only collocations, such as: listening skills, writing skills and reading skills through applications and websites that offer a variety of valuable input.
- Teachers may encourage learners informal learning through CALL applications by giving them activities to make further researches or practices.
- Teachers may include a variety of CALL devices in order to motivate their learners and avoid the major problem of boredom inside the classroom.

2.2.3. Other Recommendations for Further Studies:

- Researching the use of CALL in learning collocations is still in its infancy particularly in the Arab and Algerian context. Therefore, considerable attention is required from researchers to conduct more research to examine the nature of this relation and test the efficiency of CALL in developing one's collocations.
- The current research was conducted with 204 EFL students from 26 universities of Algeria as a sample. In order for the results to be more representative, confirmed and valid, we suggest that, further studies need to include a wider sample of homogeneous participants from different universities and institutions in an attempt to enhance the reliability and validity of the findings.
- Regardless of the utility of the questionnaire in data collection, using only one tool for the aim of gathering data is insufficient to test the assumption. For that reason, it

is suggested to use a qualitative research that includes an experiment for a considerable period of time where two groups are put under investigation. The controlled group is to be taught via traditional ways of teaching collocations, whereas the experimental group will be taught using CALL applications in order to gain more insight about the effectiveness of CALL in developing collocations.

2.2.4. Limitations of the Study

Some limitations are encountered during the accomplishment of this research. First, the time of gathering data was a hindrance towards receiving more answers from other respondents. Second, the data collection tool of the study was delimited only to 204 EFL students which is not that representative sample in comparison to the whole number of EFL learners around Algeria. Due to that we would have added more generalized information if it has included a wider sample.

Conclusion

This chapter is concerned with the practical part of the study which includes the analysis and the discussion of the students' questionnaire to investigate the use of CALL in learning collocations. Upon analysis, the results obtained confirm the usability of CALL applications among EFL learners; however, these applications are not specially made for the sake of developing collocations.

General Conclusion

Drawing to the end of this dissertation which tackles some important aspects both of collocations and CALL. This study aims to investigate students' use of CALL in learning collocations. Besides it seeks to learn about the different applications students use in developing their collocational competence, and raise the awareness of EFL teachers and learners concerning the utility of a variety of CALL applications in terms of learning collocations.

In search of achieving the previously mentioned aim of the study, the quantitative method is selected. An online questionnaire is submitted to 204 EFL students from different 26 universities of Algeria via google form format. All the levels are included except first year students due to their unfamiliarity with the notion of collocations.

After the analysis and the interpretations of the student's questionnaire, the results obtained offer answers to the previously raised research questions. They reveal that EFL students of Algeria tend to develop their collocations outside the classroom using different kinds of CALL applications. However, the majority of applications students admitted using are not all specialised in learning collocations; they are a mixture of different learning applications and social media. Few students went for specialized applications in developing collocations.

In this vein, the assumption that was set at the beginning of this research is partially confirmed. In other words, students are using a variety of CALL applications; however, not specialised applications for the sake of developing collocations.

It is worth mentioning that we should not restrict ourselves to the present findings. This study, for sure, has its limitations but it can be a basis for further research on the

relation between students' use of CALL applications and learning collocations. Indeed, we believe that much work remains to be done in this area.

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Appendices

Appendix A

Students Questionnaire A

Dear students

This questionnaire is a part of a research design in order to investigate students' use of CALL technology in learning English collocation. This survey is meant to explore your ideas on a number of issues. I assure you that the information provided will be highly confidential and used only for the purpose of academic research.

I hope that you will participate by providing answers for all items. Your participation is highly appreciated.

Note: Collocations are words that are located together made up of two or more words that are commonly used together and go together in English.

Q1: University

.....

Q2: Gender

Male

Female

Q3: Do you develop collocations inside the classroom?

Yes

No

Q4: Do you usually need to work on learning collocations outside the classroom too?

Yes

No

Q5: Do your teachers use technology inside the classroom to help you learn collocations?

Yes

No

Q5: If yes, what kind of technologies they use?

.....

Q6: Do they use only videos in order to teach you collocations?

Yes

No

Q7: If yes, do you find them beneficial or do you feel bored because your teacher always uses videos?

.....

Q8: If no, what kind of other techniques or tasks they use to teach you collocations?

.....

Thank you

Appendix B

Surdents Questionnaire B

Dear students

You are kindly requested to answer sincerely and thoughtfully this questionnaire that will be used for a Master's dissertation At Abdelhafid Boussouf University. It aims at investigating students' use of computer-assisted language learning (CALL) in learning collocations.

Please read each statement carefully and tick the appropriate answer or indicate your true opinion where necessary. Your cooperation would be sincerely appreciated. Thank you in advance.

Note: Collocations are words that are located together made up of two or more words that are commonly used together and go together in English.

Section one: General Information

Q1: University

.....

Q2: Gender

Male

Female

Q3: Grade

2nd year

3rd year

Master 1

Master2

Q4: Do you have a computer or a smart phone?

Yes

No

Q5: How many hours per day do you spend using the internet?

1 to 2 hours

3 to 4 hours

More than 4 hours

Q6: Do you like using technology in learning outside the classroom?

Yes

No

Section two: Collocation Development

Q1: Do you develop collocations inside the classroom?

Yes

No

Q2: If yes, how often?

Always

Sometimes

Rarely

Q3: Do you tend to improve collocations outside the classroom?

Yes

No

Q4: If yes, how often?

Always

Sometimes

Rarely

Q5: Do you find collocations easy or difficult to learn?

Easy

Difficult

Q6: How do you rate their importance for EFL learners?

Very important

Important

Not important

Section Three: Computer/Mobile applications usage among EFL learners

Q1: Do you use computer/mobile applications to develop your learning skills?

Yes

No

Q2: Do you enjoy learning through the use of computer/mobile applications?

Yes

No

Q3: If yes, do you find it effective?

Yes

No

Q4: Do you usually use computer/mobile applications for learning purposes outside the classroom?

Yes

No

Q5: If yes, how much time you spend using computer/mobile applications for learning?

Less than 1 hour

1 to 2hours

3 to 4 hours

More than 4 hours

Section Four: Computer/Mobile Applications in Learning Collocations

Q1: Do you use computer/mobile applications in learning collocations?

Yes

No

Q2: If yes, how often do you use them?

Always

Sometimes

Rarely

Q3: What kind of applications do you use in learning collocations?

.....

Q4: How often do you use the following applications? Please choose the best matching answer?

Applications	Always	Sometimes	Rarely	Never
Facebook				
Intagram				
Youtube				
Whatsapp				
Video games				
Podcast				
Flax				
Idiomobile				

Q5: Do you find them effective in developing collocations?

Yes

No

Q6: Which application you find very beneficial?

.....

Thank you for your collaboration

الملخص

حظيت عمليات تدريس وتعلم المتلازمات اللفظية باهتمام كبير على مر السنين، نظرًا لأهميتها في هذا المجال. ولكن، مع تقدم التكنولوجيا، ظهرت طرق جديدة لتدريس المتلازمات اللفظية وأحدثت تحولًا كبيرًا في المجال التعليمي. هذه الأطروحة تهدف إلى التحقيق في استخدام تطبيقات الكمبيوتر في تعلم المتلازمات اللفظية من طرف متعلمي اللغة الإنجليزية كلغة أجنبية في الجزائر. حيث تم افتراض أن طلاب اللغة الإنجليزية في الجامعات الجزائرية يستخدمون بعض تطبيقات الكمبيوتر لتطوير متلازمتهم اللفظية. لذلك وللإجابة على أسئلة البحث واختبار الفرضية تم جمع البيانات من خلال استبيان تم إرساله إلى 204 طالب لغة انجليزية من 26 جامعة في الجزائر. كشفت النتائج التي تم الحصول عليها أن طلاب اللغة الإنجليزية كلغة أجنبية في الجزائر يستخدمون أنواعًا مختلفة من تطبيقات الكمبيوتر، إلا أن معظم الطلاب اجمعوا على استخدام تطبيقات مواقع التواصل الاجتماعي حيث ان هذه التطبيقات ليست متخصصة في تطوير المتلازمات اللفظية، ولكن يتم استخدامها من قبل جميع الأشخاص ولأغراض مختلفة. إلى جانب ذلك، كان الوقت وقلة عدد الممثلين من اهم العراقيل أثناء إنجاز هذا العمل. في النهاية، يقدم العمل البحثي توصيات لعلم التربية والبحث المستقبلي بهدف توعية وجذب انتباه كل من المتعلمين والمعلمين الى استخدام تطبيقات الكمبيوتر المتخصصة في تطوير المتلازمات اللفظية.

Résumé

L'enseignement et l'apprentissage des collocations ont reçu une grande attention au fil des années, à cause de leur importance dans le domaine. Cependant, avec les progrès technologiques de nouvelles façons d'enseigner les collocations sont apparues et ont joué un rôle conséquent dans la sphère éducative. Cette thèse est visée pour étudier l'utilisation de CALL dans l'apprentissage des collocations chez les apprenants EFL d'Algérie. Par conséquent, il est supposé que les étudiants EFL dans les universités algériennes utilisent certaines applications CALL pour développer leurs collocations. Par conséquent, pour répondre aux questions de recherche et tester l'hypothèse, des données quantitatives ont été recueillies au moyen d'un questionnaire soumis à 204 étudiants d'anglais de 26 universités. Les résultats obtenus ont révélé que les étudiants EFL d'Algérie utilisent différents types d'applications CALL, mais la plupart des étudiants ont opté pour des applications de médias sociaux. Ces applications ne sont pas spécialisées dans le développement de ses collocations mais plutôt des applications qui sont utilisées par toutes sortes de personnes et à des fins différentes. Par ailleurs, le temps et le petit nombre de représentants ont été les principales limitations lors de la réalisation de ce travail. Finalement, le travail de recherche fournit des recommandations pour la pédagogie et les recherches futures dans le but d'attirer davantage l'attention sur la sensibilisation des apprenants et des enseignants à l'utilisation d'applications CALL spécialisées afin de développer des collocations.