LIST OF FIGURES AND GRAPHS

ABSTRACT

"Corpora and Textbook Design: The Case of Algerian Middle and Secondary School Textbooks" is an attempt to evaluate to which extent the Algerian textbooks are designed from corpora. The study will involve all the middle and secondary school English textbooks. After technological text dissections, the results obtained will be presented in the form of statistic tables, charts, graphs and others and will offer a wide range of opportunities to linguists, teachers, students and textbook designers; the remaining tasks will focus only on making the right analyses, express the appropriate remarks with the suitable alternatives and formulate the adequate conclusions. The research will be based mainly on the use of the British National Corpus, the American National Corpus and the Corpus of the contemporary American English which contain some hundred million words available in a software form. During the research we will try to shed light on previous experiences of some developed countries with the advantages of using such powerful tools (corpora and computers) the way textbooks are designed and their direct impact on the learning process in general.

TABLE OF CONTENTS

CHAPTER 1: CORPORA

CHAPTER 2: EXPLORING TEXTBOOKS

CHAPTER 3: TEXTBOOK PEDAGOGY RECOMMENDATIONS

CHAPTER 4: FINDINGS AND DISCUSSIONS

XIII

GENERAL INTRODUCTION

Electronic corpora are of great importance in linguistic studies. Nowadays, it is almost impossible to investigate any linguistic field without the use of computational linguistics or corpus linguistics. The availability of statistics, charts, tables, concordances, collocations and frequencies make linguistic research fields easier, more adequate and more accurate.

Nowadays the developed countries give more importance to textbooks and to the way they are designed, mainly in what concerns the content which is the first purpose for which they are created in addition to other criteria (the colour, the quality of images…), simply because textbooks are considered as mediums between teachers and learners and because they can assist students when working at home. Yet textbooks[1] play important roles of in the educational domains; we have opted to investigate in this domain by the use of new and advanced technology such as electronic corpora which will offer a lot of scientific opportunities.

The study of "Corpora and Textbook Design" is an attempt to shed light on the importance of electronic corpora in textbook design and evaluate to which extent the Algerian textbooks are designed directly or indirectly[2] from corpora.

The research will be based mainly on the uses of some main corpora such as the British National Corpus which contains 100 million words available in a software form and the American National Corpus, the Contemporary Corpus of American English, the Oxford Corpus and others when necessary as well as some important software such as text analysers, concordancers…. These tools are of paramount importance in computational linguistics; they present many advantages compared to the manual and traditional ways used in ordinary linguistic investigations. The speed, the amount of data processed in few seconds, the storage capacity and the accuracy are the key elements that help linguists opt for such kind of investigation in order to perform their tasks in very suitable conditions.

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[1] "Textbook", "text book" and "text-book" are all possible but we will opt for the first one during all the study.
[2] It means that dictionaries or books designed by corpora are used as main tools in Algerian textbook design

During this research, we will try to shed light on previous experiences of some developed countries and try to show the advantages of using such powerful tools (corpora and computers), the way textbooks are designed and their direct impact on the learning process in general. The research will be based on what follows:

- Are the Algerian official middle and secondary school textbooks (English language) designed with the help of electronic corpora or with dictionaries designed themselves by corpora?
- Do the existing texts in the Algerian official textbooks belong to universal norms of corpora?
- Are glossaries, wordlists, and collocations of the Algerian textbooks among the most frequent words of the English language?
- How to explore texts, glossaries and wordlists by corpus advanced software?
- To which extent range frequency priorities are represented in texts and glossaries?
- The necessary list of words that the user of textbook needs first in order to apprehend English as a foreign language and use it gradually according to his immediate needs.
- What are the most frequent words and expressions that should be introduced in a priority order to be taught first in Spoken and written English?
- What are the main factors and criteria taken into account to design successful textbooks with the help of corpora?
- What are the advantages of using electronic corpora in textbook design if compared to the traditional ways and their direct impact in the learning process?
- What are the problems that face pupils in learning English as a foreign language when these conditions are not respected?
- If they aren't designed with the help of electronic corpora, are they respecting the general rules of designing text books in the developed countries?

In this study some samples of texts and wordlists taken from Algerian textbooks (middle and secondary school) will be analysed with special software to check to which extent they respect the same criteria of textbooks designed with corpora.

The present dissertation is composed of four chapters:

The first chapter is basically a theoretical one; it consists mainly of general information about corpora and the definitions of the main concepts relating to corpora such as the design of a corpus, the classification of corpora, their content …. It also deals with the different processes that transform a raw corpus into a useful one ready to be used without any complicated ways even for beginners as well as the main results obtained from the corpus investigations such as frequencies, collocations and concordances.

The second chapter will shed light on middle and secondary school textbook exploration[3], on the text references and origins, on the file types, on the related domains covered by these texts as well as on the projects suggested to pupils at the end of each file. The results obtained in this chapter will be mainly used in the software analysis phase of the fourth chapter.

The third chapter is devoted mainly to the study of the content of all the Algerian textbooks in English (middle and secondary textbooks). The focus will be mainly on the approaches and methods suggested as well as the pedagogical recommendations on the objectives achieved through texts and activities, on the vocabulary lists used, on the cultural tasks and their impact on the learning process, and on the expected outcomes and projects.

The fourth chapter will be mainly about findings and discussions, samples from Algerian textbooks will be analysed by corpus software:
- Domain study: In this section, a comparison will be made between the domains covered by middle and secondary school textbooks and those covered by famous corpora such as the British National Corpus and the American corpus.
- Text references and origins: in this section, a study will be made to check to which extent the middle and secondary school textbook referenced texts are parts of the corpus text selection.
- Vocabulary list and range frequencies: In this section some glossaries of middle and secondary school textbooks will be investigated by corpora software in order to classify the frequency ranges covered by these lists and glossaries.

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[3] The third chapter textbook investigation is mainly made without corpus software

- Text samples of middle and secondary school texts will be investigated in terms of frequency ranges of the words they present to pupils as well as the target rate of academic word lists they will cover according to the related file content type.

The obtained results will be analysed and discussed in order to make an adequate evaluation and give the necessary recommendations.

1. Introduction

The first chapter deals mainly with the theoretical parts of electronic corpora in general such as the general definition of a corpus, the size of corpora, the classification of corpora as well as their design. In the same context, we will try to popularise electronic corpora and show to beginners, students, teachers and researchers that these tools will be totally at their disposal without the need and the use of special knowledge and skills.

The second part of this chapter focuses on how to transform a raw corpus into a useful corpus that could be easily explored by both specialists and beginners. The corpus annotation (tagging and parsing) remains the main operation that transforms the inert corpus into a useful one responding to the linguists' queries by typing the target word or expression and getting results in just few seconds.

Today, corpora have made a revolution in linguistics, they have changed the way analysis and investigations are performed qualitatively and quantitatively. They are used in many linguistic domains and fields; now even for beginners; it is possible to use electronic corpora to perform the following tasks:

- Extract concordances, collocations and frequencies of any target word
- Extract the left and right collocations of any word
- Compare two words
- Study a target word in many registers
- Analysing texts and obtaining atomistic data by using corpora
- Analysing wordlist according to their frequencies and ranges

The third part hints at the main fields and linguistic domains where corpora are used such as lexicography, dictionaries, sociolinguistics, register study, ESP, translation and other fields….Some of corpus results such as frequencies, collocations and concordances will be displayed and discussed as samples in order to explain which category of data can a corpus offer and what valuable information could be extracted during the analysis.

2. What is a Corpus?

The word corpus is derived from a Latin word which means 'Body' in French 'corps'. 'Corpora' and 'corpuses' are used to express the plural forms of "corpus". The word corpus refers to a large set of texts electronically stored and processed; the texts may be in written or spoken form or the mixture of the two.

In the Oxford Companion to the English language (1992) corpus is defined as: "a body of texts, utterances, or other specimens considered more or less representative of a language and usually stored as electronic data base".

The British National Corpus (BNC) comprises approximately 100 million words of written texts (90%) and (10%) of spoken texts as transcripts. In the same context Cook[4] suggests that:

> *The word corpus refers to a databank of language which has actually occurred-whether written, spoken or a mixture of the two'. The written texts are originally from magazines, books, diaries, newspapers, letters, popular fictions...however the spoken texts can be any recorded formal or informal conversations: Telephone conversations, dialogues, radio-shows, political meetings...*

As mentioned above, the origin of the written texts are from books, periodicals, newspapers; however the spoken texts are from telephone conversations, dialogues, classroom interactions, public discussions …These spoken texts are recorded and converted into written texts. Generally speaking, a corpus is any electronic set of texts or database that can be available on computers as software or via internet. However, for the sake of simplicity, we will opt for Mc Enery's and Wilson's definition (2001:197) which considers corpus "a finite collection of machine-readable texts, sampled to be maximally representative of a language or variety".

To conclude, and in the light of what has been said so far, one can argue that all the definitions suggest, somehow, that a corpus is the collection of texts which makes it (corpus) worth studying. In this respect, a corpus can be very helpful for linguists, teachers and students. They have just to type the target word or expression and they will be surely amazed at the quantitative and qualitative results obtained. Computational technologies allow us to gather and analyse very large bodies of data.

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[4] G. Cook (2003:73). Applied Linguistics

Among the other benefits of corpora uses (as electronic texts), there are:

- Accessibility.

- Speed

- Accuracy

- Availability

3. Size of Corpora

The size of a corpus is a very important criterion. Nowadays it is a question of millions of words stored and processed in few seconds. L. Burnard[5] suggests: "The feasible size of a corpus is not limited so much by the capacity of a computer to store it as by the speed and efficiency of the access software".

What is evident is that the size of any corpus can vary from some thousands of words to some millions of words. So, the balance is between large corpora which have specific purposes such as assisting linguists and lexicographers in writing dictionaries and text books; however, smaller corpora (few thousand words) are designed for specific research.

The following list shows a very limited sample of corpora's sizes[6].

• Bank of English: about 400 million words

•COBUILD Corpus (Collins Birmingham University International Language Database): More than 200 million words

• British National Corpus (BNC):100 million words

• Longman Lancaster Corpus: 30 million words

• American National Corpus (ANC): 11.5 million words

• ARCHER Corpus: 2million words

• Helsinki Corpus: 1.5 million words

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[5] L. Burnard (2000:15). Reference Guide for the British National Corpus

[6] *Data derived from* BNC Webmaster. Oxford University (2005).

• International Corpus of Learners of English (ICLE): 1 million words

 • Brown Corpus: 1million words

• Lancaster-Oslo/Bergen (LOB) Corpus: 1 million words

• Freiburg Corpus: 1million words

• Survey of English Usage Corpus (SEU): 1 million words

• International Corpus of English (ICE): A collection of corpora, each corpus contains1million words-in progress collections.

• Helsinki Corpus of Older Scots: 830,000 words

• Northern Ireland Transcribed Corpus: 400,000 words

• Corpus of Spoken American English (CSAE):200,000 words

• Melbourne –Survey Corpus: 100,000 words.

Nowadays, millions of corpora in different languages, sizes and purposes exist in the world; they are mainly created for linguistic, sociolinguistic and educational purposes.

4. Classification of Corpora

Nowadays, linguists can find many types of corpora; it depends only on the purposes they were created for and their contents. Among the most important kinds of corpora, we can find: National corpora, monitor corpora, reference corpora, synchronic corpora, diachronic corpora, multilingual corpora, spoken corpora, developmental and learner corpora…

4.1. National Corpora

National corpora aim to represent the national language of a country; they are mainly formed from selections of both written and spoken texts. Generally, they are made freely available in the net. Among the famous English national corpora one can list:

- The British National Corpus (BNC)

- The American National Corpus (ANC) [7]

4.2. Monitor Corpora

Monitor corpora are expandable; that is to say that the language is continuously up dated by adding new words, new expressions and new texts in order to follow the recent and rapid language change. Examples of monitor corpora:

- The Bank of English Corpus.
- The COBUILD Corpus.

4.3. Reference Corpora

Reference corpora have a fixed size and they are definitively designed at least for a certain period of time (they are not expandable e.g., the BNC).

4.4. Synchronic Corpora

These corpora are of paramount importance to make comparative studies of worldwide English and its real use in different countries. The best example without any doubt is The International Corpus of English (ICE), which is specifically designed for the synchronic studies of English language over the world.

The ICE is composed mainly by many sub-corpora (written and spoken texts) from countries where English is the first language or at least the official language (Australia, Canada, USA, Hong Kong…).

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[7] The ANC contains texts categories that are not covered in the BNC such as emails, web pages and chat room talks.

4.5. Diachronic Corpora

Contrary to synchronic corpora, diachronic corpora or historical corpora contain the same language but from different periods of times. They permit to linguists and researchers to make historical studies of a target language. They will find precious information about the changes of the language in different periods. The Helsinki Corpus of English Texts is the best-known diachronic/historical corpus which contains 1.5 million words of English, dating from the 8th century to the 18th century (Old, Middle, and Early Modern English).

4.6. Multilingual Corpora

These corpora are formed by many languages, or at least two languages for bilingual corpora. The best example is the European Multilingual Corpus where texts and their translations are originally selected from the European Parliament and some European commissions. This corpus covers all the European languages and other non-European languages such as Chinese, Japanese…

When one text is presented by one of the European members whatever his/her language is, the other members will read it and/or listen to the translated forms of this text in all the available official languages of this parliament or this commission. Thus, an accurate data base is formed to find the translation of words, concepts, expressions and texts.

4.7. Spoken Corpora

The content of these corpora is purely composed of spoken material with some references of the speakers such as:

- Age (the interest may be on teenagers' speech or adult speech for example)
- Social class (to study how a special social class can affect a language)
- Region (for example to study how some words or expressions are pronounced in a target region)
- Gender

The spoken corpora are formed by dialogues, monologues, classroom interactions, lectures political speech, sports commentaries, advertisement, business meetings**,** telephone/mobile conversations, internet chats, conferences, radio and television talks….

4.8. Developmental and Learner Corpora

The material is mainly from pupils or students acquiring their first language (L1) or their second language (L2) in English. The learners' exam papers and their written expressions are collected, corrected and coded anonymously. At the end, one can explore this kind of corpora to find the most frequent words, expressions, and mistakes made by beginners for example. Among the famous developmental and learner corpora, we can list:

-The Longman learners' corpus: 10 million words.
- The Cambridge learner corpus (CLC): 20 million words

5. Design of a Corpus

The corpus design is not an easy task; it needs time and money to be designed. As mentioned before, any corpus is a large set of texts. After their collection and selection, these texts will be transcribed and annotated (tagged and parsed)[8]. In this section, we shall take the BNC design as example[9]. The British National Corpus (BNC) contains 100 million words; this size will need 1.5 GB as free memory to be stored in a computer, a DVD, a CD, a flash disk or any other memory device. As already mentioned, the BNC is a mixture of spoken and written texts, with a total number of 4,054 texts (3,144 written texts and 910 spoken texts[10]). The written texts are mainly from:

Domains	Texts
Applied science	370
Arts	261
Belief and thought	146
Commerce and finance	295
Imaginative	477
Leisure	438
Natural and pure science	146
Social science	527
World affairs	484

Table1: Written Text Domains [11]

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[8] : Corpus annotation will be explained in the next paragraphs.
[9] : Data derived from L. Burnard (2000).About the BNC. Oxford University Computing Service
[10] : The spoken texts were recorded and transcribed in text format
[11] : From L. Burnard.(2000:10). Oxford University Computing Service

The selection criteria of these books and periodicals are:

- Bestsellers and literary prises
- Library loans: (the most loaned books and periodicals from official libraries)

As mentioned before, all the selected spoken texts were recorded and converted[12] into text format either they were from dialogues or monologues.

Domains	Texts
Educational/Informative	169
Business	131
Public/Institutional	262
Leisure	195

Table 2: Spoken Text Domains[13]

6. Transforming a Raw Corpus into a Useful One

Collecting, selecting, transcribing and storing texts in an electronic format are all parts of the raw corpus operations. The BNC building took 10 years of hard work at Oxford University Computing Service and it cost very expensive to achieve such wonderful and immense realisation. In order to get a useful corpus, a process known as annotation is necessary for any electronic corpus creation.

6.1. Annotating a Corpus

Annotating a corpus (Tagging and Parsing) is to identify each word, each phrase, each clause and each sentence from the corpus by adding a code containing information about them. We can find two different kinds of annotations:

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[12] Manual or automatic conversion

[13] ：From Lou Burnard.(2000:10). Oxford University Computing Service

- Automatic annotation: Very advanced computer software and programmes are used to perform this task.

- Manual annotation: in this case annotations are added by computer users manually. Annotating is a global term which refers to tagging and parsing a corpus.

6.2. Tagging a Corpus

Tagging a corpus is to identify each word from the corpus by adding a code in the form of tag containing information about this word; for example the word's part of speech, its origin, its location…This process permits easily to make statistics about the parts of speech frequencies. In this context, and according to S. Hunston[14]

> *Tagging means allocating a part of speech (POS) label to each word in a corpus. For example, the word "light" is tagged as a verb, a noun, or an adjective each time it occurs in the corpus.*

6.2.1. Example of Tagging

The auxiliary (to be) is a best example to explain how a word is annotated. The lemma word (to be) has many variants: am, is, are, was, were, been and being. To make the machine able to differentiate between these variant forms of the lemma (to be), a sort of code (tag) will be added separately to each word; i.e.; for the BNC which contains one million words, one million tags should be added to make the inert BNC alive.

Here is a simple example of the lemma (to be) and its variants with interpretations[15]:

- To be ======= BE
- Am ======= BEM
- Is ======= BEZ
- Are ======= BER
- Was ======== BEDZ
- Were ======= BED
- Being ====== BEG
- Been ======= BEN
-

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[14] S. Hunston (2002:80). Corpora in Applied Linguistics
[15] Examples taken from the BNC glossary of annotations

Interpretations:

- (BEZ) Z: means the 3rd singular person
- (BEDZ)D: means the past form and Z means the 3rd singular
- (BEG) G: means the 'ing' form

6.2.2 Tagging a Text

The original text[16]:

> *Another new style feature is the wine-glass or flared heel, which was shown teamed up with pointed,, squared and chisel toes. Colour is highly important in choosing autumn footwear. The autumn range of shades is almost bewildering and there are some exciting new comers, such as conker calf and charcoal Rocco and Russian violet.*

The tagged text[17]

ˆ another_DT new_JJ style_NN feature_NN is_BEZ the_ATI wine-glass_NN or_CC flared_JJ heel_NN, _,which_WDT was_BEDZ shown_VBN teamed_VBN up_RP with_IN pointed_JJ ,_, squared_JJ ,_, and_Ccchisel_NN toes_NNS ._.ˆ colour_NN is_BEZ highly_RB important_JJ in_Inchoosing_VBG autumn_NN footwear_NN ._. ˆ the_ATIautumn_NN range_NN of_Inshades_NNS is_BEZ almost_RB bewildering_JJ, _, and_CC there_EX are_BER some_DTI exciting_JJ new-comers_NNS, _, such_IN as_IN"conker_NN calf_NN and_CC charcoal_NN ,_, Rocco_NN and_CC Russian_JNP violet_NN ._.

Keys:

ATI: article neutral for number

BEDZ: was (past sing. Form of the verb BE)

BER: are (present plural form of the verb BE)

BEZ: is,'s (-s form of the verb BE)

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[16] : From the LOB corpus

[17] : From the LOB corpus

14

CC: coordinating conjunction

DT: singular determiner

DTI: determiner neutral for number

EX: existential there

IN: preposition

JJ: general adjective

JNP: adjective with word-initial capital

NN: singular common noun

NNS: plural common noun

RB: general adverb

RP: adverb which can also be a particle

VBG: present participle of lexical verb

VBN: past participle of lexical verb

WDT: WH-determiner

6.3. Parsing a Corpus

Parsing a corpus permits to identify separate parts of a text in order to facilitate its analyses and make the adequate statistics in order to identify all words' locations. Leech and Eyes[18] give more illustrations about the advantages of the parsed corpus:

> *A parsed corpus can be used to count with great accuracy the number of different structures in a corpus. By doing a grammatical analysis , the parser identifies boundaries of sentences , clauses and phrases and assigns labels to the parts identified such as (adverbial clause), (nominal clause), (relative clause), (adjective phrase) and (prepositional phrase).*

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[18] G. Leech and E. Eyes (1997:38).Syntactic annotation

6.3.1. Example of Parsing a Sentence.

Leech and Eyes[19] give an example in which they explain how a sentence is parsed in order to be used and explored in a corpus:

"The victim's friends told police that Krueger drove into the quarry".

In which:

- The whole is identified as a sentence.
- *"The victim's friends"*: is identified as a noun phrase.
- *"Told police that Krueger drove into the quarry"*: is identified as a nominal clause.
- *"Krueger"*: is identified as noun phrase.
- *"drove into the quarry"*: is identified as a verb phrase.
- *"into the quarry"* is identified as a prepositional phrase.
- *"the quarry"* is identified as a noun phrase.

7. The Useful Corpus

After the long and hard word of the annotation process[20] (tagging and parsing), the corpus is ready to be used and it presents results in three ways: Concordances, collocations and frequencies. After annotation, many results could be easily obtained such as word classes… Biber et al[21] show the comparative frequency of word-classes in three corpora.

RANK	CONVERSATION	NEWS	ACADEMIC
1	Pronouns	Nouns	Nouns
2	Verbs	Determiners	Determiners
3	Adverbs	Prepositions	Prepositions
4	Auxiliaries	Pronouns	Pronouns
5	Participles	Verbs	Verbs
6	Nouns	Adverbs	Adverbs
7	Determiners	Auxiliaries	Auxiliaries
8	Prepositions	Participles	Participles

Table 3: Comparative Frequency Word-Classes[22].

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[19] G. Leech and E. Eyes (1997:38).Syntactic annotation
[20] The BNC creation took 10 years of hard work
[21] Biber et al (1998: 15). Longman Grammar of Spoken and Written English
[22] From Biber et al (1998). Longman Grammar of Spoken and Written English

What is evident from this table is that data is made available according to our needs, one can just specify the target field, the specific domain, the period ….and we'll get invaluable data to undertake any research or investigation; as it is mentioned in the above example, the user can realise that there is no difference between "news corpora" and "academic corpora", in what concerns the most frequent word classes: Nouns are in the first position; however verbs are in the fifth position. While for the "conversation corpora", the most frequent word classes are pronouns category, followed by verbs and adverbs; however, nouns are in the 6th position. This could practically orient teachers to focus on the parts of speech rates when dealing with written and spoken activities.

7.1. Frequency

Among the main results offered by corpora, frequencies remain the important elements of corpus options. To define a corpus frequency list, according to Barnbrook[23] : *"A frequency list is simply a list of all the types in a corpus together with the number of occurrences of each type. The list can be displayed in frequency order, in alphabetical order of their occurrence of the type in the corpus"*.

Frequency lists could be exploited in many ways:

- It can be presented as a general frequency list.

Example: The 100 commonest English words found in writing around the world from Oxford English Corpus.

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[23] G.Barnbrook (1996:45). Language and Computers

1	the	26	they	51	when	76	come
2	be	27	we	52	make	77	its
3	to	28	say	53	can	78	over
4	of	29	her	54	like	79	think
5	and	30	she	55	time	80	also
6	a	31	or	56	no	81	back
7	in	32	an	57	just	82	after
8	that	33	will	58	him	83	use
9	have	34	my	59	know	84	two
10	I	35	one	60	take	85	how
11	it	36	all	61	people	86	our
12	for	37	would	62	into	87	work
13	not	38	there	63	year	88	first
14	on	39	their	64	your	89	well
15	with	40	what	65	good	90	way
16	he	41	so	66	some	91	even
17	as	42	up	67	could	92	new
18	you	43	out	68	them	93	want
19	do	44	if	69	see	94	because
20	at	45	about	70	other	95	any
21	this	46	who	71	than	96	these
22	but	47	get	72	then	97	give
23	his	48	which	73	now	98	day
24	by	49	go	74	look	99	most
25	from	50	me	75	only	100	us

Table 4: The First 100 Commonest English Words (from the Oxford Corpus)

As seen in the table above, many of the most frequently used words are grammatical words (articles, auxiliaries, prepositions….); however the first noun (time) is in the 55th position. The frequency list can be of great importance; it is the list in which words can be arranged in order of their frequency in the corpus. In the same context Biber et al [24]argue*:*

Frequency investigations tell us how often different words are used, allowing us to identify particularly common and uncommon words. This information can especially be useful in designing teaching materials for language students.

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[24] Biber et al (1998:23). Corpus Linguistics

The frequency list can be presented according to the parts of speech order in the corpus.

These lists are mainly used in comparative studies.

Nouns		Verbs		Adjectives	
1	time	1	be	1	good
2	person	2	have	2	new
3	year	3	do	3	first
4	way	4	say	4	last
5	day	5	get	5	long
6	thing	6	make	6	great
7	man	7	go	7	little
8	world	8	know	8	own
9	life	9	take	9	other
10	hand	10	see	10	old
11	part	11	come	11	right
12	child	12	think	12	big
13	eye	13	look	13	high
14	woman	14	want	14	different
15	place	15	give	15	small
16	work	16	use	16	large
17	week	17	find	17	next
18	case	18	tell	18	early
19	point	19	ask	19	young
20	government	20	work	20	important
21	company	21	seem	21	few
22	number	22	feel	22	public
23	group	23	try	23	bad
24	problem	24	leave	24	same
25	fact	25	call	25	able

Table 5: The Main Word Frequencies[25].

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[25] The first 25 frequencies of the main parts of speech in the BNC: (Nouns, verbs and adjectives).

Some frequency lists are also made available according to their part of speech category such as nouns, verbs, adjectives, adverbs….As a sample we restrict our illustration to the frequency lists of conjunctions and pronouns:[26]

Words	Frequencies	Words	Frequencies	Words	Frequencies
And	26817	Though	245	As soon as	45
That	7308	Until	242	Except	41
But	4577	After	233	Now-that	30
Or	3707	So-that	197	Provided	30
As	3006	As-if	157	As long as	29
If	2369	For	139	Whether or not	29
When	1712	&	136	Like	25
Than	1033	Nor	124	Till	24
Because	852	Unless	110	Even when	24
While	503	Once	90	In case	22
Where	458	Even-if	87	And/or	19
Although	436	Whereas	62	In that	18
Whether	332	Even though	59	Albeit	14
Before	305	Whilst	58	Except that	14
Since	295	As-though	54	So long as	13
So	258	Rather-than	46	Given that	12

Table 6: Conjunction Frequency List from the BNC[27]

As noticed in the first frequency list of conjunctions that exists in the British National Corpus BNC, some conjunctions have very large frequencies such as (and, but, or…), they will be well exploited by textbook designers in the selected materials; in contrast, other conjunctions have very weak frequencies and it is preferable that they will not be given priorities in the selected texts if compared with the most frequent ones.

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[26] Taken from the BNC
[27] Geoffrey Leech et al, UCREL, Lancaster University November 2000

Words	Frequencies	Words	Frequencies	Words	Frequencies
It	10875	Himself	311	Nobody	6 2
I	8875	Anything	288	Everybody	61
You	6954	Itself	237	Anybody	50
He	6810	Themselves	237	His	49
They	4332	Someone	187	Plenty	46
She	3801	Everything	186	Mine	46
We	3578	Herself	172	Lots	45
Who	2055	Anyone	150	Ourselves	45
Them	1733	Everyone	133	Yours	42
Him	1649	Whom	129	One-another	28
Me	1364	Myself	125	Hers	25
Her	1085	Each-other	108	No-one	21
One	953	Yourself	107	Ours	17
Us	623	None	84	Whoever	15
Something	526	No-one	81	Theirs	10
Nothing	341	Somebody	73		

Table 7: Pronoun Frequency List from the BNC[28]

The above table is a pronoun frequency list taken from the British National Corpus that contains 100,000,000 words. The table shows pronouns with very high frequencies such as (it, I, you, he, she…), and others less frequently used such as no one, whoever, one another…Linguists and textbook designers must have a look to these frequencies and use the target pronouns moderately.

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[28] Geoffrey Leech et al, UCREL, Lancaster University November 2000

7.2. Parts of Speech Frequencies

We can identify 8 main word classes:

- Nouns: computer, printer…

- Verbs: depict, analyse….

 - Determiners: the, this

- Prepositions: on, in…..

- Adjectives: beautiful, blue…

- Pronouns: you, we…

- Conjunctions: and, but…

- Adverbs: quickly, frequently…

The frequencies of the main word classes in 1 million-word computer corpora of written English are given in the table below[29]:

	%		*%*		*%*	
	Total 1 million words in each corpus		Informative prose sections		Imaginative prose (fiction) sections	
	US	**UK**	**US**	**UK**	**US**	**UK**
NOUNS	26.80	25.2	28.50	26.9	21.77	20.0
VERBS	18.20	17.8	17.02	16.4	21.69	21.9
DETERMINERS	14.16	14.2	14.84	15.2	12.11	11.4
PREPOSITIONS	12.04	12.2	12.77	13.1	9.87	9.6
ADJECTIVES	7.07	7.3	7.65	7.8	5.35	5.7
PRONOUNS	6.56	7.1	4.75	5.0	11.94	13.1
CONJUCTIONS	5.92	5.5	5.94	5.5	5.86	5.4
ADVERBS	5.23	5.5	4.73	5.0	6.72	7.2
OTHERS[30]	4.02	5.2	3.80	5.2	8.49	5.8
TOTAL	100	100	100	100	100	100

Table 8: Frequencies of the Main Word Classes

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[29] Taken from1 million-word computer corpora of written English
[30] Includes wh- words, foreign words, numerals…

By making a brief analysis[31], based on information taken from the above table, we can notice that:

- The nouns are the most frequent used words
- The verbs are more frequent in fiction than in informative prose.
- The pronouns are more frequent in spoken English and in fiction that in informative writing.
- The conjunctions have almost the same frequency in both corpora.

The analyses are from the Brown Corpus of American English (Francis&Kucera.1982:547) and the Lancaster-Oslo-Bergen (LOB) Corpus of written British English (Johansson&Hofland.1989:15).

7. 3. Concordances

Concordances are all the target word occurrences in the corpus. They are obtained from the raw corpus thanks to software called 'concordancer', such as "Key Word in Context" (KWIC). This software can present the word in a centred position of 80 characters. Defining a concordancer, S. Hunston [32] says:

> *It is a programme that searches a corpus for a selected word or phrase and presents every instance of that word or phrase in the centre of the computer screen with the words that come before and after it to the left and right. The selected word appearing in the centre of the screen is known as the (node word).*

The task of the concordancer is to search and present the whole company of the target word in all the sentences that exist in the corpus. The linguists have to take benefit from these results and to make the right analyses, as Tribble[33] argues: *'What the concordancer does is to make the invisible visible'.*

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[31] From the Brown Corpus of American English (Francis&Kucera.1982:547) and the Lancaster-Oslo-Bergen (LOB) Corpus of written British English (Johansson&Hofland.1989:15)

[32] S. Hunston(2002:39). Corpora in Applied Linguistics

[33] Tribble (1990:11). Concordances in the Classroom

The following list concerns concordances of the word "school". The concordances of any word could be obtained by typing the target word in the appropriate space and click, then hundreds of concordances will be displayed in few seconds.

Concordances of "school*"[34]

1- *To learn more after* **school**
2- *With roads, shops, and* **school** *buildings.*
3- *I was very excited and arrived* **school** *at 8.30 am to help out moving equipment.*
4- *And necessary machine not only at* **school** *and office, but also at home.*
5- *We join together at* **school** *at about 8:30 a.m.*
6- *But at* **school***, we don't really have enough chance.*
7- *At* **school***, we learned the process of doing subjects*
8- *We apply the theory we have learnt in* **school***.*
9- *In school, we do the practical exercise every day.*
10- *I understand what I have learnt in* **school***.*

7.4. Collocations

J. R. Firth[35] states*: "you shall know the word by the company it keeps"*. Sometimes, a word alone means almost nothing; we need at least another word (its collocation) or the whole expression where it is used in order to understand really what it means. The following example illustrates the collocations of the noun 'computer' with adjectives, verbs, prepositions and other nouns[36].

Adjectives + computer:

Powerful, desktop, home, laptop, mainframe, notebook, personal, portable, analogue, digital…

Verb + computer:

Run, use, switch on, switch off, log onto, log off, boot up, start up, shut down, reboot, restart, program…

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[34] Concordances for (*school)l from the BNC*
[35] Firth (1957:196).Papers in Linguistics
[36] From Oxford collocations software

Computer + noun:

Network, program, system, equipment, hardware, software, language, science, technology, keyboard, screen, terminal, game, graphics, programmer, user, company, industry, manufacturer,

Computer + verb:

Run, store, hold on, crash, be down up (not functioning) …

Preposition + computer:

On, a, the…

The following example illustrates the collocations of the verb "to make" with respective frequencies obtained from the BNC online

N°	Collocations	Frequencies
1	Make decision	274
2	Make life	256
3	Make way	245
4	Make contact	243
5	Make arrangements	153
6	Make room	145
7	Make mistakes	140
8	Make provisions	133
9	Make recommendations	126
10	Make progress	121
11	Make friends	119
12	Make enquiries	66
13	Make choices	65
14	Make peace	64
15	Make tea	61
16	Make comparisons	58
17	Make plans	50
18	Make statements	49
19	Make concessions	48
20	Make judgements	48
21	Make profits	45
22	Make trouble	43
23	Make reference	42
24	Make demands	41
25	Make music	40
26	Make coffee	37
27	Make predictions	37
28	Make assumptions	35

29	Make allowances	34
30	Make conversation	33
31	Make rules	33
32	Make suggestions	33
33	Make appointments	32
34	Make claims	32
35	Make excuses	32
36	Make inquiries	32
37	Make war	32
38	Make connections	30
39	Make jokes	30
40	Make orders	30
41	Make applications	29
42	Make policy	29
43	Make laws	28
44	Make profit	28
45	Make regulations	28
46	Make space	27
47	Make allowance	26
48	Make savings	25
49	Make comments	24
50	Make contributions	24
51	Make payment	24
52	Make sacrifices	24
53	Make adjustments	23
54	Make copies	23
55	Make history	23
56	Make judgements	21
57	Make improvements	20
58	Make loans	20
59	Make alterations	19
60	Make cheques	19
61	Make proposals	19
62	Make work	19
63	Make law	18
64	Make children	17
65	Make holes	17
66	Make waves	17
67	Make contacts	16
68	Make contracts	16
69	Make efforts	16
70	Make inferences	16
71	Make arrests	15
72	Make distinctions	15

Table 9: Collocations of "to make", with Respective Frequencies[37].

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[37] Data derived from BNC. BYU.

As the table above shows, collocations permit to have a general idea about the use of any word in real situations. Collocations permit also to get strong and weak uses of the target word with other collocates. It is preferable to urge pupils to use the verb to make with high score collocates such as make decisions, make contacts, make arrangements…) rather than low score collocates such as make coffee, make children, make cake, make efforts, make copies….

The high score frequencies that teachers should incorporate in their courses, activities or pedagogical tasks will ameliorate pupils' vocabulary and train them to use rich collocations used by native speakers.

8. The Uses of Corpora in Applied Linguistics

The rapid growth of technology gives new challenges to computational linguistics. Nowadays, it is possible to deal with sounds and videos. Computer technology offers 3 main characteristics:

- Speed: it is a question of more than 3 GHz (Billion of information processed in one second) for the recent computers.
- Capacity: the hard disk capacity of today computers can over pass easily Tera[38]-Bytes and some Giga Bytes[39] as RAM[40] capacity.
- Accuracy: with this great capacity and this very important speed by which data is processed, there is no place for errors. All is accomplished perfectly. In this context, Biber et al[41] point out:

   Computers make it possible to identify and analyze complex patterns of language use, allowing the storage and analysis of a larger database of natural language that could be dealt with by hand. Furthermore, computers provide consistent, reliable analyses.

- The integration of mobile phones, smart phones, I pads, Wi-Fi, HD, 3G…are all of paramount in ICT, NTIC, and computational linguistics

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[38] More than one thousand Giga Bytes
[39] *Byte: a unit of information that can represent one item which is made up of a series of eight bits.*

[40] *RAM: abbreviation of Random Access Memory is a computer memory in which data could be changed, modified or deleted*
[41] Biber et al. (1998: 4). Corpus Linguistics

8.1. Computational Linguistics

The Association for Computational Linguistics defines it as the scientific study of language from a computational perspective; it is a discipline between linguistics and computer science. The United States were the pioneers of computational linguistics; it was used in the 1950s, during the cold war. Computers were used to translate automatically texts from foreign languages, particularly from the Russian language into English.

Nowadays, not only computers are involved in computational linguistics but a multitude of technologies has been integrated in this field simply because they are well preferred by teachers, pupils and students. These technologies have also proved their supremacy and their smartness when compared with the previous ones. Among these technologies one can list:

- Mobile and smart phones
- I pads
- Tablets
- Networks
- Wi-Fi
- 3rd Generation and the 4th Generation[42]
- Interactive whiteboards

These tools and facilities will create a revolution in all fields and particularly in the educational one, and the integration of ICTE[43], NTIC[44] in our educational system is the best example.

8.2. Corpus Linguistics

Corpus linguistics is the study and analysis of data obtained from a corpus; G. Cook[45] defines Corpus Linguistics as a field which is concerned with the patterns and regularities of language use which can be revealed by systematic analysis of such corpora.

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[42] The fourth generation is already introduced in the developed countries in Europe and America
[43] Information and Communication Technology for Education
[44] New Information and Communication Technology
[45] G. Cook (2003:73). Applied Linguistics

Corpus Linguistics is based on two main software parts:

- A corpus: the body of data in the form of texts (written and/or spoken)
- A concordancer: the software tool that permits an automatic investigation of any word of that corpus.

Corpora offer valuable data to linguists in the forms of texts taken from natural contexts of native speakers; this is why Biber et al[46] stress on the importance of corpora in linguistics:

> *Corpus Linguistics makes it possible to identify the meanings of words by looking at their occurrences in natural contexts, rather than relying on intuitions about how a word is used or on incomplete citation collections.*

Nowadays, and with the immense development of technology, computers' storage capacity, and microprocessors' speed make it possible to search and analyse millions of words in few seconds with great accuracy; it permits also to display results in many suitable forms for users, in concordances, collocations, frequencies and other advanced analyses. Sinclair[47] argues: *"Corpus-based language studies enable the researcher to identify and describe various realisations of the productivity of language".*

So corpora and according to their importance in computational linguistics, they present new opportunities to linguists to perform research and analyses in very good conditions. The results obtained are of paramount accuracy and reliability in addition to the important amount of data that could be processed in few seconds. Corpora can be used in many domains such as: Corpora and lexicography, corpora and dictionaries, corpora and register study…

8.3. Corpora and Lexicography

Lexicography is the study of meanings of words; it is also concerned with the uses of these words in real contexts; as Cruse[48] points out: *"the meaning of a word is fully reflected in its contextual relations".* A word can never be explained by another word, but it needs a real situation; it depends of its uses in expressions, sentences, quotations…

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[46] Biber et al. (1998: 4). Corpus Linguistics

[47] J.M.Sinclair. (1997:37-8). Corpus Evidence in Language Description

[48] Cruse (1986: 16)

Before the creation of electronic corpora, lexicographic researchers analysed words by traditional methods which was based on the uses of traditional dictionaries and/or books with quotations and expressions from famous authors; nowadays lexicography analyses are not limited in space and time. They witness a revolution in terms the quality and the quantity of information processed thanks to computers' capacity storage and their unbelievable speed.

Today, and thanks to the availability of advanced technology mainly in computer science, this technological development has paved the way to linguists in general and lexicographers in particular to make concrete progress in this domain mainly in dictionaries and text books design.

The recent computers can fit very large corpora (millions of words); these corpora have different sources and they are designed according to specific rules that take into account balanced parts of the target language when compared to its recent use in its natural environment. In the same context Biber et al[49] argue that:

> *The central question in lexicographic work is the meanings of words; one of the advantages of corpus- based research is that the corpus can be used to show all the contexts in which a word occurs.*

The following example illustrates the results obtained from the BNC online corpus of two synonyms: Freedom and liberty.

Word 1: (Freedom)   Word 2: (Liberty)

	WORD	Freq
1	ACADEMIC	87
2	GREATER	97
3	FIGHTERS	47
4	NEW	31
5	SUCH	29
6	PRESS	50
7	RELATIVE	22
8	CONSIDERABLE	21
9	TOTAL	20
10	MORE	17
11	FIGHTER	17
12	REAL	17
13	PRESS	16
14	PARTY	63
15	FIFTH	15

	WORD	freq
1	CIVIL	24
2	MISS	17
3	BODICE	11
4	AT	170
5	DIABOLICAL	5
6	NOT	5
7	CAN	6
8	INDIVIDUAL	49
9	WITHOUT	6
10	PERSONAL	25
11	OR	18
12	RELIGIOUS	17
13	WAS	29
14	AS	7
15	HAS	8

Table 10: "Freedom" and "Liberty" from the BNC Online Corpus.

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[49] Biber et al (1998:26). Corpus Linguistics

As seen in the table above, "freedom" and "liberty" are synonyms but when they are used in contexts they can present different communicative functions according to the collocations and their frequencies. The second example illustrates two distinctive collocations of "thank you"[50] with their respective frequencies.

	Word/phrase	Tokens
1	Thank you chairman	202
2	Thank you president	18

Table 11: Collocations of (*thank you*). Data Derived from Corpus.byu.edu

As seen from the above table, "*thank you president*" has not the same frequency as "*thank you chairman*", the latter has a large frequency than the first, and this is true for all the registers even when the two words "chairman" and "*president*" are synonyms. So, native speakers prefer largely the use of "chairman" than the use of "*president*" when used with the expression "*thank you*".

8.4. Corpora and Dictionaries

Dictionaries have different forms and shapes. We can find traditional dictionaries (in the form of books), as we can find them in electronic format (CD). We can also find them in online versions. As far as their uses are concerned, it depends only for which purposes they are created for:

- Synonyms dictionaries
- Antonyms dictionaries
- Frequency dictionaries
- Bilingual dictionaries
- Abbreviations and acronym dictionaries
- Citation dictionaries
- Proverb dictionaries

In order to explain a word, the designers of traditional dictionaries are obliged to insert the target word in examples or sentences, simply because a word can never be fully explained with another word, and in order to solve these unsuitable situations, they generally refer to famous writers and personalities to assist the target words, or to invent adequate sentences just

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[50] See Aston, G. (1995). 'Say "thank you": Some pragmatic constraints in conversational closing" Applied linguistics 16: 57-86.

to avoid unsuitable situations of words explained directly by other words. In this context Baugh & al[51] argue:

> *Most citations are unsuitable for a learner dictionary because they are too complex grammatically; they contain unnecessary difficult words or idioms, or make culture-dependent allusions or references to specific contexts.*

But the innovation is that all the recent dictionaries are designed with the help of electronic corpora. S. Hunston[52] mentions. "*Corpora have so revolutionised the writing of dictionaries and grammar books for language learners*".

In the introduction of the Longman dictionary (1995: XVI), we can find that all examples in this dictionary are based on the spoken and written corpus material. Some examples are taken directly from corpus; some have been changed slightly from the corpus to remove difficult words; and some have been written specially for the entry. In the Cambridge learner's Dictionary (2001:5) we find that the corpus helps us to discover natural and typical examples to show how words and phrases are used.

In the COBUILD Dictionary (1995: XXI I) we can also find that the majority of the examples in the dictionary are taken word for word from one of the texts in the Bank of English Corpus. Occasionally, we have made very minor changes to make them more successful as dictionary examples. In the Longman Dictionary of Contemporary English (2001) Summers et al[53] explain:

> *The frequency graphs in the dictionary show users which are the most common constructions of words. 330 million words in computerised data bases and covering American as well as British English. Our policy has always been that corpus should be as "representative" as possible, i.e., that it should represent the broad span of the language and be reliable as a source of frequency information.*

In recent dictionaries frequencies and statistics (the occurrence of the word in written and spoken registers) are important resources to enlighten the users of dictionaries with very reliable explanations, and to give them information so that they can reach the almost correct meaning of the word. Summers et al add:

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[51] Baugh & al: (1996: 43). The role of Corpora in Compiling the Cambridge International Dictionary of English

[52] S. Hunston (2002:96). Corpora in Applied Linguistics

[53] Summers et al (2001: XI). Longman Dictionary of Contemporary English

The importance of learning the set of phrases of English is becoming more and more recognised in ELT. So collocations are shown throughout the dictionary in bold type. Again, the level of accuracy archived in the dictionary is only possible because of the use of the Longman Corpus Network. [54]

In reality, and as mentioned above, a word can never be the correct and the complete synonym of another word. A word is larger than its form and its morphology; it should be taken with great precautions mainly in translation.

8.5. Corpora and Register Study

Register study is to understand and analyse how a word varies from one situation to another, and how it acts when used in different registers, such as academic, news, poetry, fiction…. In this domain the corpus plays a vital role for linguists, without its help, one can spend a very long period of time of hard work and he/she can never reach the same results.

Comparing the numbers of occurrences of the word "light" in the main registers where it occurs, we have obtained this illustrative table where the word "light" exists 4472 times; this frequency is divided between the main registers (spoken, written, magazine, newspaper, academic, non-academic and miscellaneous.

Section	All	Spoken	Fiction	Magazine	Newspaper	Non-Academic	Academic	Misc
Freq	4472	272	893	652	444	758	413	1040

Table 12: Frequencies of "light" in Different Registers[55] (from the BNC)

So, in the light of the results of the word "light" in different registers obtained from the BNC, one can immediately explore the strong and the weak uses in the different registers of "light" or any other word.

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[54] Summers et al (2001: XI). Longman Dictionary of Contemporary English

[55] Data derived from BNC .byu.

It is also possible to explore the frequencies of any word in the main sub-sections. As illustration, we have taken the same word "light" in order to explore the respective frequencies in different sub-sections[56].

N°	Section name	Frequency
1	(w) Fiction Prose	875
2	(w) Fiction Prose	629
3	(w) Nat Science	440
4	(w) Instruction	116
5	(w) Biography	110
6	(w) Advertisement	72
7	(w) Commerce	58
8	(s) Interview	45
9	(w) Medicine	44
10	(s) Broadcast news	20

Table 13: Frequencies of "light" in Different Sub-Sections(written/spoken)

8.6. Translation

Automatic translation is also possible thanks to corpora that are formed by texts from many languages. These texts are translated automatically or traditionally and stored in an electronic data base called "multilingual corpora". These corpora are originally from institutions and organisations where many languages are used; in order to satisfy all the inquiries, each text will be directly translated into the other languages and stored to be used as a reference. The best example is the European Multilingual Corpus; its origins are from the European parliament and some European commissions. This corpus covers all the European languages and other non-European languages such as Chinese, Japanese…

Such Corpora are usually formed by original texts and their translations. In this context, G. Cook[57] reminds:*"Translators use comparable corpora to compare the use of apparent translation equivalents in two languages, and parallel corpora to see how words and phrases have been translated in the past"*.

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[56] Data derived from BNC .byu. .edu

[57] G. Cook (2003:112). Applied Linguistics

When one text is presented by one of the European members whatever his/her nationality and his language, the other members will read and listen to the translated forms of this text in all the available official languages of this parliament or this commission. Thus an accurate and reliable data base is formed to find the translation of words, concepts, expressions and texts. According to Hunston,

> *Translation is an increasingly important application of corpora, partly because of the needs of institutions such as the European Union, for whom translation is crucial, to improve and automate translation processes.*[58]

8.7. Corpora and Historical Studies

To investigate in historical studies, only specialised corpora are used in this field. These types of corpora contain texts dating from certain periods from Old English to Early Modern English. The following are examples of historical corpora:

- The Lampeter Corpus of Early Modern English Tracts containing English pamphlets dating from1640 to 1740,
- The ARCHER corpus containing English texts dating from between 1650-1990
- The Helsinki corpus contains 1.6 million words of English from three main periods:
- Old English, Middle English and Early Modern English

A lot of historical investigations can be made thanks to these corpora. Biber et al[59] state:

> *Diachronic text corpora enable a multitude of investigations. A diachronic corpus can be used to study lexicographic, grammatical and discourse features as well as registers and dialects. Stylistics perspectives can also be included by focussing on individual authors.*

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[58] S. Hunston (2002:123). Corpora in Applied Linguistics

[59] Biber et al. (1998:203-4). Corpus Linguistics

The following example from Biber et al[60] illustrates the historical study of modal verbs[61] and semi- modal verbs[62] over the last three centuries[63].

News

Century	Must	should	Have to	Got to	Need to	Ought to	Supposed to
17th	*	§	§		–	–	–
18th	*	2*	§	§	–	§	§
19th	2*	3*	§	–	–	§	–
20th	3*	3*	*	–	–	–	–

Table14*:* Frequencies of Modals and Semi-Modals across the Last Four Centuries in "news" Register

Fiction

Century	Must	should	Have to	Got to	Need to	Ought to	Supposed to
17th	2*	5*	–		§	§	–
18th	4*	5*	§		–	§	–
19th	3*	4*	*	–	–	§	§
20th	4*	2*	2*	§	§	*	–

Table15*:* Frequencies of Modals and Semi-Modals across the Last Four Centuries in "Fiction" Register

Drama

Century	Must	should	Have to	Got to	Need to	Ought to	Supposed to
17th	10*	3*	§		–	*	–
18th	7*	5*	§		–	§	§
19th	10*	3*	*	§	–	§	§
20th	8*	3*	3*	2*	§	§	§

Table16: Frequencies of Modals and Semi-Modals across the Last Four Centuries in Drama Register.

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[60] Biber et al. (1998:206-7). Corpus Linguistics

[61] Must and should*:* are considered as modal verbs.

[62] Have to, got to, need to, ought to, and be supposed to*:* are considered as semi-modals).

[63] *Information taken from the British National Corpus (BNC), Archer Corpus, and the Longman- Lancaster- Corpus.*

* each (*) represents more than 3 per 10000 ,

8.8. Corpora and Sociolinguistics

These types of corpora cover the written and/or the spoken texts, so that many investigations will be possible. These corpora make possible to investigate in many domains such as:

- Gender study

- Age study

- Social class study

- Genre study

A Sociolinguistic study can be made general such as the comparison of the parts of speech between genders (see table 17), or it can be made specific by making comparisons between special words (see table 18).

	Males %	Females %
Common Nouns	8.49	7.93
Proper Nouns	1.44	1.64
Pronouns	13.37	14.55
Verbs	20.30	21.52

Table 17: Main Gender' Parts of Speech Comparison.

The research made by Paul Rayson, Geoffrey Leech and M. Hodges[64] illustrates the gender study in the use of English vocabulary, using the BNC and the International Journal of Corpus Linguistics.

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[64] Paul Rayson, Geoffrey Leech and M. Hodges (1997:133-152). Social Differentiation in the Use of English Vocabulary

8.8.1. Lexical Variation by Gender

The following table shows the comparison of 20 words showing representation in male and female speech.

WORD	MALES	FEMALES
She	7134	22623
Her	2333	7275
Said	4965	12280
I	55516	92945
And	29677	50342
To	23467	39861
Christmas	288	1001
Thought	1573	3485
Lovely	414	1214
Nice	1279	2851
Had	4040	7600
Did	6415	11424
Going	3139	5974
Because	1919	3861
Him	2710	5188
Really	2646	5070
School	501	1265
He	15993	26607
Home	734	1662
Me	5182	9186

Table 18: Comparison between Male and Female Speech[65]

From the above statistics taken from corpora, we can get invaluable information about genders' speech variation. The use of certain words is deeply affected by male or female speech. After restricting the study to some main pronouns, we have made a brief comparison about the male and female[66] uses of these pronouns.

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[65] Data derived from Paul Rayson, Geoffrey Leech and M. Hodges (1997:133-152). From the BNC and the International Journal of Corpus Linguistics.

[66] The study includes the following pronouns: (she, he, I, me, her and him)
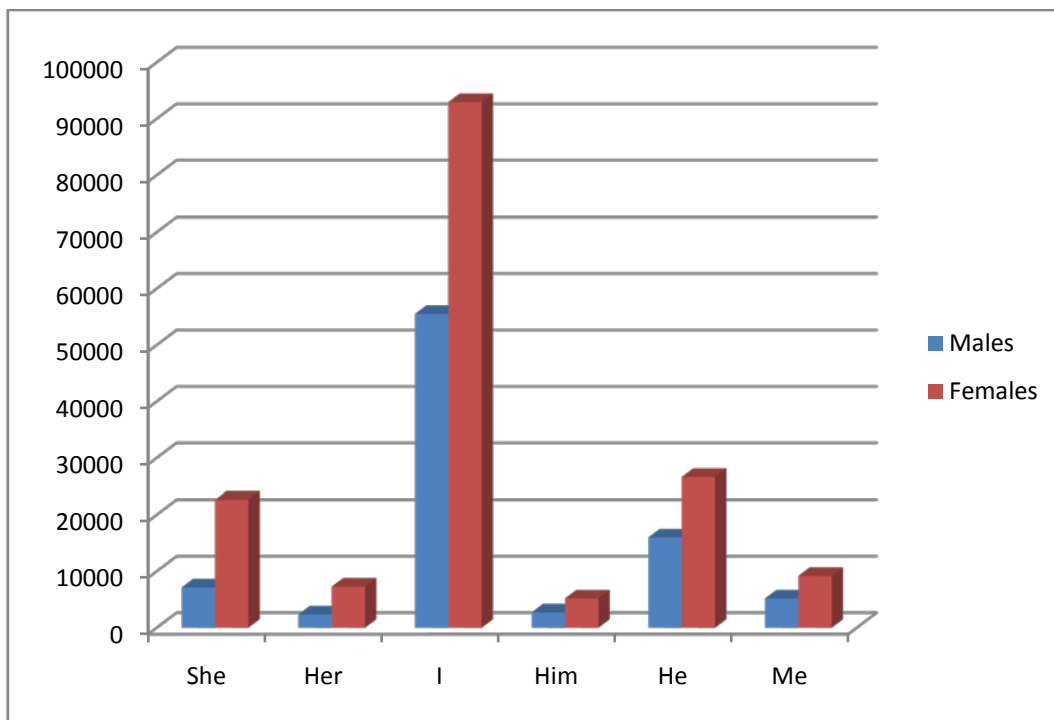
Graph 1: Pronoun Study in Male and Female Speech[67]

As noticed females' speech exceeds largely males' speech in terms of pronouns. The remark is also true when females are speaking about males (he, him…), this kind of information will be of great help to linguists in general and sociolinguists in particular.

8.9. Corpora and ESP

As well as the previous fields, corpora play an important role in ESP; the existence of specialised corpora in ESP (Business, finance, tourism, computer science…) has developed ESP investigations. In this context, Flowerdew[68] mentions:

> *The integration of corpora or electronic text collections in ESP (English for Specific Purposes e.g., Business Science, Tourism, Computer Science, Library Science, Telecommunications) is viewed as important way to enlarge learners' knowledge because different subject areas or knowledge domains can be integrated in one approach.*

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[67] Results in table 18 transformed into graph

[68] Flowerdew (2001: 71). The Exploration of Small Learner Corpora in EAP Materials Design

Nowadays, it is possible to find and explore specialised corpora that are designed to serve specific linguistic purposes such as business, electronics, medicine, economy, law, advertisement…Using such corpora is a real opportunity to extract information about the investigated field, before making the right analyses.

The following example illustrates a list of the main biology concepts[69]:

Abdomen	Duct	jaw	Secretion
Appendage	ferment	Juice	Sepal
bark	Fertilizing	Kidney	skull
beak	Fibre	liver	Slide
Bud	Fin	Lung	Soil
cartilage	germinating	Metabolism	Stain
Cavity	Gill	parent	Stalk
claw	Gland	petal	stamen
climber	Hoof	Pollen	Sucker
Creeper	Host	sac	thorax
domesticating	inheritance	Scale	Tissue

Table19: Biology Main Concepts

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[69] From the Basic Dictionary of Science (Biology list)

Invaluable information could be extracted from ESP corpora, such as collocations and concordances. In the following example we can find the result of the technical word "computer"[70], where all the technical concepts that are used with computer are shown as concordances and collocations.

Word	Collocations	Concordances
Computer	Computers connected	For individual computers connected via Terminal adapters, this is still the safest approach
	Computer Aided	Computer Aided Design and Computer Aided manufacture are just one part of this.
	Computer assisted	Tutorials plus computer assisted learning (CAL) .
	Laptop computer	They found his e-mails while searching a laptop computer.
	Portable computers	What you can do Portable computers don't have to be painful.
	Personal computer	Users can download music conveniently using an online music store from their personal computer directly via air.
	Computer science	My role was to examine grant applications in computer science education.
	Mainframe computers	A number of programmers working on big mainframe computers developed different computer games during the following years.
	Computer simulations	Computer simulations which have been prepared by the architects show how stunning the building will look with its new roof of green
	Computer screen	Who dislikes being expected to spend yet more hours with mind and body stranded on the opposite sides of a computer screen?
	Computer viruses	Computer viruses are a constant threat and lead to a lot of wasted time if a virus infects a PC.
	Laptop computer	Our digital laptop computer safe is designed for people who take their laptops home from work.
	Desktop computers	Not to be confused with the generic term ' pc ' applied to all desktop computers.
	Notebook computers	Either way, there's an ergonomic price to pay with notebook computers.

Table 20: Collocations and Concordances of "Computer"

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[70] Data derived from (Sketch Engine)

9. Conclusion

In this chapter we have introduced briefly the main theoretical concepts of corpora. In the last three decades, computational linguistics and corpus linguistics have considerably transformed the linguistic studies and the way they were undertaken. Nowadays, any linguistic investigation could be made in few seconds with a great precision thanks to the technological development, mainly in computer science.

Today it is a reality to witness and explore large storage capacities, computers with very powerful microprocessor speed. Thus, millions of words can be processed in just few seconds. The analysis will be easier than with traditional methods and the results obtained are more reliable.

Many domains are investigated thanks to electronic corpora: lexicography, dictionaries, register studies, stylistics, sociolinguistics, automatic translation and other fields can be investigated, explored and analysed by electronic corpora and by computers.

To sum up, we can notice that corpora are just tools to save very large texts in electronic forms; however, software that accompanies these corpora are the main elements that make the inert corpora useful and alive. Linguists have to explore deeply the processed results obtained from the corpus software and perform the adequate analysis of large lists of concordances, collocations and frequencies. Nowadays almost all countries in the world have created their national corpora the majority of these corpora are freely available via internet.

1. Introduction

This chapter deals mainly with middle and secondary school text origins, references, their contents and the related domains covered by these texts. This taxonomy will permit to make a comparative study with the BNC text origins and references. The methodology used in this chapter is that each textbook will be analysed and compared to the BNC alone. At the end a recapitulative study will be made for all the four books of the middle school level as one part and compared to the BNC materials.

As far as the secondary school textbooks are concerned, we will follow the same methodology as the previous category, where the content of each textbook will be analysed and compared alone with the BNC materials. At the end the three books of the secondary school level will be compared and analysed as a recapitulative study with the BNC materials.

This chapter presents a very important part of the research, because it will analyse deeply all the texts that are presented to support pupils in middle and secondary schools. The main findings and the main results of this part will be presented in the form of tables and/or graphs, followed by discussions and comments. When making comparisons, one can have an idea about the previous results he has obtained and those obtained by high institutions such as the British National Corpus which is designed by Oxford University Computing Service, which presents all the English language with 100 million words from selected texts collected from many and various domains and categories with accurate statistics presenting the real language proportions in real life use.

2. References and Origins Text Study

The objectives of this section consist of analysing all the middle and the secondary school textbooks relative to texts' origins and the statistics about reference types. A recapitulative study will be made at the end of each sub-section.

2.1. Middle School Text References and Origins

The objectives of this section consist of analysing all the middle textbooks (the four middle school textbooks) in what concerns texts' origins and the statistics about reference types.

2.1.1. The First Year Middle School Text Origins

The first year middle school textbook doesn't contain texts apart from some short passages and paragraphs. The majority of the first year middle school textbook unit files are based on vocabulary lists, short sentences, dialogues and other short texts without any reference[71]. In the next list we can find what is really referenced (2 songs, 1 poem and 1 short text)[72].

- Song: "We are the champions" (Queen) p. 63
- "Sam the Farmer" A short passage p. 93 (From the country News, March 24th , 2003)
- A song: "Wimoweh" (Paul Simon) p. 94
- Poem: "Trees" (Joyce Kilmer, Abridged version *on wings of verse*) p. 153

In the following list we can find the main first year middle school unreferenced short texts, dialogues…

- Dialogue p.108 (without any reference)
- "The Algerian Olympic Complex" a short passage p. 69(without any reference)
- "Fast Food" a short passage p.112(without any reference)
- "Listening Scripts" p.114 (without any reference)
- "Bill Gates" a short biography p.129 (without any reference)
- "The Little Red Riding Hood" a short passage p.134 (without any reference)
- "Teenagers" a short passage p.135(without any reference)
- "Listening Scripts" p.136 (without any reference)

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[71] The 1st Am book doesn't contain any reference list or any bibliography for the used short texts
[72] The text references are reported as they were written by the authors (sometimes without house editions, the year of publication, the page numbers…)

- " The Weather Forecast" p.147 (without any reference)
- "Mother Earth" a short passage p.151 (without any reference)
- "Children's rights" p.155(without any reference)
- "Animals' Hopes" a short passage p.156 (without any reference)
- "Listening Scripts" p.158 (without any reference)

2.1.1.1. First Year Middle School Reference Text Study Recapitulation

According to the results obtained from the study made in the previous section, the first year textbook consists of what follows:

	Number	Texts	Dialogues	Songs &Poems	Letters & emails
Referenced	04	01	00	03	00
Unreferenced	13	09	04	00	00

Table 21: First Year Middle School Reference Text Study

2.1.2. The Second Year Middle School Text Origins

As far as the 2nd year middle school textbook is concerned, this textbook is not based on real texts for reading comprehension; apart from some short passages and paragraphs. The majority of the second year middle school textbook unit files are based on vocabulary lists, short sentences, dialogues and other short texts without any reference[73]. Only one short text adapted from "The Old Man and the Sea" is really referenced[74].

In the following list we can find the main 2nd AM unreferenced short texts, dialogues…

- "A day in the life of Jane Smith" p.10 short text (without any reference)
- "Britney Spears Fan Club" p.13 biography (without any reference)
- "Pablo Picasso" p.15 biography (without any reference)
- "Baya Mahieddine" p.19 short biography (without any reference)
- "Listening Scripts" p.20 (2 dialogues, 2 short passages and a letter) (without any reference)
- "Learn about Culture" p.21(about 'Chaabi, Rap, Beethoven, 'Rhythm and Blues' and 'Hip-Hop') (without any reference)

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[73] The 2nd Am book doesn't contain any reference list or any bibliography for the used short texts
[74] A short passage p18 (adapted from '*The Old Man and the Sea*'. By Ernest Hemingway)

- "Judy the painter, Sonia the comedian and Harry Martin the musician" short passages p.24, used for practise activities such as: Copy the text using the right punctuation for the first, put the verbs into the right form for the second and find the opposite of some words for the third. (without any reference)
- "Listening Scripts" p.40 (3 dialogues and 1 short passage) (without any reference)
- "Learn about Culture" *The Story of Crosswords* p.41(without any reference)
- "Learn about Culture" p.42 (about 'video games', 'Chess', 'Flipper', 'Puzzle', 'Monopoly', 'Criss-Cross' and 'Scrabble' (without any reference)
- "Vitamins" p.62 a short passage used for practise activities without any reference)
- "The Five Food Groups" p.63 a short passage used for practise activities (without any reference)
- "Listening Scripts" p.64 (3 dialogues without any reference)
- "Listening Scripts" p.88 (3 dialogues without any reference)
- A play p.98 (without any reference)
- Dialogue p.99 (without any reference)
- "Djeha" a short text p.102 (without any reference)
- "Willy" a short story p.107(without any reference)
- Dialogue p.108(without any reference)
- "Listening Scripts" p.110 (3 dialogues without any reference)

2.1.2.1. Second Year Middle School Reference Text Study Recapitulation

According to the results obtained from the study made in the previous section, the second year middle school textbook consists of what follows:

	Number	Texts	Dialogues	Songs &Poems	Letters & emails
Referenced	01	01	00	00	00
Unreferenced	20	12	08	00	00

Table 22: Second Year Middle School Reference Text Study

2.1.3. The Third Year Middle School Text Origins

As far as the third year middle school textbook is concerned, it doesn't contain any reference or any bibliography list at the end of the book[75]. Some of these texts are referenced; however the large majority of them remain unreferenced.

In the following list we can find all the referenced materials used in the third year middle school textbook[76].

- "Hello" a Beatles' song p.51
- "Wonderful Trips with ONAT" advertisement p.58
- "For Auld Lang Syne[77]" p.77, a song written by Robert Burns (1759-1789)
- "Moby Dick" p.96, a short passage from Herman Melville's novel(Penguin Edition)
- "The Pyramids of Giza" p.147. Adapted from *Reflections*. Students' Book by James Taylor.
- "This Land is your Land" p.162 (Extract from a song by Woody Guthrie)

In the following list we can find all the unreferenced materials used in the third year middle school textbook.

- "Email" p.20
- "Letter" p.28
- "Looking for a Holiday Job in Britain" advertisement p.28
- Dialogues p.35
- "BBC Channels" a short passage p.36
- "Guard or Bear Killers" a short passage p.39
- "Letter" p.46
- Dialogue p.55
- "letter" p.59
- Dialogue p 59
- "Dennis Tito: The World's First Space Tourist" a short passage p.74
- "Loch Ness" a short passage p.77
- "letter" p.84

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[75] The 3ʳᵈ Am book doesn't contain any reference list or any bibliography for the used texts

[76] The text references are reported as they were written by the authors (sometimes without house editions, the year of publication, the page numbers…)

[77] 'For Auld Lang Syne' is a Gaelic song title which means "in Memory of Past Times"

- "Billy Fans" p.103, a short passage
- Four short paragraphs p.109
- Two letters p.110
- "Comprehensive School in Britain" p.111
- A letter p.119
- "The United Kingdom" p.133
- "Washington D.C." p.141
- "English in the World" p.148
- A short text p.157
- "Listening Scripts) pp. 164-170 (6 dialogues and 5 short texts)

2.1.3.1. Third Year Middle School Reference Text Study Recapitulation

According to the results obtained from the study made in the previous chapter, the third year middle school textbook consists of what follows:

	Number	Texts	Dialogues	Songs &Poems	Letters & Emails
Referenced	06	03	00	03	00
Unreferenced	34	17	09	08	00

Table 23: Third Year Middle School Reference Text Study

2.1.4. The Fourth Year Middle School Text Origins

This time and in contrast to the previous textbooks, the fourth year middle school textbook contains a list of acknowledgements for photo credits used in this book and for text credit quoted and/or adapted[78]. Some texts are referenced at the end of each page containing the target text; however, the large majority of them remain unreferenced.

In the following list we can find all the referenced materials used in the fourth year middle school textbook[79]:

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[78] Only three texts are referenced in the bibliography :p.23: Bernal Seal, Longman-p.51: Alchemy, Forum- p.152: Simon Greenall, Diana Pye, Cambridge

[79] The text references are reported as they were written by the authors (sometimes without house editions, the year of publication, the page numbers…)

- "Table Manners" a short text p. 23(from Bernal Seal, Longman)

- "A report" p.47 (from USA Today)

- "Alchemy" p.51(from Forum)

- " A Famous Address" a short text p. 64(*I have a Dream*, by Martin Luther King)

- " A Rainy Sunday" P.82-83 Lyrics of Jimmy Spheens

- "If I Had a Hammer" a song P.140, by Peter, Paul and Marry

- " Snow White" p.156-157-158 (from Grimm's Fairy Tales) Penguin

- "Yesterday" a song p.164, by the Beatles

In the following list we can find all the unreferenced texts used in the fourth year middle school textbook.

- "Pancake Day" a short text p. 22

- " The Restaurant" a short text p. 32

- "Nepalese Food" a short text p.38

- "If you are Happy and you Know it" a song p.40

- " Children's Anxiety" a short text p.46

- "The Robot" a short text p.57

- " How Long Can We Hope to Live?" a short text p.62

- A dialogue p.69

- " Paul's Expectations" a short text p.70

- " Becky's Expectations" a short text p.71

- "Family of Art" a short text p.73 (about art)
- "Brad and Tracy" a short text p.74

- A letter p.96

- "The House that Jack Built" a poem p.100

- Dialogue p. 102

- "Martin Luther King" a short text p.107

- "Memories" a short text p.112

- " Where Have all the Flowers Gone?" a song p. 116

- Abd-el-Kader's diary p. 122

- Ronald's e-mail p.123

- "Nacera" a short text p.125

- "Nacera's letter" p. 134

- "To Whom it May Concern" a letter of reference P. 138

- A dialogue p.145
- " The Tragic Accident" a short text p.147
- "Joha and the Pot" a short story p.151
- "Thomas Alva Edison" Biography p.161
- " Caught in a Straight Jacket" a short text p.162
- "Listening Scripts" pp.164-175(12 dialogues and 3 short texts and a poem)

2.1.4.1. Fourth Year Middle School Reference Text Study Recapitulation

According to the results obtained from the study made in the previous chapter, the fourth year middle school textbook consists of what follows:

	Number	Texts	Dialogues	Songs &Poems	Letters & Emails
Referenced	08	05	00	03	00
Unreferenced	42	20	15	02	05

Table 24: Fourth Year Middle School Reference Text Study

2.1.5. Middle School Reference Text Study recapitulation

This table gives a brief glance to all middle textbook[80] content types studied above:

	Number	Texts	Dialogues	Songs &Poems	Letters & Emails
Referenced	19	10	00	09	00
Unreferenced	109	58	36	10	05

Table 25: Middle School Reference Text Study Recapitulation

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[80] All the four middle school textbooks
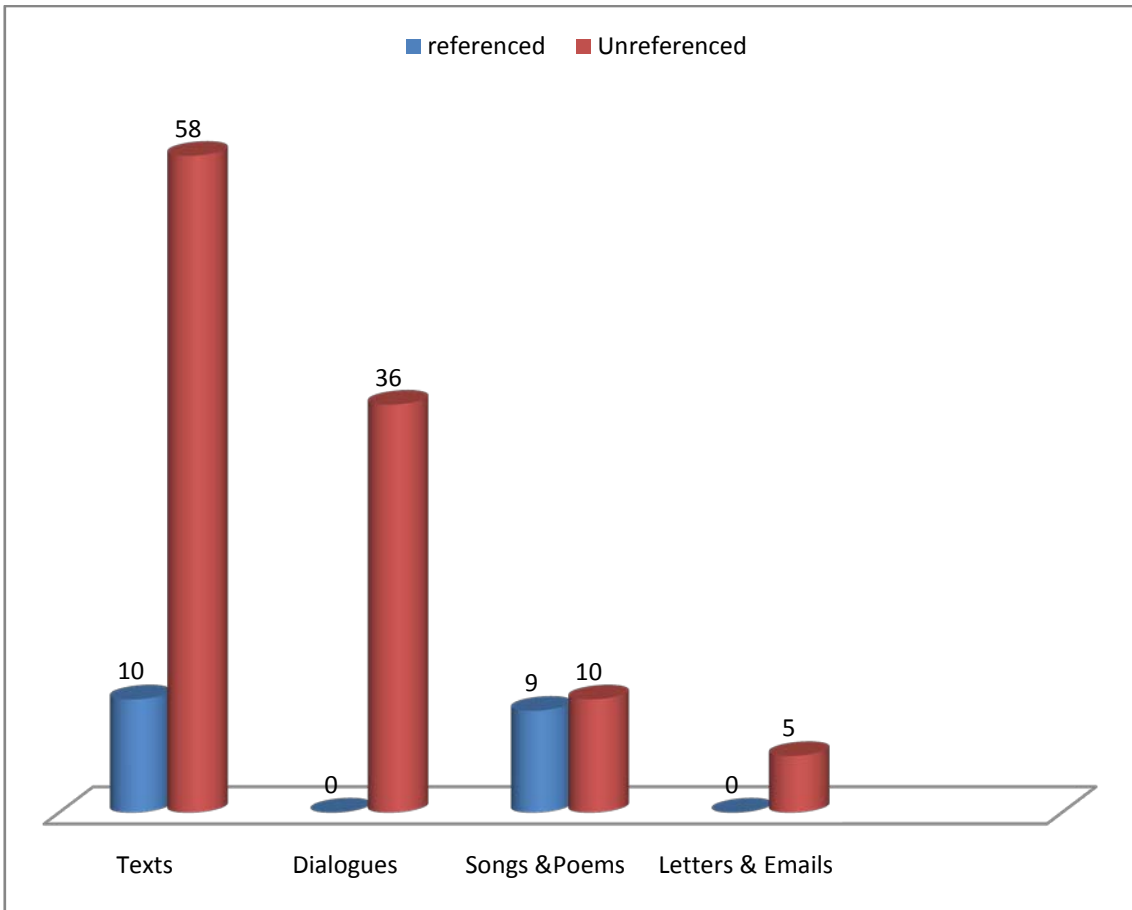
Graph 2: Middle School Reference Text Study

This graph shows clearly that in the middle school textbooks the unreferenced materials are dominating the referenced ones and that in each case the unreferenced texts present the lion's part followed by unreferenced dialogues.

2.2. Secondary School Text References and Origins

The objectives of this section consist of analysing all the secondary textbooks (the three secondary school books) in what concerns texts' origins and the statistics about reference types.

2.2.1. First Year Secondary School Text Origins

The first year secondary school textbook contains a page of acknowledgements and references for quoted and/or adapted texts[81]; however, not all the texts are referenced in this list, some of them are referenced at the end of the each text and the others are not referenced at all.

In the following list we can find all the referenced texts used in the first year secondary school textbook[82].

- "A book review" p.51(From the Daily Mail)
- "Summary of *'Things Fall Apart'*p.52 (From the book cover of *'Things Fall Apart'* C. Achebe)
- Text p.53 (From *'Things Fall Apart'* C. Achebe)
- Text p.57 (Adapted from *'Hard Times'* Charles Dickens)
- Text p.59(Adapted from *'Alice's Adventures in Wonderland'* By Lewis Carroll's.Penguin)
- A fable p.68 "The Stork and the Pitcher" (Adapted from Jean de la Fontaine's *Fables*"
- A fable p.68 "The Oak Tree and the Reeds"(Adapted from Jean de la Fontaine's *Fables*"
- Poem p.69 "My Country" by Dorothea Mackellar
- Text p.70 "Ghandi: A Story of Life" by Y. Chadha
- Text as a report p.83 "Computer Use" (From The Times: September 13th , 2004)
- Text p.88 "Decent Behaviour" (Adapted from the Reader's Digest, 1999, pp.45-46)
- Text p.115 "Communication" (Adapted from Hutchinson Encyclopaedia)
- Text p. 121 "Television" (A student paper)
- Text p.145 "Chemicals at War against Man" (Adapted from Paul Thacker, *Popular Science*, p.35, July, 2001)

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[81] Acknowledgements and text credits : « At the Crossroads SE1(2009- p 176)

[82] The text references are reported as they were written by the authors (sometimes without house editions, the year of publication, the page numbers…)

- Letter p.21 (From English International)
- Text p.91 (From English International)
- Text as a report P.96 (From "Look Ahead", Longman)
- Text p.132 (From Hutchinson Encyclopaedia)
- Text p.126 "The Making of a Scientist" (From *Popular Science*)
- Text p.129 "Cloning" (From Gat Magazine)
- Text p.156 "Renewable Energy" (From Forum)
- Text p.162 "The Worldwide Energy Pie" (From Hutchinson Encyclopaedia)
- Expressions p.164 "Weather Words" (From Forum)

In the following list we can find all the unreferenced texts used in the first year secondary school textbook.

- A letter p.35
- A letter p.45
- A dialogue p.61
- A dialogue p.66
- A short story p.72
- Advice column p.91
- A text as a report P.96
- A text about Sugar Production p. 101
- A letter p.120
- An untitled text p.123
- An untitled text p.123
- An untitled text p.127
- An untitled text p.133
- An untitled text p.134
- A dialogue p.148
- A text "Eco-clean: Kind to your environment and kind to you!" p.150
- An untitled text p.155
- A text "Don't be a litter lout" p.158
- A letter p.160
- An untitled text p.163
- Listening Scripts pp.168-174 (9 dialogues and 2 texts)

2.2.1.1. First Year Secondary School Reference Text Study Recapitulation

According to the results obtained from the study made in the previous section, the first year secondary school textbook consists of what follows:

	Number	Texts	Dialogues	Songs &Poems	Letters & Emails
Referenced	23	19	00	03	01
Unreferenced	32	16	12	00	04

Table 26: First Year Secondary School Reference Text Study

2.2.2. Second Year Secondary School Text Origins

The second year secondary school textbook contains a page of acknowledgements and references for quoted and/or adapted texts[83]; however, not all the texts are referenced in this list, some of them are referenced at the end of the each text and the others are not referenced at all.

In the following list we can find all the referenced texts used in the second year secondary school textbook[84]:

- A text about memories p.19 (From "Memories of an Algiers Childhood" Salah Chaib)
- A text p.32 "*Traditional Manners and Changing Manners*" (adapted from Internet)[85]
- A text p.33 "*Barber or Doctor?*" (Adapted from Graham Reynolds, *Turner*, Thames and Hudson)
- A text p.34 "*Do it in Style!*" (from Modern English International N°9p.8:1982)
- A cardboard p.35 "*Food Reckoner*" (from Fruit d'Or)
- A song p.53 "*When I'm Sixty-Four*" (from the Beatles, 1966)
- A text p.54 "*Keep America Clean*" (Advertising Council)
- A poem p.55 "A Nation' Strength" (by Ralph Waldo Emerson; 1803-1882)
- Children Right Convention p.56 (from Human Rights, Vol.1, United Nations)
- A song p.57 "*American Friends*" (from Julia Stein, Desert Soldiers, California Classics)

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[83] Acknowledgements and text credits : « Getting Through SE2(2006- p 208)

[84] The text references are reported as they were written by the authors (sometimes without house editions, the year of publication, the page numbers…)

[85] This reference is mentioned by the authors without specific website

- A text p.74 " *A World without Oil*" (from BBC Modern English)
- A text P.75 "*Energy Consumption in Modern Times*" (Adapted from Forum p.68)
- A text P.76 "*The Conservation of Human resources*" (from the Book of Popular Science pp.11-12)
- A text P.77 "*The World's Water Supply*" (from Forum, 1999,p.48)
- A text P.95 " *A Bag of Tricks*" (from Adventures Ahead, Brace and World)
- A text p.96 "*Arab Science*" (from the Book of Popular Science)
- A text p.97 "*The Property of Buoyancy*" (from the Book of Popular Science)
- The book cover p.106 " *Grimm's Fairy Tales*"P.106 (Penguin Classics)
- A text p.114 " *Learning the Hard Way*" (from fables of Aesop, Penguin Classics, p.199)
- A text p.114 " *The Little Girl and the Wolf*" (from James Thurber, Fables for our times)
- A text p.115 "*The Story of a the Chest*" (By Taous Amrouche, "*Le Grain Magique*" from Winding Threads edited by H. Burner)
- A text p.116 " *The Grateful Friends*" (from "*Grimm's Fairy Tales*" Penguin Popular Classics,p.58)
- A text p.134 "*Solidarity in Natural Disasters*" (Adapted from the Internet, www.unisdr.org)
- A text p.135 "International Federation of Red Cross" (Adapted from Internet)
- A text p.136 "*Charities*"(Adapted from Oxford Guide to British and American Culture p.100)
- Dictionary Entry p.145 (from Oxford Learner's Dictionary)
- A text p.155 "Frankenstein" (From Mary Shelley's Frankenstein, retold by Patrick Nobes)
- A text p.156 "*Those Mysterious Flying Saucers*"(from the Book of Popular Science,vol.9,p.17)
- Fact File p.157 "*Will Volcanoes Cause the End of the World*?" (from Daily Mail, March 9, 2005)
- A poem p.164 (from Hornsby and Shear, Hints on Pronunciation for Foreigners"
- A text p.176 "*The Good Society*"(From New Statesman and Society, January 28, 1994)
- Chart and tables pp. 176-177 "*Stock Market*" (From the times Business, May,26,2004)

- A text p.178 " Economic Freedom" (From Milton and Rose Friedman, *Freedom to choose*)

In the following list we can find all the unreferenced texts used in the 2nd AS book.

- An untitled text p.16
- An untitled text p. 21
- A text pp.24-25 "What People Eat"
- A dialogue p.28
- An untitled text pp.38-39
- A dialogue p.42
- A text pp.48-49 "Martin Luther King, The Man of Peace"
- An untitled text p.60
- An untitled text p.69
- An untitled text pp.80-81
- A text p.86 "University College Open Day"
- A dialogue p.87
- An untitled text pp.89-90
- A text pp.100-101 "Tsunami in the News"
- An untitled text p.104
- A text p.109 " Head on Collision on Highway"
- An untitled text p.110
- A text p.120 "How Charitable are your Youth?"
- Interview with Bill Gates p.122
- An untitled text p.129
- An untitled text (about science fiction) pp.139-140
- An untitled text p.149 (about discoveries)
- A dialogue p.151
- A letter p.160
- Letters p.161
- A text "American Women at Work" pp.170-171
- Listening scripts pp.179-186 (5 dialogues and 2 texts)

2.2.2.1. Second Year Secondary School Reference Text Study

According to the results obtained from the study made in the previous section, the second year secondary school textbook consists of what follows:

	Number	Texts	Dialogues	Songs &Poems	Letters & Emails
Referenced	33	29	00	04	00
Unreferenced	33	21	10	00	02

Table 27: Second Year Secondary School Reference Text Study

2.2.3. Third Year Secondary School Text Origins

The third year secondary school textbook contains a page of acknowledgements and references for quoted and/or adapted texts[86]; however, not all the texts are referenced in this list, some of them are referenced at the end of the each text and the others are not referenced at all. In the following list we can find all the referenced texts used in the third year secondary school textbook[87]:

- A text pp 22-23 "Algeria at the crossroad of Civilizations" Adapted from *Africana*: *The Encyclopaedia of African and African American Experience.* K.A. Appiah and H.L. Gates, Jr. 1999:p.69. Persus Books.

- An untitled text about Egyptian civilization pp37-38, from victor Skipp, out of the Ancient World, Penguin, p.61

- Two poems p.44, about the "Rise and Fall of Civilizations" By Langston Hughes (1902-1967), Weary Blues[88]and Percy Bysshe Shelley (1792-1822)[89]

- A text pp 54-55 "*Imitating Property is Theft*", from *The Economist* May 17th, 2003

- An untitled text pp.66-67 about business. Adapted from Bill Mascull, *Business Vocabulary in English*, p.90, CUP.

- A song p.73, "Money, money, money…" By ABBA

- A text pp 83-84 "*Education in Britain*". From *Guide to British and American Culture,* p. 66, OUP 2001

- An untitled text about American Education pp.98-99, from D.K. Stevenson, *American life and Institutions*, USIA,1992

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[86] Acknowledgements and text credits : "New Prospects"   SE2(2007- pp 271-272)
[87] The text references are reported as they were written by the authors (sometimes without house editions, the year of publication, the page numbers…)
[88] Reference of the 1st poem
[89] Reference of the 2nd poem

- A song p.105, "What did you learn in school today?" By Tom Paxton
- A text p.114, "How is Your Energy Balance?" Written by the authors[90]
- A text p 126. "*Without Advertising, you Couldn't Afford a Football Match Ticket*. Reader's Digest, May, 2003
- An untitled text p.131. Hugh Cory, Advanced writing, OUP, p94,2006
- A song p.134. M. Charlot et. al, Let's go! Armand Colin
- A text p. 143-144 "The *Solar System*". From the *Book of Popular Science,* Glorier and Alain. E. Nourse, *The Giant Planets*
- An untitled text pp.157-158. (About planets) *From International Herald Tribune*, Tuesday, July 5th , 2005, p.8
- A song p.164, "Astronomy Domine" By Pink Floyds
- A short text p.168, "Keys to Happiness", from the Reader's Digest, December 1997, p.97
- A text p.174-175 "Feelings". From the Oxford Guide to British and American Culture, p.192
- A text p.186, "What I Have Lived for?" By Bertrand Russell,1872-1970
- A text p.189-190 "*The Unicorn in the Garden*". Adapted from James Thurber, *Fables of our time*, Penguin.
- Listening Script pp.196-197 "Radio Interview". Adapted from Victor Skipp. "*Out of the Ancient World*"
- A song p.195, "Love is all" By Roger Glover and Guests/Butterfly Ball (1974)
- A text p.198, "*Listening and Speaking*". Adapted from Victor Skipp. "*Out of the Ancient World*"
- A text p.201 "A *School Child's Parent in the Headmaster's Office*". Margaret Archer and Enid Nolan-Woods. Adapted from Cambridge First Certificate English. A Course for First Certificate, Nelson. p.69, 1977
- A text pp.202-203, "Life Story", part I and part II. Adapted from Eva Meushaw, ed. *Adventure Ahead*, Hartcourt
- An untitled text p.206, from Modern English International p.32
- Listening Scripts p.207, "Radio Interview". Adapted from "*The Good News Magazine*"

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[90] "The New Prospect" authors are: S.A.Arab, B.Riche and M.Bensemmane.

- Listening Scripts pp.208-209, "Radio Interview". Adapted from *The Reader's Digest,*2002

- An untitled text pp.209-210. *Adapted from Skills in English,* level 3. Garnet Education

- A text p.240, *"The Spread of Civilisation in the Maghreb and its impact on Western Civilization". From the General History of Africa*, Unesco,1997,Vol.IV,pp.24-28

- A text p.241, "Did the West Begin on the Banks of the Nile?" By Sharon Begly. Adapted from Newsweek, September 23, 1991,pp.45-46

- A text p.242, "*How Societies Choose to Fail or Survive*", from The Financial Times, January 22-23,2005,p.26

- A text pp.243-244, "*Lest We Forget our History*". Adapted from Carina Ray, "Lest We Forget We Have a History", in The New African, N°469, January2008

- A text p.245, *"Anti-Corruption Education"*. Adapted from Bettina Meier, TI, International Secretariat, "*Anti-Corruption Education", November,2004*

- A text p.246, "*Threats on UK E-Trade*" By Elisabeth Judge. From *The Times,* May 28, 2002.

- A text pp.247-248 "*It's a Moral Issue*". From David Lodge, *Nice Work*,1988

- A text pp.248-249 "*Bribe-Taking is Wrong*". Adapted from Chinua Achebe's *No Longer at Ease*, London, Heinemann, pp.1-154

- A text pp.250-251 "*Recommendations Concerning Education*"[91] From a Compilation of International Instruments, New York: United Nations, 1994, pp.600-601

- A text pp.251-253 "*How to Educate Children*". From Charles Dickens, *Hard Times*. Penguin.

- A text p.254 "*Computers Vs Books*" From Lee Lacocca[92], *Taking Straight*, 1988

- A text p.255 "The Story Behind Supermarket Success". From Looking Ahead, p.40. Longman

- A text p. 256 "*The Functions of Advertising*" From Robert Miller, *The New Classes*, 1988

- A text p. 257 "*How the Food Industry Poisons Our Children*" By Joanna Blythman. Adapted from the Daily Mail, May 26, 2004

- A text p.258 "The Basic of Consumer Behaviour" From www.advertopedia.com /consumer-behaviour-basics.htm

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[91] Recommendations Concerning Education for International Understanding, Co-operation, Peace and Education Relating to Human Rights and Fundamental Freedoms. Adopted by General Conference of the UNESCO at its 18th session on 19 November 1974
[92] Lee Lacocca was president of the Chrysler Corporation when the text " Computers Vs Books" was written

- A text p.259 "*The Children Who Don't Know Chips from Potatoes*". From Daily Mail, Monday, November 7, 2006, p.7
- A text p.260 " *The Benefits of Space Exploration*" From Carl Sagan, Cosmos
- A text p.261 *"Mission to Venus or to Hell?"* From Michael Hanlon, Daily Mal, Monday November 7, 2005, P. 15
- A text p.262 "The Satellite Era" From *Exploring the Cosmos, The UNESCO Courrier*, January 1993, p.10
- A text pp.262-263 "*Remote Sensing*" From Kiran Karnick, "*Remote Sensing*" in *UNESCO Courrier*, January, 1993, 15-17
- A text p.264 "*The Martian are Coming*" from U.S. News and World Report, Dec.27, 1999, P.42
- A text pp.265-266 "*Letter to my Nephew*" From James Baldwin, *The Fire Next Time*" pp.3-10. Vintage
- A text pp.266-267 "*Why we Laugh*" Adapted from Edgard V. Roberts, *Writing Themes about Literature*, pp.114-145
- A text pp.267-268 "Sport and Friendship among Peoples" From The UNESCO Courrier, December 1992, p. 19
- A text pp.268-269 "*A National Religion*" From Maryanne Kearny Datesman, *The American Ways*, Longman, 1997,pp.50-51
- A text p.269 "*April Fool!"* Adapted from *Modern English International*
- A text p.270 "*Meeting one's Partner*" Adapted from *New Society*, March 22,1973

In the following list we can find all the unreferenced texts used in the third year secondary school textbook.

- An untitled text pp.179-180 (About the life of Diana)
- Listening Script p.199, "Radio Interview".
- Listening Script p.200, three business friends conversing over a cup of tea.
- Listening Script p.204. A journalist Interview
- Listening Script p.205. A dialogue

2.2.3.1. Third Year Secondary School Reference Text Study Recapitulation

According to the results obtained from the study made in the previous section, the first year textbook consists of what follows:

	Number	Texts	Dialogues	Songs &Poems	Letters & Emails
Referenced	57	47	03	07	00
Unreferenced	05	01	04	00	00

Table 28: Third Year Secondary School Reference Text Study

2.2.4. Secondary School Reference Text Study Recapitulation

This table gives a brief glance to all secondary textbooks[93] content types studied above:

	Number	Texts	Dialogues	Songs &Poems	Letters & Emails
Referenced	113	95	03	14	01
Unreferenced	70	38	26	00	06

Table 29: Secondary School Reference Text Study Recapitulation
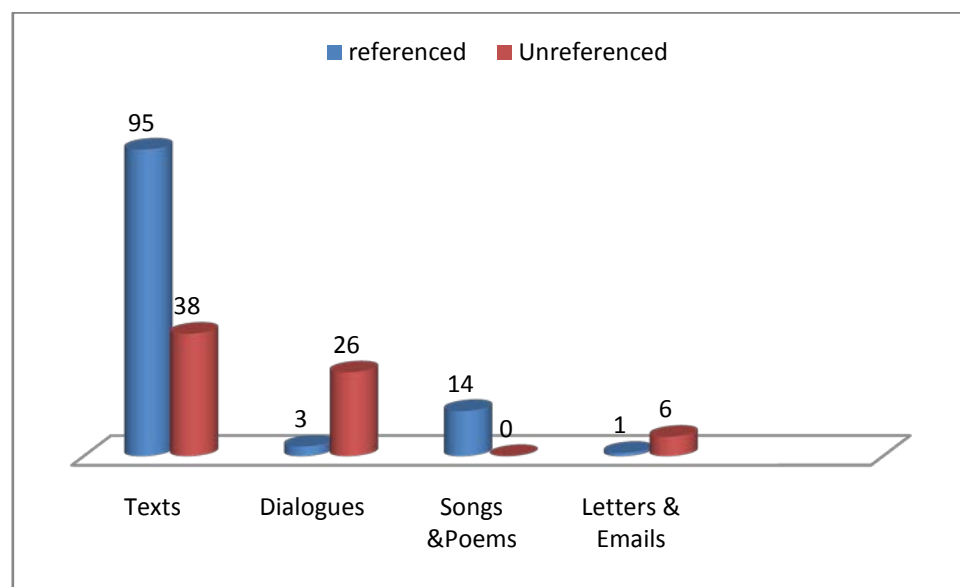
Graph 3: Secondary School Reference Text Study

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[93] All the three secondary school textbooks

This time and in contrast to the middle school statistics, the above graph shows clearly that in the secondary school textbooks the referenced materials are dominating the unreferenced ones and that in each case the texts present the lion's part followed by dialogues.

3. Content Type Study

In this section, a study will be made about all the middle and the secondary school textbook files. A recapitulative study will be made for each sub-section alone.

3.1. Middle School Files' Topic Taxonomy

In this sub-section, a study will be made about all the middle school textbook files. A recapitulative study will be made for each sub-section alone.

The first year middle school book consists of seven files:

- File 01: Hello!

-File 2: Family and Friends

-File 3: Sport

-File 4: In and Out

-File 5: Food

-File 6: Inventions and Discoveries

-File 7: Environment

The second year middle school book consists of five files:

-File 1: A Person's Profile

-File 2: Language Games

-File 3: Health

-File 4: Cartoons

-File 5: Theatre

The third year middle school book consists of four files:

-File 1: Communications

-File 2: Travel

-File 3: Work and Play

-File 4: Around the World

The fourth year middle school book consists of six files:

-File 1: It's my Treat

-File 2: You can do it

-File 3: Great Expectations

-File 4: Then and Now

-File 5: Dreams, Dreams…

-File 6: Fact and Fiction

The middle school textbook files' topics have the following partition

N°	Files' topics	Numbers
1	Communication	02
2	People	05
3	Sports	01
4	Culture	04
5	Food	02
6	Health, environment, science and technology	03
7	Art	03
8	Travel and tourism	02
	Total	22

Table 30: The Middle School Textbook Topic Taxonomy

As seen the above table and the below graph, we can notice that we have an almost equilibrate files' topics with a light domination of people and culture topics.
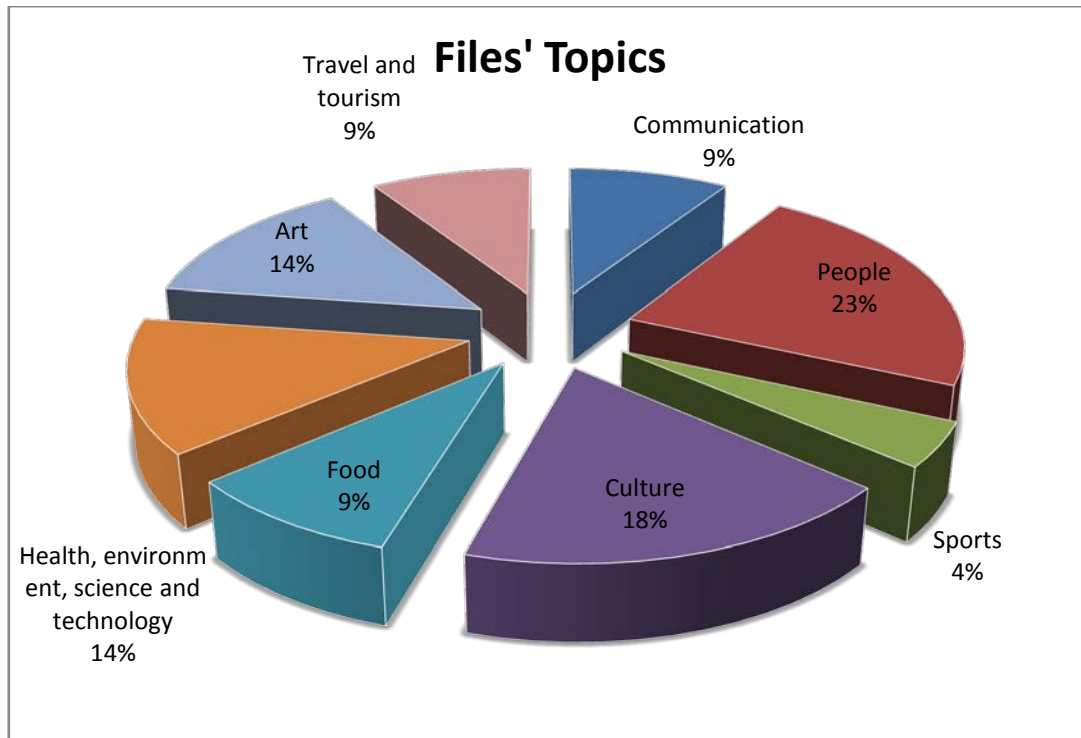
Graph 4: Middle School Textbook Files' Types

3.2. Secondary School Textbook Files' Types

In this sub-section, a study will be made about all the secondary school textbook files. A recapitulative study will be made for each sub-section alone.

First Year Secondary School Textbook files' types:

The first year secondary school book consists of five files:

- File 01: Getting through (communication)

-File 2: Once upon a time (art /literature)

-File 3: Our findings show…. (Journalism/ reporting)

-File 4: EUREKA! (Science and technology)

-File 5: Back to nature (environment)

Second Year Secondary School Textbook files types:

The second year secondary school book consists of eight files:

- File 01: Signs of the Time

-File 2: Make Peace

-File 3: Waste not, Want not

-File 4: Budding Scientist

-File 5: News and Tales

-File 6: No Man is an Island

-File 7: Science or Fiction?

-File 8: Business is Business

Third Year Secondary School Textbook Files' Types:

The third year secondary school book consists of six files:

- File 01: Ancient civilisations

-File 2: Ethic in business

-File 3: Education in the world

-File 4: Advertising, consumers and safety

-File 5: Astronomy and the solar system

-File 6: Feelings, emotions; humour and related topics

3.2.1. Secondary School Files' Topic Taxonomy

The secondary school textbook files' topics have the following partition

N°	Files' topics	Numbers
1	Communication	02
2	People	04
3	Culture and Education	02
4	Food	01
5	Health, environment, science and technology	05
6	Art/Literature	02
7	Business	02
8	Civilisations	01
	Total	19

Table 31: The Secondary School Textbook Topic Taxonomy

As seen the above table and the below graph, we can notice that the secondary school texts have an almost equilibrate files' topics with a light domination of health, environment, science, technology and people topics.
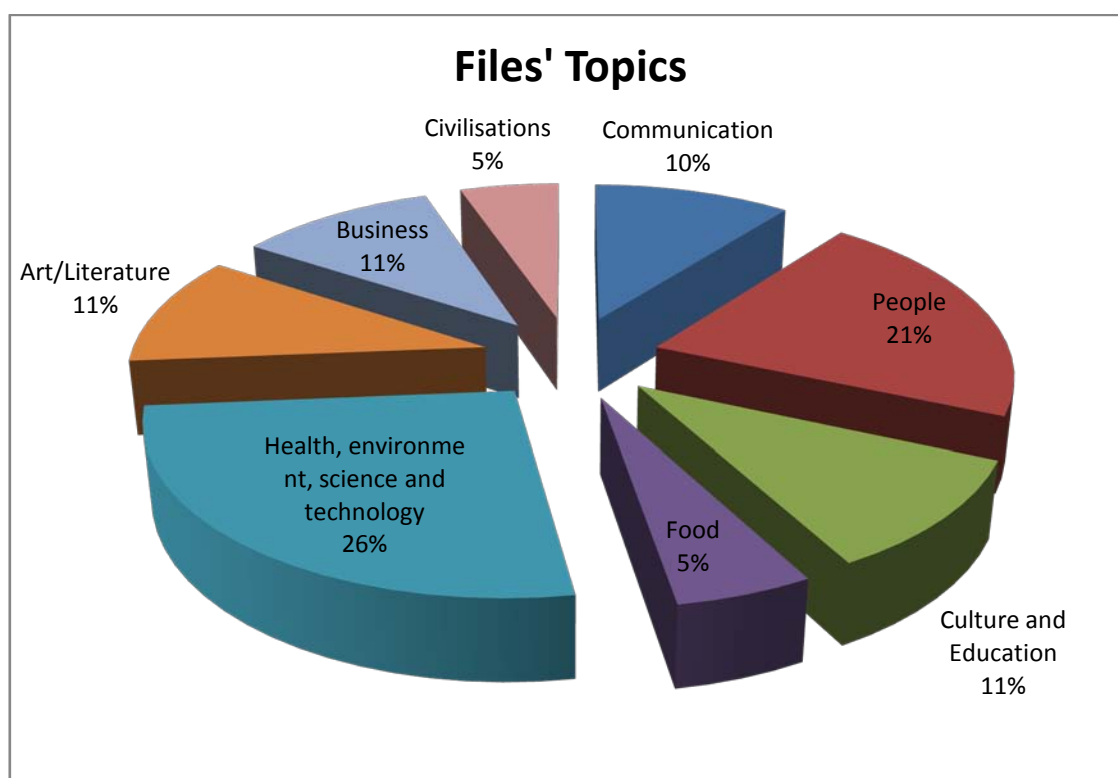
Graph 5: Secondary School Textbook File Types

4. Domain Study

The objectives of this section consist of analysing all the middle and the secondary school textbooks in what concerns statistics about domain types. But before making domain analysis let us see the BNC domains[94].

4.1. BNC Domains

The BNC consists of many domains that cover various fields such as business, imaginative, science and technology…. The following table illustrates the British National Corpus domains.

	Domains	%
1	Imaginative	21.91%
2	Belief & thought	3.40%
3	Commerce & world affairs	26.32%
4	Leisure	11.13%
5	Natural & applied sciences	12.39%
6	Social sciences	14.39%
7	Arts	8.08%
8	Unclassified	1.93%

Table 32: The British National Corpus Domains[95]

These domains were rationally presented in the British National Corpus to reflect the real text proportions of the English language; meanwhile the British National Corpus remains the most representative corpus of English language and its accurate reference.

4.2. Middle School Textbook Domain Study

This section will study the domains covered by middle school textbooks[96], but according to the previous study made about texts origins we have noticed that the majority of middle school textbooks are untitled and unreferenced; that is why the following study will focus on reading almost all the middle textbook texts and guess the domains covered taking into account the target file they belong to.

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[94] From the BNC manual (L. Burnard:2000).OUP
[95] From the BNC manual (L. Burnard:2000).OUP
[96] See text origins in chapter 3

4.2.1. First Year Middle School Textbook Domain Study

After the text reference and files' topic study made in the previous sections, we have investigated the domain taxonomy. Texts were partitioned seven main domains in addition to the unclassified one, where all the texts belonging to any of the seven domains will be classified alone.

	Domains	Number of texts	%
1	Imaginative	01	7.69 %
2	Belief & thought	/	00 %
3	Commerce & world affairs	/	00 %
4	Leisure	04	30.76 %
5	Natural & applied sciences	02	15.38 %
6	Social sciences	06	46.15 %
7	Arts	/	00%
8	Unclassified	/	00%

Table 33: The 1st Year Middle School Textbook Domains

We can remark clearly that in the first year middle school textbook type are just short paragraphs, passages and dialogues.

4.2.2. Second Year Middle School Textbook Domain Study

	Domains	Number of texts	%
1	Imaginative	01	4.34 %
2	Belief & thought	/	00 %
3	Commerce & world affairs	/	00 %
4	Leisure	02	8.69 %
5	Natural & applied sciences	02	8.69 %
6	Social sciences	03	13.04 %
7	Arts	13	56.52 %
8	Unclassified	02	8.69 %

Table 34: The 2nd Year Middle School Textbook Domains

We can remark that in the second year middle school textbook apart from some texts, the remaining part of the second year middle school textbook is in the form of short paragraphs and dialogues.

4.2.3. Third Year Middle School Textbook Domain Study

	Domains	Number of texts	%
1	Imaginative	01	04 %
2	Belief & thought	03	12 %
3	Commerce & world affairs	02	08 %
4	Leisure	08	32 %
5	Natural & applied sciences	04	16 %
6	Social sciences	06	24 %
7	Arts	01	04 %
8	Unclassified	/	00 %

Table 35: The 3rd Year Middle School Textbook Domains

As in the previous textbooks, we can't find a large number of referenced texts in the third year middle school textbooks. Only twenty texts are used in this textbook and only three are referenced, followed by songs, poems and dialogues.

4.2.4. Fourth Year Middle School Textbook Domain Study

	Domains	Number of texts	%
1	Imaginative	04	17.39 %
2	Belief & thought	03	13.04 %
3	Commerce & world affairs	01	04.34 %
4	Leisure	02	08.69 %
5	Natural & applied sciences	03	13.03 %
6	Social sciences	09	39.13 %
7	Arts	01	04.34%
8	Unclassified	00	00 %

Table 36: The 4th Year Middle School Textbook Domains

As in the previous sub-section, texts are largely used than the previous textbooks but with very poor rate in what concerns the referenced ones. The second main part is that of dialogues followed by songs/poems and letters/emails.

4.2.5. Middle School Textbook Domains' Recapitulative Study

	Domains	Number of texts	Middle school textbook domain rates	BNC Rates
1	Imaginative	07	08.33 %	21.91%
2	Belief & thought	06	07.14 %	3.40%
3	Commerce & world affairs	03	03.57 %	26.32%
4	Leisure	16	19.04 %	11.13%
5	Natural & applied sciences	11	13.09 %	12.39%
6	Social sciences	24	28.57 %	14.39%
7	Arts	15	17.86 %	8.08%
8	Unclassified	02	02.38 %	1.93%

Table 37: Middle School Textbook Domains' Recapitulative Study

In this section, we have taken all the middle school textbooks and we have made a comparative study with the BNC results. What could be noticed, is that only the natural and applied science text rate of the middle school textbooks is typically identical to BNC one. As far as the others are concerned, rates are not respected at all.

4.3. Secondary School Textbook Domain Study

This section will study only secondary school textbooks because all the middle school textbooks contain only unreferenced texts in general; that is why the following study will focus on secondary school textbooks and perhaps. The obtained results will be useful to undertake the next investigation.

4.3.1. First Year Secondary School Textbook Domain Study

	Domains	Number of texts	%
1	Imaginative	07	35%
2	Belief & thought	02	10%
3	Commerce & world affairs	00	00%
4	Leisure	00	00%
5	Natural & applied sciences	08	40%
6	Social sciences	03	15%
7	Arts	00	00%
8	Unclassified	00	00%

Table 38: The 1st Year Secondary School Textbook Domains

As seen in the above table, and if we compare the first year secondary school textbook domains with the BNC domains, we can say that in what concerns imaginative texts and social science texts it is almost the same rates. However, for natural and applied science texts, this category is highly represented (40%) if compared with the BNC one (12%).

4.3.2. Second Year Secondary School Textbook Domain Study

	Domains	Number of texts	%
1	Imaginative	07	25%
2	Belief & thought	03	10.71%
3	Commerce & world affairs	02	7.14%
4	Leisure	00	00%
5	Natural & applied sciences	09	32.14%
6	Social sciences	07	25%
7	Arts	00	00%
8	Unclassified	00	00%

Table 39: The 2nd Year Secondary School Textbook Domains

The second year secondary school textbook domain rates are nearly the same as the BNC domains, mainly in what concerns imaginative text category; however, the other categories are either highly presented such as belief and thought, natural and applied sciences and social sciences or less presented such as commerce and world affairs; for the other BNC domains, they are not presented at all.

4.3.3. Third Year Secondary School Textbook Domain Study

	Domains	Number of texts	%
1	Imaginative	02	3.57%
2	Belief & thought	10	17.85%
3	Commerce & world affairs	12	21.42%
4	Leisure	04	7.14%
5	Natural & applied sciences	11	19.64%
6	Social sciences	16	28.57%
7	Arts	00	00%
8	Unclassified	01	1.78%

Table 40: The 3rd Year Secondary School Textbook Domains

The third year secondary school textbook domain rates are not different from the other secondary school textbook domain rates. The main difference is that imaginative text category is less presented in the third year secondary school textbook by 3.57% if compared with the BNC rate with more than 21%. The Belief and thought, the natural and applied science and the social science categories are highly presented if compared with the BNC rates of the same categories; however, and in contrast, leisure, commerce and world affair categories are less presented than the BNC categories.

4.3.4. Secondary School Textbook Domains' Recapitulative Study

	Domains	Number of texts	Secondary school textbook domain rates	BNC Rates
1	Imaginative	16	15.53%	21.91%
2	Belief & thought	15	14.56%	3.40%
3	Commerce & world affairs	14	13.59%	26.32%
4	Leisure	04	3.88%	11.13%
5	Natural & applied sciences	27	26.21%	12.39%
6	Social sciences	26	25.24%	14.39%
7	Arts	00	00%	8.08%
8	Unclassified	01	0.97%	1.93%

Table 41: Secondary School Textbook Domains' Recapitulative Study

In this section, we have taken all the secondary school textbooks and we have made a comparative study with the BNC results. The first remark is that social, natural and applied science text category present the lion's part with 51.45% (26.21%+25.24%), imaginative, belief and thought, commerce and world affairs are in equilibrate rates between 14% and 15.50%, however leisure, category is presented with just 3.88% and art category is not presented at all in our textbooks.

5. Conclusion

The text references and origins are very important in this study; they present an important variable that could be very important and can affect deeply the results and analysis in our research. That is why we have made a quantitative study in what concerns texts origins and their respective references. The negative point that could be raised is that a great number of texts mainly in middle school textbooks are unreferenced, as well as some texts of secondary school textbooks.

Yes, it's true that at this stage, pupils are not concerned at all with texts' references, but in academic domains such as textbook design. It is worth mentioning that references should be provided in the bibliography; however only few texts are referenced in the middle school textbook; however the texts of the secondary school textbooks are acceptably referenced.

The results obtained will be deeply analysed in order to investigate deeply the other important elements that should be synthesised for pedagogical purposes.

In this chapter, and in contrast to the next one, the analysis was based on data that exist on textbooks and was compared directly to the British National Corpus statics, but without using advanced software. In the next chapter, investigations will be mainly based on the use of advanced software to undertake result analysis.

1. Introduction

This chapter deals mainly with the pedagogical recommendations that exist in middle and secondary school textbooks; it focuses also on how pedagogical objectives of the competency based approach are achieved through these selected texts and activities. The study aims also to deal with pupils' outcomes and how the project pedagogy is apprehended by both learners and teachers.

The research will focus mainly on the four middle school textbooks and the three secondary school textbooks designed by the Algerian ministry of education. The research aims to shed light on their contents, such as files, the domains, the expected objectives, the target vocabulary, phonetics, cultural initiation and projects.

The study will consist of two distinctive parts:

Middle school textbooks:

- *Spotlight on English Book One* (1st year middle school)

- *Spotlight on English Book Two* (2nd year middle school)

- *Spotlight on English Book* Three (3rd year middle school)

-*On the Move* (4th year middle school)

Secondary school textbooks:

- *At the Crossroads* (1st year secondary school)

- *Getting Through* (2nd year secondary school)

- *New Prospects* (3rd year secondary school)

Each sub section will dissect the content of each textbook level and it will be restricted to their contents as it is mentioned above.

In the next section, a study will be made about the compatibility of the textbook file types and the suggested projects. it will check to which extent these projects are operational to reach efficiently the pedagogical objectives.

2. The Algerian Educational System

Since its independence, Algeria has given a primordial importance to the educational system[97] . The Algerian Ministry of Education was created in 1963; it was the unique authority to design and supervise the whole Algerian educational system such as curricula, textbooks, teachers' training…. The immediate aims were the formation of citizens respecting three dimensions: The Islamic religion, the Arabic language within the Algerian country.

The actual structure of the school system is based on (5+4+3) model: five years of primary school, four years of middle school[98] and three years of secondary school. In the academic year 2013-2014, eight million pupils i.e., more than the 1/5 of the global population in Algeria were enrolled in the three levels over all the country.

At the end of the five years of primary school studies, and after an official exam, pupils could be awarded by the Primary School Certificate which permits them to access to the next level. During the four years of the middle school studies, pupils are mainly taught, Arabic, mathematics, natural sciences, technology, Islamic education, French, English, history, geography and physical education. At the end of this stage, pupils who are successful on the official exam could be awarded by the Middle School Certificate, which permits them the access to the first year of secondary school. After the first year, they could be oriented again to five main streams: scientific, letters, foreign languages, , technology or business and management. The general objective of the secondary school studies is to prepare pupils for further studies, mainly the higher studies, after the baccalaureate exam success. During the 1990s less than 33% succeeded to the baccalaureate exam, but during the ten last years 70% did. The baccalaureate degree is the unique way to access to the higher studies system, but the new students will meet the ministry of the higher education conditions set every year such as the student choice, the baccalaureate stream and the general average mark obtained.

As mentioned above, the Algerian educational system consists of three levels: The primary, the middle and the secondary schools. The middle school is graded into 4 years where English is taught as a foreign language in all this period. For each year one book is

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[97] See By Nick Clark Editor, WENR (World Education News and Reviews)www.wenr.org

[98] Primary and middle school education is considered as Compulsory school

designed to assist both learners and teachers; the books contain courses and activities. They are presented as follows:

- *Spotlight on English Book One* (1st year middle school)

- *Spotlight on English Book Two* (2nd year middle school)

- *Spotlight on English Book* Three (3rd year middle school)

- *On the Move* (4th year middle school)

The secondary school is graded into 3 years where English is taught as a foreign language in all this period. Three books are designed to assist both learners and teachers; they contain courses and activities and they are presented as follows:

- *At the Crossroads* (1st year secondary school)

- *Getting Through* (2nd year secondary school)

- *New Prospects* (3rd year secondary school)

Through these files teachers will expect many learning objectives by using different strategies and methods. First of all the middle school syllabus is based on a mixture of communicative and competency based approach; this could be felt in the nature of the activities and the expected learners' outcomes.

Each file from the list above is formed by three main sequences where all the four skills are performed[99]:

- Listen and speak: As first step, the priority is given to words, followed by expressions such as greetings and at the end, pupils are asked to listen and repeat short dialogues.

- Produce: In this phase pupils have to produce short dialogues or conversations using their own information and their own words.

- Practise: In this stage pupils will be able to listen, read and understand short passages, answer all their related written and oral activities, respect the correct

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[99] Adapted from the secondary school English Syllabus

pronunciation, apply grammar rules and use correctly vocabulary acquired during the previous activities. At the end, pupils should be able to write short dialogues, correct them and check the mistakes collectively before performing them as a play or in pair/group work.

3. The Competency Based Approach through Middle and Secondary School Textbooks

The relationship between the competency based approach and the expected objectives established by the Algerian education authorities is mentioned in "At the Crossroads" textbook introduction:

> *We have distinguished between two types of skills in the textbook: on the one hand, we have the primary skills (listening, speaking, reading and writing), and on the other hand the 'social' skills which need the mobilisation of the former for the learner to accomplish everyday life concrete actions such as telephoning, using a road map and writing business and personal letters.[100]*

3.1. From the Competency Based Approach to Pedagogical Objectives

In this section, we will try to explain how the English textbook designers have realised the aims and goals of the competency based approach into measurable pedagogical objectives. In this context, and in the light of what has been said before, we can say that Bloom[101] had divided pedagogical objectives into six main levels:

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

Level 1: Knowledge

Knowledge [102]as its name implies is the fact to know or to recall elements, items and components, or methods, ways, and processes. As knowledge objectives, teachers may insert

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[100] "At the crossroads" authors

[101] Benjamin S. Bloom. Taxonomy of Educational Objectives (1974). David McKay ed.

[102] Adapted from the Condensed Version of the Taxonomy of Educational Objectives (Cognitive Domain) pp201-207. B. S. Bloom. Taxonomy of Educational Objectives (1974). David McKay ed.

activities to train pupils to know specific facts from a text such as: dates, places and characters of the story. In the same context, pupils could be trained to know general or specific terminology, vocabulary or technical terms and concepts. This level is also concerned with the knowledge of ways and means of presenting, organising, and displaying. B.S. Bloom established

> *This knowledge is an intermediate level of abstraction between specific knowledge on the one hand and knowledge of universals on the other. It does not so much demand the activity of the student in using the materials as it does a more passive awareness of their nature.* [103]

This could be of paramount importance for learners in order to make them conscious of correct forms in using the target foreign language adequately with very high accuracy; this could be easily possible when pupils know the rules and the conventions of the aural and written form of the language as well as its grammar.

The "knowledge" level could be expressed by various action verbs such as identify, recall, know, acquire, describe, locate, write a list, enumerate, recite, tell the definition, answer by true or false, name the items or characters…

Level 2: Comprehension

Comprehension as its name implies is the ability to understand something or understanding its meaning. It is a strong part of the cognitive domain. As a convention the concept "comprehension"[104] is mainly related to "reading comprehension" however this could simply be largely adapted to other learning processes from the other remaining skills such as listening, speaking and writing.

This second level of pedagogical objectives is strongly related to the first one which is the knowledge fact. Nevertheless, this could be variously presented in the teachers' main objectives such as activities related directly to the lesson support presented in the form of texts, dialogues…

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[103] Benjamin S. Bloom (1974:202). Taxonomy of Educational Objectives
[104] Benjamin S. Bloom. Taxonomy of Educational Objectives (1974:89). David McKay ed.

B.S. Bloom adds:

> *It refers to a type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implication.* [105]

The "comprehension" level could be expressed by various action verbs such as translate, explore, explain, transform, summarise, write or tell the main idea of the text, compare between, contrast, express what you think, explain the story in your own words, provide a definition, think about the end of the story, interpret, abstract…

Level 3: Application:

As far as this level is concerned, the next pedagogical objective type will be mainly about the application of a rule or a piece of knowledge and use it in particular situation. The application level comes directly after knowledge and comprehension levels. B.S Bloom suggests "if a student really comprehends something, then he can apply it". [106]

Many teachers can't switch from the two previous levels which are "knowledge" and "comprehension" to the most important one which is the real practice of pre-required information into personal or collective achievements. In many situations, the learning process is frequently limited to just knowledge and comprehension. However, the application phase is completely neglected.

Some pupils could be evaluated and given very high scores and marks, and could be even classified as excellent elements but just through knowledge and comprehension examinations, in contrast, if an application evaluation will take place the results will be probably catastrophic. The dichotomy between comprehension and application areclarif ied by B.S. Bloom in the following terms:

> *The demonstration of "comprehension" shows that the student can use the abstraction when its use is specified. A demonstration of "Application" shows*

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[105] Benjamin S. Bloom (1974:204). Taxonomy of Educational Objectives

[106] Benjamin S. Bloom (1974:120). Taxonomy of Educational Objectives

that he will use it correctly, given the appropriate situation in which no mode of solution is specified.[107]

The "application" level could be expressed by various action verbs such as: Apply, plan, solve, prepare, produce, repair, demonstrate, operate, develop, explain why or why not, construct, design, create…

Level 4: Analysis

The largest definition of "analysis" is the scientific process of examining something in order to find out what it consists of. It is also considered as the process of considering something carefully; the analysis can involve the use of statistical methods in order to deeply understand the phenomenon or explain it. Analysis could imply many levels: the lowest one is about the analysis of elements. However, the second level is about the analysis of relationships and the third one is about the analysis of ways, methods and organisational principles.

"Analysis" is considered as high level thinking phase; it needs a lot of skills and multiple intelligences. The common point is that "analysis" must follow and respect scientific rules and methodologies. Pupils should be well organised and well accurate to make efficient analyses rather than following their own intuitions in order to achieve random results obtained and established from non scientific rules and methodologies. B.S. Bloom writes:

Analysis emphasises the breakdown of the material into constituent parts and detection of the relationships of the parts and the way they are organised. It may also be directed at the techniques and devices used to convey the meaning or to establish the conclusion of a communication. [108]

The "analysis" level could be expressed by various action verbs such as: Analyse, estimate, order, distinguish, discover, compare, determine, identify, detect, explore, discuss, conduct an investigation, review, diagram, construct a graph, and write a questionnaire…

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[107] Benjamin S. Bloom (1974:120). Taxonomy of Educational Objectives
[108] Benjamin S. Bloom (1974:144). Taxonomy of Educational Objectives

Level 5: Synthesis

Synthesis means the combination and the mixture of many ideas, principles, styles, elements, constituents and substances in order to generate a new or a combined type of the studied category. In this respect, B. S. Bloom states:

> *Synthesis is the putting together of elements and parts so as to form a whole. This involves the process of working with pieces, parts, elements…and arranging and combining them in such a way as to constitute a pattern or structure …*[109]

Synthesis could be easily applied in written expression or in an oral performance where all the previous knowledge, its comprehension and its potential applications can play a vital role in the synthesis process.

The "Synthesis" level could be expressed by various action verbs such as design, build, plan, suggest, create a model, produce, make hypothesis, prescribe/propose a method or a way, formulate, propose, devise, finish the story...

Level 6: Evaluation

Evaluation is considered as the highest level of pedagogical objectives. It consists in making judgements about the right decisions and select the best issues as the final phase of a process or a project. Evaluation involves all the other previous cognitive levels knowledge, comprehension, application, analysis and synthesis. According to B.S. Bloom,

> *Evaluation involves the use of criteria as well as standards for appraising the extent to which particulars are accurate, effective, economical, or satisfying. The judgements may be either quantitative or qualitative, and the criteria may be either those determined by the student or those which are given to him*". [110]

The "evaluation" level could be expressed by various action verbs such as judge, evaluate, debate, formulate, choose, support, indicate priority, grade, rank, rate, measure, assess, test, select, check, appraise, give your opinion …

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[109] Benjamin S. Bloom (1974:206). Taxonomy of Educational Objectives
[110] Benjamin S. Bloom (1974:185). Taxonomy of Educational Objectives

4. The Fundamental Competencies

According to the national education authorities[111] and according to the pedagogical meetings held by many inspectors in Algeria, all teachers should apply the three fundamental competencies as specific learning features of English.[112]

Competency 1: Interact, where pupils should be able to:

- Write and read emails and short messages (sending and receiving).

- Ask and answer their partners

- Carry on a conversation or a dialogue with a partner

- Correct mistakes, consulting dictionaries, translating words…

Competency 2: Interpret, where pupils should be able to:

- Pick out the general idea of a text

- Understand the meaning of a passage (message, paragraph, text)

- Check the meanings of words and expressions by using dictionaries.

Competency 3: Produce, where pupils should be able to:

- Convert ideas into written or oral messages in order to convey meanings

- Put into practise all the linguistic strategies learnt before

- Write letters, reports, and written expressions

- Perform role plays, interviews, dialogues

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[111] *Resources* : " Official syllabus – BEM guide October 2007"-

[112] (Adapted from Medea training session of 11/01/2005 presided by the inspector Mr R.Hachelaf. Member of the national commission of the English course book evaluation)

5. Middle School and Secondary School Textbook File Study

In this section, we will attempt to study all the middle school[113] and the secondary school textbook file types in two separate sub-sections. This study will be a source of inspiration in order to investigate all the target books[114] in terms of objectives, strategies used to achieve these pedagogical objectives and competencies in order to shed light on the pedagogical relationship between file selection and the final expected projects[115].

5.1. Middle School Textbook File Study

In this section, we will try to study all the middle[116] school textbook file types, objectives and strategies used to achieve these pedagogical objectives and competencies in order to shed light on the pedagogical relationship between file selection and the final expected projects[117].

5.1.1. First Year Middle School Textbook File Study

The 1st year middle school book consists of seven files:

- File 01: Hello!

- File 2: Family and Friends

- File 3: Sport

- File 4: In and Out

- File 5: Food

- File 6: Inventions and Discoveries

- File 7: Environment

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[113] This study will be followed by a similar one concerning secondary school file types
[114] All the middle and the secondary school textbooks
[115] From the official syllabus of the 1st year middle school
[116] This study will be followed by a similar one concerning secondary school file types
[117] From the official syllabus of the 1st year middle school

The first file (Hello!) can be considered as an introductory file, it is mainly about greeting people, asking for information, saying numbers, and making phone calls.

The main objectives are that at the end of this file, pupils should be able to:

- Greet people, friends…

- Ask for information

- Use the WH questions

- Make phone calls

- Distinguish between nationalities

The second file (Family and Friends) is mainly about family members, family tree, asking and giving information about people, describing people physical appearance…

The main objectives are that at the end of this file, pupils should be able to:

-Introduce people

-Ask, describe and give information about people: Age, height, weight, job, occupation.

-Talk about the family members.

-Describe people's physical appearance

The third chapter (Sports) is about sports and games in general; it introduces the names of famous sports in the world as well as famous players.

The main objectives are that at the end of this file, pupils should be able to:

- Locate and describe a place

-Name sport/sportswear/equipment

-Talk about daily activities and hobbies

The fourth file (In and Out) is mainly about animals, and expressing time and everyday activities. The remarks of the fourth file objectives are mainly how to initiate pupils to talk about everyday activities, giving information about animals and telling time. However, the cultural initiation is about time in other cities; learning about the British educational system and using of the Chinese horoscope.

As far as the project is concerned pupils are asked to make a research about wild and domestic animals or pets or to prepare a questionnaire about a friend, a school or a town.

In my opinion, I think that some questions could be asked about the real relationship of these topic selections within the same file so as to learn about animals and expressing time, learning about the British educational system and using the Chinese horoscope. In contrast, and as output, they will prepare projects about wild and domestic animals or making questionnaire about a friend, a school or a town!!!

The main objectives are that at the end of this file, pupils should be able to:

- Talk about present and everyday activities.

-Give information about animals.

-Tell the time

The fifth file (Food) is principally about food, meals and aliments. The file consists of detailed lists of food and aliments, some restaurant menus, and instructions about preparing a meal. Even the section "Learn about Culture" is about breakfasts and dishes in the world.

The main objectives are that at the end of this file, pupils should be able to:

-Ask about prices.

-Express quantities.

- Order a meal

-Describe a process.

-Discriminate between goods.

-Talk about ailments

The sixth file (Inventions and Discoveries) is typically about inventions, science and technology; however some remarks and comments could be made about it. As far as this file is concerned, we can make the same remarks done for the fourth file. Firstly, the objectives of the sixth file are mainly to teach pupils how to talk about past events, inventions, people lives and biographies. The selected texts are about Bill Gate and the Little Riding Hood. Secondly, the cultural initiation presents also an intrigue because pupils are initiated about Britain colonizers, old sayings such as: as brave as a lion, as pretty as a picture, as sly as a fox, as

light as a feather, as strong as an ox…., or about the origin of sports. At the end pupils are asked to make a project a children's book of inventions or a civilization profile!!!

The main objectives are that at the end of this file, pupils should be able to:

- Talk about past events.

-Ask & give information about inventions.

-Talk about peoples' lives

-Give peoples' biographies

The last file (Environment) is an invaluable initiation about environment and how to preserve it from pollution. In the same contexts, pupils are taught about almost all the types of pollution as well as the way they could be fought.

The main objectives are that at the end of this file, pupils should be able to:

- Talk about weather

-Name and describe animals

-Express intentions

-Talk about rights and duties

5.1.2. Second Year Middle School Textbook File Study

In this sub-section we try to dissect each file from the below list into many main important parts such as the objectives and the strategies used to achieve these pedagogical objectives[118].

The 2nd year middle school book consists of five files:

- File 1: A Person's Profile

- File 2: Language Games

- File 3: Health

- File 4: Cartoons

- File 5: Theatre

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[118] From the official syllabus of the 2nd year middle school

The first file which is entitled "A Person's Profile" is about how to describe a person's physical appearance and famous persons' careers such as singers, actors…

The file deals mainly with how to introduce a person, mainly a famous one, reading biographies and learning about music and art in different cultures.

The main objectives are that at the end of this file, pupils should be able to:

- Describe a person by using adjectives

- Talk about someone's life

- Write biographies.

- Ask and answer questions.

The second file which is entitled "Language Games" is mainly about famous games such as crosswords, puzzles…, where pupils are expected to make a game booklet as project. In this file, pupils are given the definitions of anagrams[119], palindromes[120], puzzles, synonyms and antonyms. The origins of some games are also given in this file: Chess, puzzles, crisscross, video games, flipper, monopoly and scrabble. As project pupils are asked to make a game booklet containing puzzles, crosswords, pyramids…

The main objectives are that at the end of this file, pupils should be able to:

- Express possibility, capacity and permission

- Talk about prices.

- Define objects and things.

- Talk about health.

- Ask questions politely

- Locate and describe a place

- Check synonyms and antonyms by using dictionaries

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[119] Anagram is a word that is formed by changing the order of the letters in another word (triangle: integral)
[120] Palindrome is a word or a phrase that is the same whether you read it backwards or forwards (refer)

The third file, entitled "Health" is a typical one because it deals mainly in its totality with health and its related concepts such as some aches, ailments and their respective remedies. In this file, pupils are taught tips about how they can improve their health as well as the use of some plants and natural aliments as medication. A list of grandmothers' remedies is also suggested to pupils in order to improve their knowledge and involve them in pre-required information from their culture.

The main objectives are that at the end of this file, pupils should be able to:

- Express permission and prohibition

- Describe illnesses.

- Ask about someone's health.

- Suggest solutions.

- Ask about someone's activities.

- Talk about someone's regular activities.

- Talk about discoveries.

- Talk about remedies

The fourth file entitled "Cartoons" is mainly about famous cartoons in the world and the names as well as the historical flash about the first cartoons in the world.

The paramount objectives are to make pupils familiar with reading or watching cartoons in different languages in order to improve their languages, their general culture and acquiring new information.

The main objectives are that at the end of this file, pupils should be able to:

- formulate an invitation

- Ask about someone's likes.

- Express intentions.

- Enquiring about someone's future activities.

- Make the right choices.

- Ask about prices

The fifth file is entitled "Theatre", where pupils are introduced about the fourth art. They are also initiated about the theatrical main genres such as comedy, tragedy, drama and their related concepts: Plot, playwright, comedians.

The main objectives are that at the end of this file, pupils should be able to:

- Talk about distances and durations.

- Enquiring about someone's career.

- make an Interview.

- Talk about likes and dislikes.

- Ask about someone's preferences.

- Ask about someone's past activities.

- Talk about past activities

5.1.3. Third Year Middle School Textbook Study

In this sub-section we will try to dissect each file from the below list into main important parts such as: The main objectives of the file and the strategies suggested for achieving these objectives[121]

The 3rd year middle school textbook consists of four files:

- File 1: Communications
- File 2: Travel
- File 3: Work and Play
- File 4: Around the World

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[121] From the official syllabus of the 3rd year middle school

The first file which consists of three sections is about Communication between people such as greeting people, introducing someone, describing personalities in section1. Making requests, asking for clarifications, and responding to offers and advertisement in section 2. The third section is mainly about expressing emotions and preferences. As project pupils are asked to prepare a wall sheet about greetings.

As mentioned above the first file (Communications) consists of three sections

-Section 1: Hello again!

-Section 2: Who is calling please?

-Section 3: What's on?

The main objectives of the first section (*Hello again!*) are, at the end of this section pupils should be able to:

- Greet people and friends.

- Introduce people.

- Describe physical appearance (revision).

- Identify and use appropriate intonation in "yes", "no" and "wh" questions

The main objectives of the second section *(Who is calling please?)* are, at the end of this section pupils should be able to:

- Make and answer requests.

- Make apologies and give explanations.

- Ask for clarification and express sympathy

The main objectives of the third section (*What's on?),* are at the end of this section pupils should be able to:

- Describe likes and dislikes.

- Express preferences.

- Make, accept and refuse invitations

The second file consists of three sections:

-Section 1: Welcome on board

-Section 2: On my way…

-Section 3: Good bye sailor

The second file is mainly about, reading the airport departure board, reading advertisement trips, playing a travel puzzle in section 1. In section 2, pupils are asked to complete the map of an imaginary town, to describe their town, show directions, and answer the travel quiz. The third section is mainly about training pupils to set a programme for a travel agency. As project pupils are asked to prepare a travel phrase leaflet. The culture snapshot is about the Loch Ness in Scotland.

The main objectives of the first section (*Welcome on board*) are, at the end of this section pupils should be able to:

- Ask for permission.

- Make requests.

- Accept and decline requests.

- Make suggestions.

The main objectives of the second section (*On my Way…*) are, at the end of this section pupils should be able to:

- Ask for and give directions.

- Ask about distances and time.

- Expand notes.

- Use the right intonation.

The main objectives of the third section *(Good bye Sailor)* are, at the end of this section pupils should be able to:

- Plan a visit.

- Make suggestions.

- Express obligation / prohibition.

- Ask a favour.

- Check understandings and correct misunderstandings

The third file consists of three sections:

-Section 1: What has happened?

-Section 2: Have you ever…?

-Section 3: I was wondering

The third file which consists of three sections is mainly about describing regular and daily activities such as school activities and leisure time in section1, talking about life experiences and recent events in section 2, but in the third section, pupils are taught about school rules, and students' notice board. In the cultural snapshots, pupil can have a quick and a clear idea about the comprehensive school in Britain. As project pupils are asked to design a school magazine page.

The main objectives of the first section (*What has happened?)* are, at the end of this section pupils should be able to:

- Describe regular activities.

- Express feelings.

- Describe actions that happened in the past and affect the present.

- Express consequences

The main objectives of the second section (*Have you ever…?)* are, at the end of this section pupils should be able to:

-Talk about recent actions with an effect on the present.

- Express obligations with "have to".

- Ask for and give advice.

- Narrate events using "yet", "just", "ever" and "never"

The main objectives of the third section (*I was wondering*) are, at the end of this section pupils should be able to:

-Carry on a conversation.

- Comfort someone.

- Narrate events.

- Describe where, when and how something happened.

The fourth file consists of three sections

-Section 1: This is my land

-Section 2: New York

-Section 3: What a wonderful world!

The fourth file which consists of three sections is about locating and describing countries, naming countries from a map, comparing countries, talking about distances and reading about the histories of some English-speaking countries such as Canada, Australia, New-Zealand, Jamaica and Ireland in section 1. Section 2 is mainly about locating and describing towns, talking about their history and describing places of interest such as New York, locating places from Manhattan map. In section 3 pupils are taught about the Seven Wonders of the ancient world and the countries where they are located as well as some Wonders of today world such as the Eiffel Tower, the Statue of Liberty and the Tower Bridge. Pupils are also taught how to compare touristic sights and attractions. As project they are asked to prepare a touristic brochure.

The main objectives of the first section (*This is my land*) are, at the end of this section pupils should be able to:

- Locate countries on a map.

- Talk about the four cardinal points.

- Compare countries according to their location, area, population and climate.

The main objectives of the second section (*New York*) are, at the end of this section pupils should be able to:

- Locate towns within a country.

- Describe towns (locate main avenues and streets, official buildings…).

- Make adverts.

- Write memos

The main objectives of the third section (*What a wonderful world*) are, at the end of this section pupils should be able to:

-Describe a monument (shape and dimensions).

-Express agreement and disagreement

5.1.4. Fourth Year Middle School Textbook

In this sub-section we will try to dissect each file from the below list into main important parts such as the main objectives of the file and the strategies suggested for achieving these objectives[122].

The 4th year middle school book consists of six files:

- File 1: It's my Treat
- File 2 : You Can Do it
- File 3: Great Expectations
- File 4: Then and Now
- File 5: Dreams, Dreams…
- File 6 : Fact and Fiction

The first file entitled "*It's my Treat*" is typically about food and drink   where the pupils are taught about the most popular food and dishes in the world. They are also taught about the nutritional values of some aliments such as chocolate, cereal bar…As far as the file is concerned, some menus are suggested in order to familiarise pupils with the necessary vocabulary related to food and eating (dishes, cooking and eating habits).

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[122] Taken from the official syllabus of the 4th year middle school

The main objectives are that at the end of this file, pupils should be able to:

- Make suppositions

- Seek agreement

- Give instructions

- Carry out a procedure

- Ask for and give information

The second file entitled "*You can do it*" which is about citizenship and sustainable development introduces pupils to the important changes in man's capabilities as well as its related vocabulary to technology and animal life.

The question that could be asked is what is the relationship of "*You can do it*" which is about citizenship and sustainable development and animals and their average life expectancy? What is the relationship between man's capabilities and animals in danger of extinction? The pupils are even asked to write and design a charter to ensure the protection of wild animals. In contrast, the file contains some texts about development and man's capabilities such as: robots, NASA and other performances. As project pupils are asked to make a profile of changes in man's capabilities.

The main objectives are that at the end of this file, pupils should be able to:

- Express ability and possibility

- Ask for and give Permission

- Express agreement and disagreement

The third file entitled "Great Expectations" is mainly about people and places. The vocabulary used is related to hopes and expectations. The file deals with planning an excursion, locating places as well as acting as a tourist guide; but what is not evident, is that pupils are asked to prepare and arrange a conference as project, but the majority of the short texts are mainly about schools[123], and a diagram about the American pre-university educational system. Another text is about art and the other short texts are about California map, the United States of America map, and The Royal Mauritanian Mausoleum in Algeria; however and as mentioned above, the expected project is about arranging a conference.

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[123] Pp 68;69;70;71;74;

The main objectives are that at the end of this file, pupils should be able to:

- Give information (consolidation)

- Express condition

- Express satisfaction and dissatisfaction

- Make suggestions, requests, offers, promises using (if).

- Locate places (consolidation)

-Make predictions

The fourth file which is entitled "*Then and Now*" is about customs and habits. The vocabulary used is mainly related to old crafts, antiques, history, geography and famous persons' biographies. The texts are also about the past: The cavemen tools and objects, the Sahara 5,000 years ago, famous persons' biographies (Haroun Al-Rachid, Leonardo Fibonacci…), historical monuments and places. The project is about making differences between today and grandparents' food, clothes, celebrations….

The main objectives are that at the end of this file, pupils should be able to:

- Express surprise and interest

- Ask for and give information

- Describe people (consolidation)

The fifth file entitled (Dreams, Dreams…), is about cultural exchanges. The texts are about TV interviews, emails, internet search about Australia (location, area, population…), giving/asking for advice. The related vocabulary is about travel, tourism, money matters, jobs and careers; but what is not evident is that the project is about laying out a newspaper problem page.

The main objectives are that at the end of this file, pupils should be able to:

- Express uncertainty

- Express possibility

- Seek and give advice

- Ask for and give recommendations

- Make suggestions

- Give warnings

- State possible options

The sixth file entitled "Fact and Fiction" is about arts and science. I think that there are narrow links between the title and the file's content simply because the target vocabulary is about old crafts, antiques, history and geography[124]. Secondly, the texts are strangely selected for a file that will deal with Arts and sciences: A short text (page 147) is about a tragic accident and pupils are asked to write a newspaper report about the same accident. In page 151, we can find the story of "Joha and the Plots" followed by "Snow White" story in pages 156-158 and as project pupils are asked to make a scrapbook which may comprise:

- A report about an accident or a new invention

- An obituary of a celebrity who has just died

- A transcript in English of a short folktale

- A cartoon strip with speech bubbles

The main objectives are that at the end of this file, pupils should be able to:

- Narrate

- Report

- Express interest and surprise

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[124] As mentioned in the book map pp (XIV-XV)

5.2. Secondary School Textbook File Study

As mentioned above, the secondary school level is graded into 3 years where English is taught as a foreign language during all this period. Three books are designed to assist both learners and teachers, they contain courses and activities and they are presented as follows:

- *At the Crossroads* (1st year secondary school)

- *Getting Through* (2nd year secondary school)

- *New Prospects* (3rd year secondary school)

Through these files teachers will expect many learning objectives by using different strategies and methods. First of all, as the middle school, the secondary school syllabus is based on a mixture of communicative and competency based approach; this could be seen in the nature of the activities and the expected learners' outcomes.

Each file from the list above is formed by three main sequences where all the four skills are performed[125]:

- Listen and speak: The main objectives are to reinforce the pre required listening and speaking skills as well as to train pupils to pronounce new words (stress, intonation...) and new expressions in the form of dialogues and pair work.
- Produce: We can say that this phase is a complementary one of "listen and speak", where pupils will use the words and expressions learnt previously in adequate expressions, personal short sentences, dialogues…
- Practise: The objectives of this phase are to put into practise all the theory in order to solve grammar exercises, answer written, and oral activities, develop written expressions, reports and projects.

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[125] Official syllabus recommendations and1st YSS teachers' book

In this sub- section, we will try to describe the content of the secondary school textbooks in terms of files, objectives, grammar, strategies, competencies, projects…

5.2.1. First Year Secondary School Textbook File Study

The 1st year secondary school textbook consists of five files:

- File 01: Getting through (communication)

- File 2: Once upon a time (art /literature)

- File 3: Our findings show…. (Journalism/ reporting)

- File 4: EUREKA! (Science and technology)

- File 5: Back to nature (environment)

Each file is composed by four sequences[126]:

- Listening and speaking: the sequence objectives are mainly to encourage pupils to anticipate before listening and reading, to communicate using their own words using correct pronunciation, to prepare them before producing any oral or written task.
- Reading and writing: the sequence aims to train pupils to read comprehensively in order to understand meanings, ideas and check and correct individually or collectively their mistakes before producing any written or oral expression.
- Developing skills: this sequence aims to make pupils able to solve real situation problems by performing the four skills depending on the problem situation: Writing/answering a letter/report, interviewing, telephoning…
- Consolidation and extension: This sequence aims to practise expansively all the pre-required knowledge in real situations, writing a job application letter, showing the way, telephoning…

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[126] From recommendations to teachers "At the Crossroad"

In this sub-section we will try to dissect each file from the above list into main important parts such as the files contents, their main objectives, the cultural initiation and project[127].

The first file entitled "Getting through", and which is mainly about "communication"; where pupils are introduced with the main hardware devices of a computer as well as the related ones to internet. Pupils are also taught how to create an email account by reordering sentences and forming a coherent paragraph containing instructions about creating an email account. The second step is about writing an email, where pupils are initiated to write emails. The third step is an introduction to "how to make a phone call in English"; where pupils are given a "phone tactics summary" as developing skills. Pupils are also introduced to "how to write ordinary letters and make responses to the received ones. As far as this file is concerned, email messages, phone calls and letters are taken as texts to support pupils in the course process and many activities are related to these texts.

At the end of the file and as project, pupils are asked to choose between designing a job application booklet or making an internet user's guide for beginners.

The main objectives are that at the end of this file, pupils should be able to:

- Describe people's regular activities

- Describe places

- Invite friends and relatives

- Express obligation

- Express purposes

The second file entitled "Once upon a time" is about art, universal literature and original tales where famous and well known writers and authors are introduced during the suggested activities as well as some of their works in the form of short stories:

"*Aladdin and the Magic Lamp*", "*Ali Baba and the Forty Thieves*", "*The Voyage of Sindbad the Sailor*" and other worldwide stories such as "*Things Fall Apart*" of Chinua Achebe, "*Hard Times*" of Charles Dickens, "*Alice's Adventures in Wonderland*" of Lewis

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[127] From the official syllabus of the 1st year secondary school

Carroll, as well as the biographies of other famous writers, authors and artists such as William Shakespeare, Mahatma Ghandi and Charlie Chaplin.

At the end of the file and as project, pupils are asked to select a book and Write its review. The main objectives are that at the end of this file, pupils should be able to:

- Describe people's physical appearance and personality features

- Locate places

- Asking for and giving directions

- Expressing point of view/ opinion

The third file entitled ": Our findings show…" is about journalism, reporting, picking up information and making a survey. The selected texts and activities are almost all about finding information from pictures, newspapers, tables, graphs, charts…. Some concrete and real examples are given to pupils such as a graph of "*home computer use by teenagers*". The newspaper "*The Times*" illustrates the same survey example in a written report which presents details about computer use by a sample group of 60 young people. Pupils are also given the results of sports questionnaire, where they are asked to answer the related questions and use it as a model. As another example, pupils are asked to interpret the figures in the graph of "*The consumption of milk and cream between 1980 and 1987*". At the end of this file, they are asked to draw a curve of a graph and illustrate the fluctuations of sugar production where a related text about sugar is given as support.

Pupils are also given a valuable tactics summary for doing a survey such as designing a questionnaire, conducting an interview, collecting and interpreting data. As project, pupils are asked to conduct a survey about one of the following topics:

- Peoples' newspaper reading habits

- TV viewers and TV programmes

- The different uses of the computer

The main objectives are that at the end of this file, pupils should be able to:

- Give advice
- Express orders, requests, advice and suggestions

- Reporting questions
- Expressing likes and dislikes

The fourth file entitled "EUREKA!" is a typical file about science and technology where pupils are given listening scripts about old and recent inventions. Some famous scientists are also introduced such as Louis Pasteur, Alexander Fleming, Alexander Graham Bell and Albert Einstein as well as the names of their inventions and discoveries. The file presents rich types of texts related to inventions, discoveries and advanced technology: "Satellite Communication", "Television", "Ocean Exploration", "The Making of a Scientist", "Cloning", and "Astronomy".

Through these texts and their related activities pupils learn how to respond to a listening script about an invention, writing an inventor's biography. Pupils are also taught how to deal with inventions' information such as the name of inventions, the name of inventors, the date, and the problems solved by these inventions or innovations…

As far as the file is concerned, pupils are also taught how to analyse inventions by discussing and expressing their advantages and their drawbacks. At the end, and as project, pupils are asked to make a profile of an invention, writing about its evolution, presenting the different models of the target invention as well as the invention chronology and the names of all the inventors involved.

The main objectives are that at the end of this file, pupils should be able to:

- Describe an object
- Ask questions
- Narrate
- Express opinions
- Compare
- Report facts

The fifth file entitled "Back to Nature" is typically about environment. First of all, pupils are introduced with world climate areas and their related vocabulary and information. Preserving environment is among the main file's objectives, it is used to make pupils aware about deforestation, desertification, the use of chemical product in agriculture, and gas emission effects. Pupils are also introduced about the benefits of bio-products as well as the use of recyclable materials and renewable energy.

At the end and as project, pupils are asked to design a consumer guide, where they are asked to select products that people consume or use daily and analyse them from an ecological point of view.

The main objectives are that at the end of this file, pupils should be able to:

- Argue for and against (agree and disagree)
- Express cause and effect
- Express feelings
- Express condition
- Express polite requests

5.2.2. Second Year Secondary School Textbook File Study

The 2nd year secondary school book consists of eight files:

- File 01: Signs of the Time

- File 2: Make Peace

- File 3: Waste not, Want not

- File 4: Budding Scientist

- File 5: News and Tales

- File 6: No Man is an Island

- File 7: Science or Fiction?

- File 8: Business is Business

In this sub-section we try to dissect each file from the above list into main important parts such as: The files' contents, their main objectives, cultural initiation and projects[128]

The first file entitled "Sign of the Time" is mainly about life styles and diversity; pupils are first introduced with the main economy sectors (primary, secondary and tertiary sectors)[129]. Pupils learn also the three main aspects of a life style profile such as clothes, food and entertainment. Dealing with traditional manners and changing manners, Pupils are taught how people change their lifestyles such as opting for fast foods, staying long periods of time in coffees. The way people have change their dressing way is also mentioned in this file and the disappearance of some behaviours and habits such as traditional meals and foods in the Algerian society.

The target vocabulary used in this file is mainly about food and clothes which will be used later for the project "writing a life styles profile"

The main objectives are that at the end of this file, pupils should be able to:

- Express similarities and differences
- Ask for and give information about cultural differences
- Compare between two events/situations
- Express certainty and doubt
- Express intention
- Narrate
- Predict

The second file entitled "Make Peace" is typically about peace and conflict resolution. As introduction, pupils are initiated about international non-governmental organisations such as: United Nations, UNICEF, UNESCO…., as well as the famous persons militating for peace among them: Nelson Mandela, Martin Luther King, Abraham Lincolns and others. Pupils are also taught how to distinguish between their rights and their duties by reading and discussing the Children's Right Convention adopted by United Nations in 1989. The target vocabulary is related to peace and citizenship in addition to abbreviations and acronyms concerning international non-governmental organisations.

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[128] From 2nd year secondary school book
[129] Agriculture, industry and services as the three main economy sectors

At the end, pupils are asked to write a statement of achievement about Nobel peace prize winners and present it in the form of a small sketchbook.

The main objectives are that at the end of this file, pupils should be able to:

- Make suggestions
- Ask for and give opinions
- Express obligation and absence of obligation
- Express ability and possibility
- Make requests

The third file entitled "*Waste not, Want not*" is about poverty and world resources. Through the file's texts and passages, pupils have opportunities to learn about energy consumption in modern times, the conservation of human resources, water, pollution, deforestation… Pupils are also taught about strategies for checking a monolingual dictionary and how to study dictionary entries. At the end and as project, pupils are asked to make a conservation plan that will be presented in the form of a prospectus.

The main objectives are that at the end of this file, pupils should be able to:

- Narrate
- Describe a process
- Report information
- Ask for and give information

The fourth file entitled "Budding Scientist" is about science and experimentations; where pupils are firstly introduced by the adequate and necessary vocabulary related to this file such as: Geometry, sociology, algebra, arithmetic, astrolabe….Some texts are used to support pupils to assimilate and achieve the file's objectives, they are mainly about electrostatics, mathematics, buoyancy . At the end and as project pupils are asked to write a report on scientific experiments[130].

The main objectives are that at the end of this file, pupils should be able to:

- Express conditions
- Make predictions
- Make and reply to suggestions

The fifth file of the secondary school textbook entitled "*News and Tales*" is typically about news, tales, fiction and stories. At the beginning of this file, pupils are initiated about information and news sources such as famous newspapers ("Newsweek", "The Guardian", "The Sunday Times"…) as well as famous books of well known writers: Tales from Shakespeare, James Joyce and Jonathan Swift. At the end of the file, pupils are asked to prepare a project by writing a collection of stories.

The main objectives are that at the end of this file, pupils should be able to:

- Agree and disagree
- Narrate
- Asking for and giving opinions
- Express conditions/regrets/wishes
- Making speculations
- Listening to a folktale
- Making an oral summary of tale
- Telling a tale
- Reading a new story
- Writing a short story

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[130] For scientific stream only

The sixth file which is entitled "*No Man is an Island*" is mainly about disasters and solidarity. The suggested texts and passages are all about disasters such as floods, earthquakes, fires, droughts, road accidents and charity organisations. Necessary safety instructions are taught to pupils in order know how to limit natural catastrophe effects. As far as this file is concerned, pupils are also taught how to behave during and mainly after natural disasters for solidarity actions.

The remark that could be made about this file is that a text as an interview of Bill Gates as man of the year in 2005, as well as the related activities to this interview that are used as pupils' supports in a file that is mainly about natural disasters.

At the end of the file and as project, pupils are asked to make a survey about people's readiness to face natural and man-made disasters.

The main objectives are that at the end of this file, pupils should be able to:

- Quote someone
- Make claims
- Express interest and surprise
- Disagree politely
- Reading a report
- Reading a newspaper article
- Writing a report
- Writing an announcement and a letter of opinion

The seventh file of the secondary school textbook entitled "Science or fiction?" is mainly about science fiction stories, fantasy films and related characters such as (Frankenstein the Martians or visitors from outer space). The related vocabulary is mainly about films, literature, science fiction, fantasies….

At the end of the file and as project, pupils are given the opportunity to choose between:

- Writing miscellanies which will be presented in the form of journal about fantasies.
- Making a repertory of inventions and discoveries

The main objectives are that at the end of this file, pupils should be able to:

- Express conditions
- Give advice
- Express regret
- Blame someone
- Make speculations
- Make suppositions
- Express wishes

The eighth file entitled "*Business is Business*" is typically about management, business and efficiency. Almost all the used vocabulary is about business and management. The suggested texts are in the form of ordering letters, complaining letters, memos, faxes and others about women at work, the good society, stock markets, and economic freedom. Pupils are expected to explore, analyse and evaluate graphs and annual reports of firms and companies. At the end of the file, pupils are asked to compile a business portfolio which will include letters/telegrams/faxes and telex messages on business situations.

The main objectives are that at the end of this file, pupils should be able to:

- Make comments
- Make decisions
- Make previsions
- Persuade and convince
- Suggest and advice
- Instruct
- Negotiate
- Complain
- Make apologies

5.2.3. Third Year Secondary School Textbook File Study

The 3rd year secondary school textbook consists of six files:

- File 01: Ancient civilisations

- File 2: Ethic in business

- File 3: Education in the world

- File 4: Advertising, consumers and safety

- File 5: Astronomy and the solar system

- File 6: Feelings, emotions; humour and related topics

In this sub-section we try to dissect each file from the above list into many important parts such as: The files' contents, their main objectives, the strategies used to reach these objectives and suggested projects[131]

The first file entitled "Exploring the Past" is a typical one that deals with ancient civilisations. Pupils are initiated to past exploration through texts, pictures and maps. They are also introduced to ancient Greek, Sumerian, Egyptian, Indus Valley and Chinese Civilisations and their chronological order in history as well the regions where they flourished.

As far as the file is concerned, many texts are designed to increase pupils' knowledge and culture such as: "Algeria at the Crossroads of Civilizations", "Ancient Egyptian Civilisation". Not only pupils are taught about, African, Arab, Maghreb or Algerian civilisations but they are also taught about western civilisation which started from the antiquity, The Middle Ages, The Renaissance, the Enlightenment, and the Industrial Revolution, in the Nineteenth and Twentieth Centuries. As project, pupils are asked to make a profile of an ancient civilisation (e.g. Greece).

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[131] From 3rd year secondary school book

The main objectives are that at the end of this file, pupils should be able to

- Compare between two things/events
- Narrate
- Inform
- Express concession

The second file entitled "Ill-Gotten Gains never Prosper" is mainly about Ethics in business, fighting fraud and corruption. Through the File's texts and activities, pupils can distinguish between what is really morally acceptable and what is morally wrong in business.

Pupils can also distinguish between ethical and unethical practices when doing business and how they can fight against corruption, eradicate fraud and counterfeit.

As project, pupils are asked to write charter for ethics in relation to three professions such as: Accountancy, medicine, teaching, journalism…

The main objectives are that at the end of this file, pupils should be able to:

- Describe
- Advise
- Express obligation/ cause/ result/ opinion
- Make hypotheses
- Express wishes and regrets

- Report what people think, say, believe…

The third file of the 3rd year secondary school textbook which is entitled "Schools: Different and Alike" is typically about education in the world. Firstly, pupils are asked to think about what they will study if they will succeed in the baccalaureate exam. Secondly pupils are introduced to the American educational system as well as education in Britain through selected text from Guide to British and American Culture and American Life and Institutions.

As project, pupils are asked to design an educational prospectus or a home page for their secondary school.

The main objectives are that at the end of this file, pupils should be able to:

- Describe a process
- Express wish and desire
- Express purpose/result
- Express warnings
- Express obligation and necessity
- Ask for and give advice
- Compare and contrast

The fourth file of the third year secondary school textbook is entitled "Safety First" is about advertising, consumers and safety, it deals also about how and to which extent can advertising affect consumers and their safety. Pupils are urged to read the labels on the packages of food before buying them, know about ingredients, the expiry date, before being attracted by the price, the design…

Pupils are also urged to opt and consume organic food rather than genetically modified food by improving their consuming culture. Through the selected texts, pupils are given clear explanations about how to have an equilibrate energy balance and avoid food poisoning.

As far as the file is concerned, the target vocabulary used in this file is about: food, consumers, advertisement, products and consumer protection associations. This vocabulary is wished to be used in the final project which is about making a survey on the impact of advertising.

The main objectives are that at the end of this file, pupils should be able to:

- Describe
- Express cause & effect
- Express probability and possibility
- Express hypothesis & deducing
- Express concession
- Express quantity

The fifth file is entitled "It's a Giant Leap for Mankind" is typically about astronomy and the solar system as well as satellites, telescopes, planets' information and man explorations of the Moon. The selected texts and passages are mainly about planets, solar system, and comets' collisions.

Pupils are also initiated to distinguish between natural and artificial satellites and the roles of these devices in TV, radio and broadcasting communication. In this file, the focus is on special vocabulary such as: Astronomy, planets, solar system, galaxy, satellites, Moon, Mars, Jupiter…

As far as the file is concerned, pupils are introduced with famous scientists and discoverers in astronomy field such as: Galileo Galilee, Copernicus, Al Battani, Claudius Ptolemy and other famous astronomers.

At the end and as, project pupils are asked to design an astronomy booklet including items such as:

- ID cards about two major planets in our solar system
- ID cards about two major moons in our solar system
- A short presentation of the history of space travel

The main objectives are that at the end of this file, pupils should be able to:

- Describe
- Compare and contrast
- Make hypotheses
- Make suppositions
- Read figures
- Ask Questions

The sixth and the last file of the third year secondary school textbook which is entitled "We are a Family!" it is mainly about Feelings, emotions, humour and related topics. The selected texts are mainly about humour and its good effects on our health, sense of humour, keys to feelings, happiness, anger and Diana life. Pupils are also introduced to a FAQ (Frequently Asked Questions) web page as well as science fiction texts (The Unicorn in the Garden). Finally and as project pupils are asked to write a booklet of tips for coping with

strong emotions I.e., how to deal with strong feelings and emotions such as love, hate, happiness, anger, jealousy…

The main objectives are that at the end of this file, pupils should be able to:

- Describe
- Advise
- Express likes and dislikes
- Express feelings

6. Pupils' Expected Outcomes

Among the main pupils' expected productions at the end of each file, projects are the originality of the competency based approach. We can consider a project as the final learning step that could be introduced as main objectives. It is the result and the fruit of many pedagogical parts; it could be applied to many levels according to competencies and abilities, they need an acceptable period of time to be prepared (from 2 to 4 weeks). Among the advantages of the project approach:

- Create pupils' collaboration

- Establish pupils' autonomy and making decisions

- Free topic choice and making decisions

- Total pupils 'involvement

- Production of concrete outcomes

- Inside and outside the classroom searching and learning

- Respect of deadlines

A project could be achieved by realising the following steps:

- The choice of the theme and the form of the final presentation (written report, oral…)

- The choice of the adequate strategies and methodologies

- Data collection

- Organising and arranging collected data

- Analysing and studying findings

- Project presentation

- Project discussion and evaluation

7. Competency Based Approach and Projects

All the middle and secondary school English textbooks are based on the competency based approach, which itself is characterized by the integration of projects at the end of each unit or file, it is considered as a main and inevitable part of the pedagogical objectives and learning strategies. Projects are considered as real and true ways to measure and evaluate competencies through pupils' realisations; whatever the ways, methods, tools and means used to achieve and realise this project. The most important thing is that pupils will participate to this project; individually or in groups. Teachers should evaluate and grant each effort in order to motivate pupils, and should guide them to avoid the mistakes in the next projects.

In contrast to the other approaches and methods where teachers play the role of owner of knowledge, where they are considered as the unique transmitters of information and knowledge; the competency based approach which is an action-oriented approach requires full actions from learners which were considered as passive receivers in the earliest approaches. According to the rules of the competency based approach, pupils should be involved fully in the learning process. Pupils decide which type of project they will choose, they way they will prepare it (individually or in groups), where to find and collect data and the way it could be collected and selected, to whom pupils will ask for assistance, the number of times they will restart again their projects after self-evaluation and non satisfaction …So, the teachers' roles are really limited to some tasks such as, deciding for the title of the project and its pedagogical objectives and some recommendations.

As in real life situations, sometimes pupils know only what they want and why they want it, but the way to get it will differ from one person to another, from one situation to another. What will make final differences in the results could be without any doubt: motivations, personality, psychological and intelligence differences.

7.1. Textbooks' Project Pedagogy

Projects are used to initiate pupils to research and investigation. Generally, pupils are given multi-topic projects, where they can choose and opt for the appropriate project which will suit their levels, motivation and intelligence. Teachers may opt for open-ended projects rather than structured projects or topic-related projects. The open-ended projects can not limit pupils' imagination and creativity, they permit them to express and show to which extent they can apprehend a research; however with structured projects and topic related projects, the expected outcomes will be almost the same for all the learners, we can't feel any important difference between projects prepared by excellent pupils and ordinary pupils.

Projects urge pupils to revise and assimilate the pre required information from the related lessons of the project. They have many indirect pedagogical aims and objectives, they make pupils able to use their own methods and strategies to think, solve, create, design and present their projects. They can feel really autonomous when working outside the classroom; they can satisfy their curiosity without obstacles. They learn how to make the right choice and decision when opting for such project rather than another as well as the methods and strategies used to achieve it…. Time notion is also not neglected in project pedagogy, it trains pupils to respect the deadlines and manage the time duration to realise the project in the pre-determined period.

7.2. Intelligence Detection by Projects

Projects are used as the final step of the unit learning process; they are of paramount importance, because they permit to recognise the pupils' intelligence. Gardner[132] presents intelligence taxonomy; he presents eight ways to detect learners' intelligence:

- Verbal/Linguistic intelligence: Reading, writing, speaking, and listening.
- Logical/Mathematical intelligence: Working with numbers, and abstract patterns.
- Visual/Spatial intelligence: Working with images, mind mapping, visualising, and drawing.
- Musical/Rhythmic intelligence: Using rhythm, melody, patterned sound, song, dance…
- Bodily/Kinaesthetic intelligence: Processing information through touch, movement, dramatics…

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[132] Gardner, Howard. (1983). The theory of multiple intelligences, New York : Basic Books
Gardner, Howard. (1993). The theory of multiple intelligences: The theory in practice New York : Basic Books

- Interpersonal intelligence: Sharing, cooperating, interviewing, relating…
- Intrapersonal intelligence: Working alone, self-paced, instruction, individualised projects…
- Naturalist intelligence: Spending time outdoors, sorting, classifying, noticing…

The way projects are designed, presented and displayed will inform teachers about pupils' hobbies and preferences. Teachers may be astonished when evaluating some projects; they will notice that some lazy pupils have done a remarkable work and that their project were among the most attractive one if not the best.

7.3. Project Procedure

According to middle and secondary school textbook recommendations, almost all the suggested projects must obey the following procedure:

- Choose a topic
- Make a plan
- Collect information and resources
- Select and organise data
- Opt for a final design
- Present and display
- Project comparison and evaluation

8. Middle School Textbooks' Projects:

As noticed in the previous sections, each file is crowned by a project realisation. This will automatically imply all the learned theories and the data acquired through the textbooks content and activities. So, at the end of each file, and in order to put in practice all the acquired information, pupils are asked to make a project.

8.1. First Year Middle School Textbook Projects

Project1: Make a tourist brochure about a country, a city, a village

 Project 2: A family tree/ a game card

Project 3: Sport magazine

Project 4: A brochure about animals

Project 5: A recipe book/Menu for a week

Project 6: Children's book about inventions

Project 7: Animal encyclopaedia

8.2. Second year middle school textbook projects:

Project1: A famous person's profile

Project 2: A language game booklet

Project 3: Medical / herbal guide

Project 4: A strip cartoon

Project 5: Writing a play

8.3. Third Year Middle School Textbook Projects:

Project 1: A wall sheet about greetings

Project 2: A travel phrase leaflet

Project 3: Designing a school magazine page

Project 4: A touristic brochure

8.4. Fourth year middle school textbook projects:

Project 1: Designing a advertising leaflet for a restaurant

Project 2: A profile of changes in man's capabilities

Project 3: Arranging a conference

Project 4: Making a poster about grandfather or grandmother clothe types

Project 5: Laying out a newspaper problem page

Project 6: Making a scrapbook

9. Secondary School Textbooks' Projects

Secondary school level is also concerned with projects, where pupils are asked to put in practice all the learned theories and the data acquired through the textbooks content and activities.

9.1. First year Secondary school textbook projects

Project 1: Making a job application booklet/an internet guide for beginners

Project 2: Writing a book review

Project 3: Conducting a survey

Project 4: Making the profile of an invention

Project 5: designing a consumer's guide

9.2. Second year Secondary school textbook projects:

Project 1: writing a life styles profile

Project 2: Writing a statement of achievements

Project 3: Making a conservation plan

Project 4: Writing reports on scientific experiments/Writing an ABC of dreams

Project 5: Writing a collection of stories

Project 6: Making a survey

Project 7: Writing miscellanies/Making a repertory

Project 8: Writing a business portfolio

9.3. Third year Secondary school textbook projects

Project 1: Making the profile of an ancient civilisation

Project 2: Writing a charter of ethics

Project 3: Designing an educational prospectus

Project 4: Conducting a survey on the impact of advertising

Project 5: Designing an astronomy booklet

Project 6: Writing a booklet of tips for coping with strong emotions

10. The pedagogical Relationship between File Contents and Projects

In this sub-section, we try to discuss the pedagogical relationship between file contents and projects; in order to see to which extent they can complement each other. As the previous studies, the following will consist also of the middle and the secondary school textbooks.

10.1. Middle School Textbook Relationship between File Contents and Projects

All the four middle school textbooks will be studied in what concerns the pedagogical relationship between file content and the suggested projects.

10.1.1. First Year Middle School Projects

File types	Projects
- File 01: Hello!	Project1: Make a tourist brochure about a country, a city, a village
-File 2: Family and Friends	Project 2: A family tree/ a game card
-File 3: Sport	Project 3: Sport magazine
-File 4: In and Out	Project 4: A brochure about animals
-File 5: Food	Project 5: A recipe book/Menu for a week
-File 6: Inventions and Discoveries	Project 6: Children's book about inventions
-File 7: Environment	Project 7: Animal encyclopaedia

Table 42: First Year Middle School File Types and Projects

Analysis**:**

As first remark, we can say that the types of the projects suggested in the first year middle school textbook are acceptably suitable for pupils who are considered as beginners in learning English as a foreign language.

10.1.2. Second Year Middle School Projects

File 1: A Person's Profile	Project1: A famous person's profile
File 2: Language Games	Project 2: A language game booklet
File 3: Health	Project 3: Medical / herbal guide
File 4: Cartoons	Project 4: A strip cartoon
File 5: Theatre	Project 5: Writing a play

Table 43: Second Year Middle School File Types and Projects

Analysis:

When analysing the second year middle school file types, we can say that generally the selected projects suggested at the end of each unit fit elegantly the pedagogical objective expectations. But for the last project "Writing a play" is somehow an exaggerated project that could be asked for pupils of a second year middle school level.

10.1.3. Third Year Middle School Projects

-File 1: Communications:
This file consists of three sections
    -Section 1: Hello again!
    -Section 2: Who is calling please?
    -Section 3: What's on?
	Project 1: A wall sheet about greetings

-File 2: Travel:
This file consists of three sections
    -Section 1: Welcome on board
    -Section 2: On my way…
    -Section 3: Good bye sailor
	Project 2: A travel phrase leaflet
	
	Project 3: Designing a school magazine page

-File 3: Work and Play:
This file consists of three sections
    -Section 1: What has happened?
    -Section 2: Have you ever…?
    -Section 3: I was wondering	

-File 4: Around the World
This file consists of three sections
    -Section 1: This is my land
    -Section 2: New York
    -Section 3: What a wonderful world!
	Project 4: A touristic brochure

Table 44: Third Year Middle School File Types and Projects

Analysis**:**

As first remark, we can say that the types of projects suggested in the third year middle school textbooks are acceptably suitable for pupils at this stage, except for the second and the fourth project where pupils are asked to make a travel leaflet as project for the second file and making a touristic brochure as project for the fourth file.

10.1.4. Fourth Year Middle School Projects

File 1: It's my Treat (Food and drink)	Project 1: Designing a advertising leaflet for a restaurant
File 2 : You Can Do it (Citizenship – Sustainable Development)	Project 2: A profile of changes in man's capabilities
File 3: Great Expectations(people and places)	Project 3: Arranging a conference
File 4: Then and Now(Customs)	Project 4: Making a poster about grandfather or grandmother clothe types
File 5: Dreams, Dreams… (Cultural exchanges)	Project 5: Laying out a newspaper problem page
File 6 : Fact and Fiction (Arts and sciences)	Project 6: Making a scrapbook

Table 45: Fourth Year Middle School File Types and Projects

Analysis:

When analysing the fourth year middle school file types, we can say that generally the selected projects suggested at the end of each unit fit elegantly the pedagogical objective expectations. But for the Project of the third file "Arranging a conference" is somehow very difficult project and it exceeds largely the pupils' capacities.

10.2. Secondary School Textbook Relationship between File Contents and Projects

As the previous study which was about the middle school textbooks; all the three secondary school textbooks will be studied in what concerns the pedagogical relationship between file content and the suggested projects.

10.2.1. First Year Secondary School Projects

- File 01: Getting through (communication)	Project 1: Making a job application booklet/an internet guide for beginners
-File 2: Once upon a time (art /literature)	Project 2: Writing a book review
-File 3: Our findings show…. (Journalism/ reporting)	Project 3: Conducting a survey
-File 4: EUREKA! (Science and technology)	Project 4: Making the profile of an invention
-File 5: Back to nature (environment)	Project 5: designing a consumer's guide

Table 46: First Year Secondary School File Types and Projects

Analysis:

Once again, we can say that the types of projects suggested in the first year secondary school textbook are acceptably suitable for pupils at this stage. Not only they are at the reach of the pupils levels, but they present diverse domains where information is abundantly available.

10.2.2. Second Year Secondary School Projects

- File 01: Diversity	Project 1: writing a life styles profile
-File 2: Peace /conflict resolution	Project 2: Writing a statement of achievements
-File 3: Poverty world resources	Project 3: Making a conservation plan
-File 4: Technology and innovation	Project 4: Writing reports on scientific experiments/Writing an ABC of dreams
-File 5: Fiction or reality	Project 5: Writing a collection of stories
-File 6: Disasters and solidarity	Project 6: Making a survey
- File 7: Science fiction stories	Project 7: Writing miscellanies/Making a repertory
-File 8: Management and efficiency	Project 8: Writing a business portfolio

Table 47: Second Year Secondary School File Types and Projects

Analysis**:**

When analysing the second year secondary school file types, we can say that generally the selected projects suggested at the end of each unit fit elegantly the pedagogical objective expectations. The suggested files deal with diverse topics of paramount interests that will prepare pupils to improve their analysis and synthesis that will be mainly required for baccalaureate exam.

10.2.3. Third Year Secondary School Projects

- File 01: Ancient civilisations	Project 1: Making the profile of an ancient civilisation
-File 2: Ethic in business	Project 2: Writing a charter of ethics
-File 3: Education in the world	Project 3: Designing an educational prospectus
-File 4: Advertising, consumers and safety	Project 4: Conducting a survey on the impact of advertising
-File 5: Astronomy	Project 5: Designing an astronomy booklet
-File 6: Feelings, emotions; humour and related topics	Project 6: Writing a booklet of tips for coping with strong emotions

Table 48: Third Year Secondary School File Types and Projects

Analysis:

According to the pedagogical objectives set up for each file, and in taking into account the files' type content, we can say that the suggested projects are well selected to measure the pupils' outcomes, by giving them a lot of opportunities to develop their skills in their future carrier to undertake the higher studies.

11. Conclusion

In this chapter, we have dealt mainly with the pedagogical sides recommended by the middle and secondary school textbook designers and how the competency based approach is introduced through different file types in many integrated situations incarnated in project realisations.

The achievement of files' objectives is also a crucial part that could be felt through text types and contents as well as their related activities; it's why Bloom's taxonomy of pedagogical objective is strongly present and practised in middle and secondary school textbooks. The switch from the competency based approach to learning by objectives is realised by three ways: Interact, interpret and produce. It is really a clever way to involve pupils in the learning process of a foreign language which is English.

Pupils are well guided with very successful methods; so that pupils' competencies could adequately be measured and easily evaluated by teachers. Pupils' outcomes reside on the realisation of different projects (booklets, brochures, games, profiles, guides…).

In the light of what was studied in this chapter, we can say that project pedagogy is a successful way of learning by doing where pupils have the chance to work individually or in groups. It needs a total pupils' involvement inside and outside the classroom.

1. Introduction

This chapter presents the kernel of the research. It will deal with the main findings of the investigation where we try to discuss and comment the obtained results. Working with statistics is primordial in nowadays research and investigations. One can have an idea about the previous results he has obtained when compared to the reliable one obtained by high institutions such as the British National Corpus which is designed by Oxford University Computing Service, and it presents all the English language with 100 million words from selected texts collected from many and various domains and categories with reliable rates presenting the real language proportions in real use.

In this chapter we will study wordlists, collocations, expressions and texts that exist in middle and secondary textbooks by using advanced corpora software. The study will focus mainly on statistics, frequencies, graphs …Some samples of vocabulary lists from middle and secondary school textbooks are suggested to software analyses, in order to compare them with the most frequent word list advised by Oxford University researchers mainly for non native speakers.

Finally, some text samples are analysed and dissected by advanced software.

2. Textbook Glossaries

The following section will shed light on the main glossary lists that exist in the middle and secondary school textbooks. The analyses will focus on the frequency ranges of these words.

2.1. Middle School Textbook Glossary

In this section, we try to move from an ordinary list presented at the end of a textbook to its deep investigation in order to make pedagogical and linguistic analysis about the selection and design of some words, expressions and texts. The case study is about the 1st year middle school book glossary that has approximately 1105 words presented in alphabetical order[133]. During the process some compound words such as (Yellow card, ball point pen, family name, one hundred…) are counted as more than one word by the used software. That is why the written form of certain words was modified during the process. The obtained results are as follows:

- Nouns: 778

- Adjectives: 118

- Verbs: 78

- Others[134]: 131

The glossary list covers many domains and fields with distinctive frequencies for each category; the ten main distinctive parts of the glossary are as follows:

Rank	Field category	Frequency	Rank	Field category	Frequency
1	Food	80	6	Communication	18
2	Animals	38	7	Clothing	17
3	Sport	26	8	Language	17
4	Time	24	9	Transport	13
5	Devices	22	10	Health	13

Table 49**:** The Main Distinctive Parts of the Glossary

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[133] Spotlight on English (2007:pp 165-189)
[134] Prepositions, conjunctions, adverbs, pronouns…

To illustrate our study and make this analysis more effective, we transform the above table into the following graph:
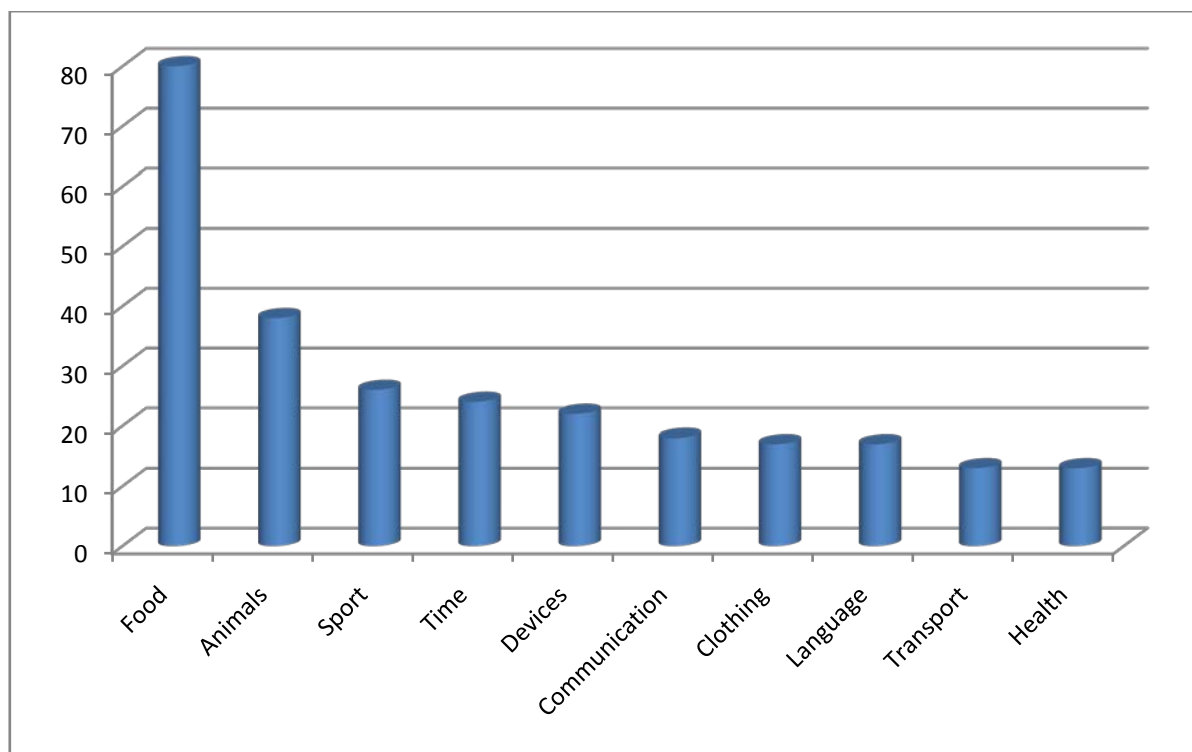
Graph 6: Glossary's Main Distinctive Parts

Among the results obtained, a very long list presents other field categories with less frequency that could not be presented in this section due to the space that it will occupy. If we compare these results with the textbook file types[135], we will immediately conclude that only the third, the fourth and the fifth files of the first year middle school textbook are really well presented in what concerns the target vocabulary of the related concepts needed by pupils to learn better these topics by using a foreign language such as English. The file (food) is well presented in the index by 80 related words; this presents advantages to pupils to master the target field when dealing with a multitude of different words. So for a file of 20 pages containing texts and dialogues, activities, that will last approximately more than one month

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[135] File 01: Hello! (About greeting people and communication)

-File 2: Family and Friends

-File 3: Sport

-File 4: In and Out (about animals)

-File 5: Food

-File 6: Inventions and Discoveries

-File 7: Environment

and that will be concluded by a project, I think that 80 key concepts are largely enough for pupil to undertake new files in a foreign language, in contrast, a rate of less than 30 key concepts presents a poor vocabulary file.

The software investigation permits also to investigate deeply the glossary list of the first year middle school textbook. The following results present more detailed sub-fields with their respective frequencies. We will restrict the research to the main most frequent sub-fields otherwise the list will be very long, when we know pertinently that the software investigation will present all the existing sub-fields even when occurring one time only[136].

Rank	Sub-field	Frequency	Rank	Sub-field	Frequency
1	Vegetables	14	4	Musical instruments	06
2	Fruit	13	5	Seasons	05
3	Meat	08	6	Meal	05

Table 50: Glossary' Sub-Fields

In addition to the results mentioned in the table above, we have also obtained 5 sub-fields with a quadruple frequency, 8 subfields with triple frequency, 76 sub-fields with a double frequency and 596 sub-fields with a simple frequency for each but we have restricted the investigation to words with a respective frequency equal or superior to 5. Among the investigation possibilities we can explore each category alone. In this study, and as an illustration, we have taken the first three ranked categories (vegetables, fruit, and meat). The obtained results are as follows:

The detailed Vegetable list is presented by 14 words:

Bean

Cabbage

Carrot

Chips

Cauliflower

Courgette

Cucumber

Lettuce

Mushroom

---

[136] The investigation is restricted to sub-fields with a frequency 5

Onion

Peas

Potato

Turnip

Vegetable

The detailed fruit list is presented by13 words:

Apple

Banana

Fig

Fruit

Grapes

Lemon

Melon

Olive

Pineapple

Plum

Orange

Peach

Pear

The detailed meat list is presented by 8 words

Bacon

Beef

Chicken

Chop

Meat

Mutton

Poultry

Steak

Throughout this study, we have to investigate deeply the vocabulary list or the glossary by comparing the statistics to the target file types. The software investigation shows to which extent an ordinary textbook unit or file could be explored and evaluated in what concerns its vocabulary efficiency to reach the expected objectives set at the beginning of each unit.

To sum up and in the light of this advanced investigation, we have seen that some files are strongly presented in what concerns vocabulary and others are weakly presented. So, textbook designers can use the existing software in order to explore the compatibility of the selected texts, dialogues and/or activities with the vocabulary diversity and richness that exists within these texts. The methodology used in this investigation is from holistic to atomistic i.e., moving from generals to details. By this approach textbook designers can realise the importance of the selected texts in what concerns vocabulary interests.

2.2. **Secondary School Textbook Glossaries**

The glossaries of the first year secondary school textbook are presented in the form of lists at the end of each file. These lists are also translated into Arabic.

- File one "Getting Through" is an introductory unit is about computers, internet, emails…The glossary presented to pupils in page 44 contains 59 words.
- File two: "Once upon a Time" is about short stories, books, novels… The glossary presented to pupils in page 74 contains 60 words.
- File three "Our Findings Show" is about conducting a survey or a research. The glossary presented to pupils in page 105 contains 60 words.
- File four "EUREKA!" is about inventions and discoveries. The glossary presented to pupils in page 136 contains 57 words[137].
- File five "Back to Nature" is about environment and renewable energy. The glossary presented to pupils in page 166 contains 60 words.

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[137] In this glossary we have 58 words, but we haven't taken into account one preposition (against) that exists in this glossary because we have limited the study to the main parts of speech (nouns, verbs, adjectives and adverbs)

The table below illustrates the glossary composition in what concerns the main parts of speech.

Files	File 1	File 2	File 3	File 4	File 5	Total
Number of words	59	60	60	57	60	296
Nouns	27	32	32	36	39	116
Verbs	14	09	16	08	16	63
Adjectives	16	19	11	12	05	63
Adverbs	02	00	01	01	00	04

Table 51: Glossary Main Parts of Speech

So, from the first sight, the target glossary is faithfully respecting the parts of speech norms of the British National Corpus or any other reference corpus. In any language in the world and mainly the English one, the nouns present the most important rate of the language parts of speech followed respectively by verbs, adjectives, and adverbs.

To make this investigation worthily interesting, we transform the above inert table into live graphs where many unseen events could be easily made in the investigation zoom in order to formulate the necessary remarks, observations and recommendations when really necessary.
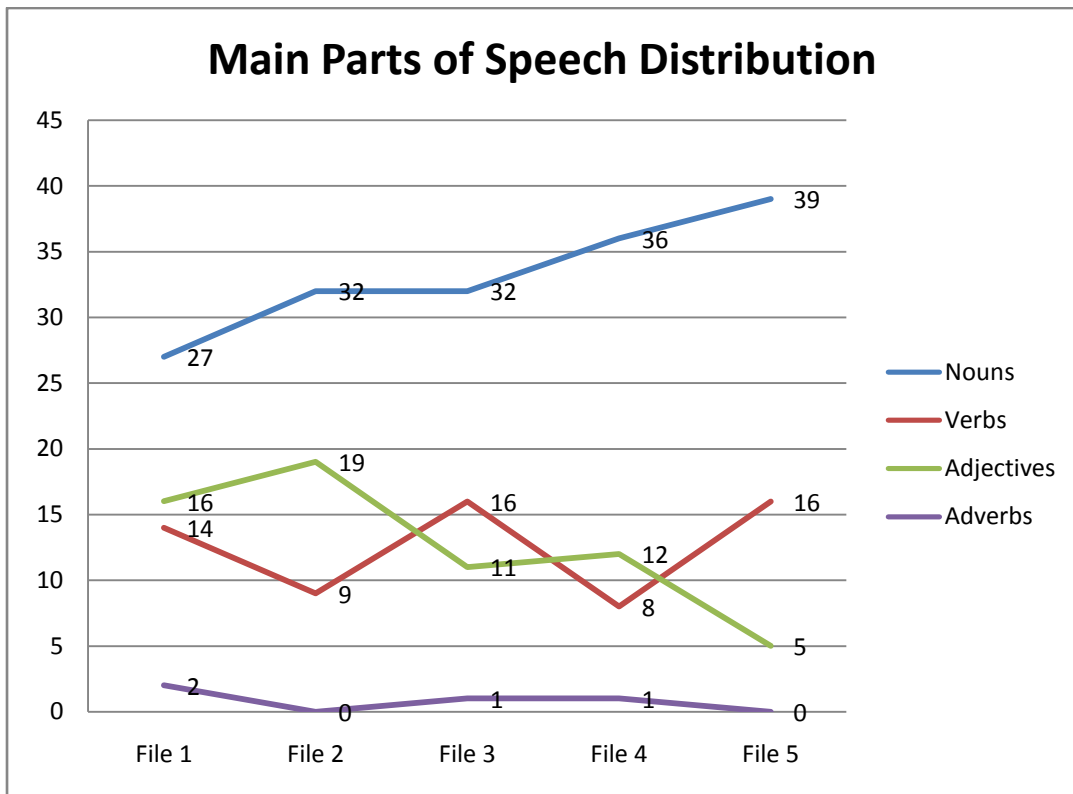
Graph 7: Main Parts of Speech Distribution

From the above figures, the graphs illustrate clearly some important details that could be of paramount help for linguists and textbook designers. As an inert list, one can detect nothing from it apart from some rudimentary remarks or observations, but having a full illustration of the parts of speech distribution through the different files of any textbook will transform the textbook design into an accurate and exact science where each word, each collocation, each expression, and each text will have strong reasons to appear in this textbook. The randomness will not find a place when the technology by its advanced software is dominating the situation.

From the following figure, we will have another vision angle where the main parts of speech rate are clearly evident and reflect the real glossary situation. If we refer to the totality number of words that exist in the five units of the first year secondary school textbook, we will notice that the nouns with a number of 116 and a rate of 47% dominate largely the other main parts of speech, followed by verbs and adjectives with 63 for each category (26%); however, adverbs are weakly presented by a rate of 2%. The obtained results are logical issues because in ordinary glossaries, the nouns are largely presented; they can reach the half of the existing words. The other categories present the other half mainly in what concerns verbs and adjectives. Some important adverbs can take place in certain glossaries but it is not the case of the pronouns, prepositions, articles, conjunctions and auxiliaries; these parts of speech are rarely inserted in the glossaries.
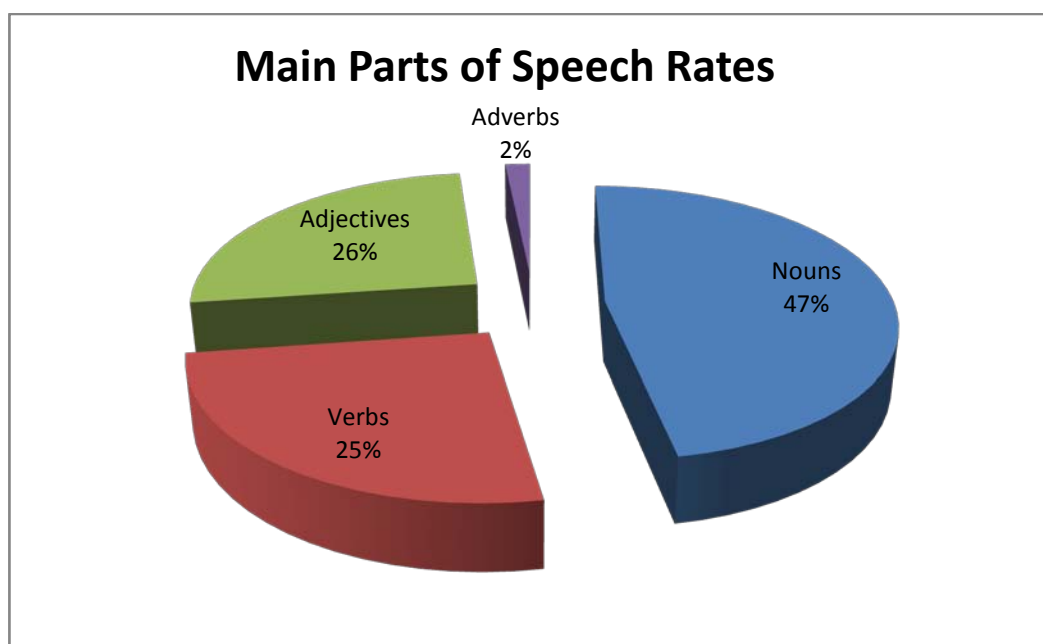
Graph 8: Glossary Main Parts of Speech Rates

In the same context and by analyzing the frequency ranges of the glossaries presented in the first year secondary school textbooks, and according to the statistics of the following table obtained by the British National Corpus software which is devoted to analyse texts and lists we can immediately shed light on what was hidden and invisible to all the textbook contributors and users.

To be clear and objective, according to Oxford and The British / American National Corpora experts, the 3000 most frequent words in English should be taken into account when using new vocabulary to learn a foreign language such as English; this could be efficiently true mainly when it concerns beginners or non native speakers[138]. The Oxford 3000 Dictionary is itself based on the most frequent words of the British National Corpus and the American National Corpus. It presents a reliable reference in what concerns word or vocabulary lists.

By the following investigation, we try to study to which extent these glossaries are dealing with the frequency ranges and mainly the 3000 most frequent words that exist in the English language. So, we have synthesised the detailed results of the glossaries mentioned above in an illustrative table.

Frequency Ranges	0-500	501-3000	>3000
File 1	15%	28%	57%
File 2	06%	15%	79%
File 3	07%	32%	62%
File 4	08%	22%	69%
File 5	02%	27%	72%
Average	7.6%	24.8%	67.8%

Table 52: Files' Frequency Range Rates

The frequency ranges are divided into 3 main parts:

- Range 1: (0-500), it presents mainly the first 500 most frequent words used by native speakers in the English language[139] .

- Range 2: (501-3000), this range presents the second part of the most frequent words used by native speakers of the English language. This list consists of 2500 important words needed by the users of the English language in general and non native speakers in particular.

- Range 3: (>3000). This range presents the words that are not recommended by the experts of Oxford and the British/American National Corpora. The 3rd range consists of specific words and very special vocabulary lists.

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[138] See The Oxford 3000 TM Dictionary

[139] This list is mainly characterised by the presence of an important number of pronouns, prepositions, auxiliaries and some conjunction that are more frequent in the daily speech of native speakers.

Frequency Range Average

Range 1
7.6%

Range 2
24.8%
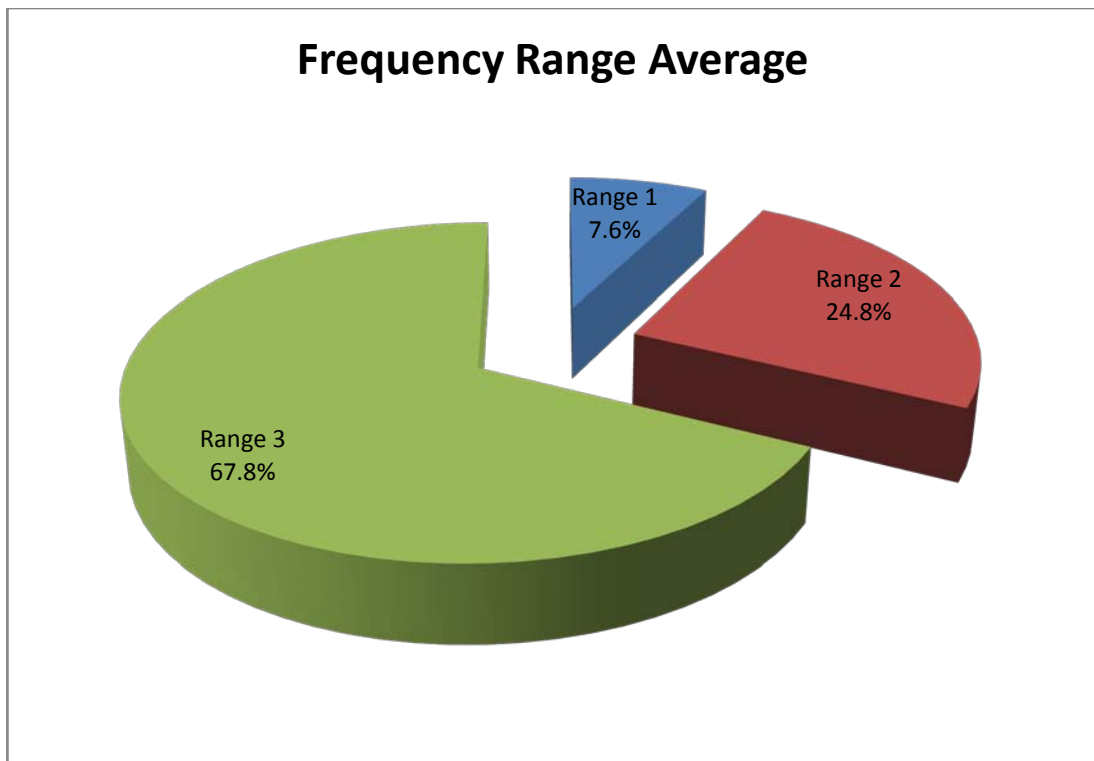
Range 3
67.8%

Graph 9: Glossary Frequency Range Average

As seen in the graph above, the first year secondary school textbook glossaries are mainly dominated by words belonging to range 3 (67.8%), followed by the range 2 (24.8%) and finally the range 1 (7.6%). This could be logically explained, when we consider the 1st year secondary school textbook file types:

- File 01: Getting through (communication)

-File 2: Once upon a time (art /literature)

 -File 3: Our findings show…. (Journalism/ reporting)

-File 4: EUREKA! (Science and technology)

-File 5: Back to nature (environment)

These files are mainly devoted to English for Specific Purposes (ESP), when we notice the presence of computer science, communication in file one, art and literature in the second, journalism and research findings and investigations in the third file, science and technology in the fourth and environment in the last one.

This could logically explain the obtained results and mainly the dominance of the range 3 which presents words that are beyond the recommended 3000 words. So, when we consider the file type content, it's obvious that we will use and find specific words of ESP. So this range will be logically accepted (67.8%).

The second range is somehow neglected in the first year secondary school textbook glossaries. This category contains 2500 most frequent words and it is comprised between the first 501 and 3000 most frequent words used in English. In my opinion and according to my modest experience in corpora and their statistics, the rate 35% will be logically efficient and acceptable mainly for pupils still beginning a new career in a secondary school system.

The As mentioned above, this range presents the list of the first 500 most frequent words in English that are most frequently used by native speakers in their daily speech and communication. This list consists of pronouns, articles, prepositions, auxiliaries and conjunctions. That is why such words haven't a place in such glossaries, and they can't be strongly presented in such lists.
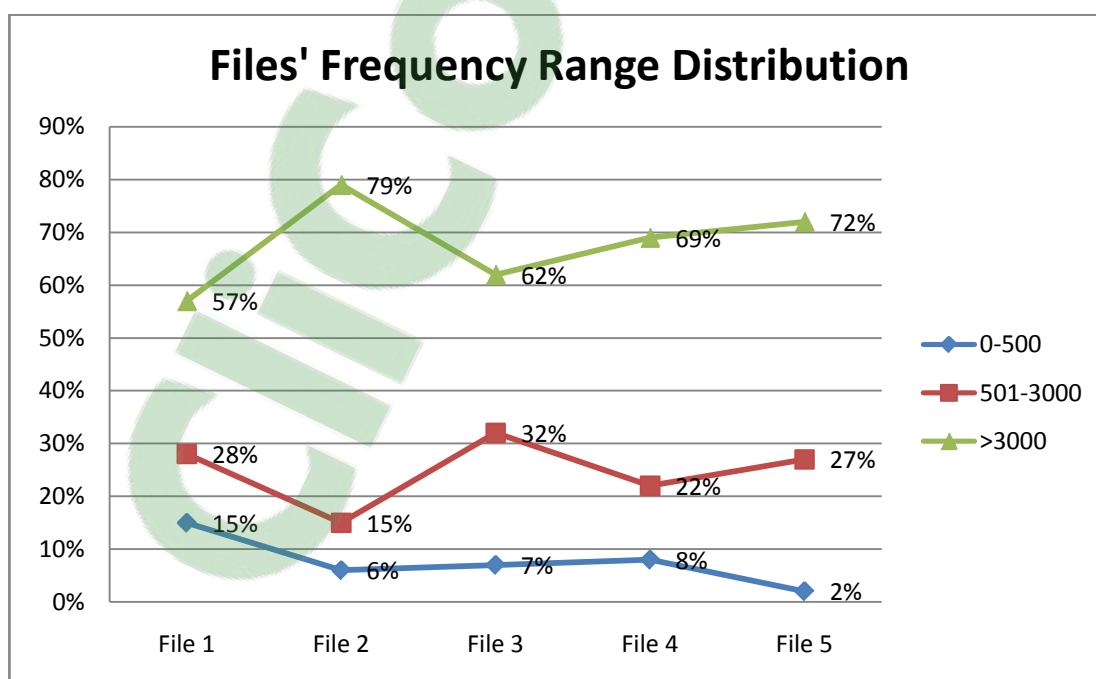
Graph 10: Files' Frequency Range Distribution

138

3. General Processing of Texts

This section will investigate on the middle and secondary school textbook. Samples of texts, lists and short passages were selected from different books of the middle and the secondary school textbooks.

3.1. Middle School Textbooks

This sub-section deals mainly with the general processing of large samples of texts from all the concerned levels (from the 1st year middle school to the 4th middle secondary school). It aims mainly to detect the strong and weak parts of each textbook's files, units or texts. The investigation sheds light on almost the important wordlists, paragraphs and texts. It will help us to have an idea about the texts' selections I.e.; each text will be analysed according to the most frequent words that appear along the textbook or at least along the studied file.

3.1.1. Specific Frequencies

This study aims to investigate on the positions of the most frequent words throughout the selected files of the textbook or the unit. The result tables will display a very long list of all the existing words of each textbook[140] and the number or the code of the text or list where they appear. The objectives of this study are to analyse quickly the selected text and see to which extent they will be efficient in terms of the necessary words apparition. We will limit the study to the four middle school textbooks, and we will devote the secondary school textbooks to another advanced study.

3.1.1.1. First Year Middle School Texts and wordlists

In this study and as mentioned above, we have processed[141] 19 wordlists and 3 short texts (1024 items)

Input files:
T_1.	(64 bytes)	list 1 adj.txt
T_2.	(217 bytes)	list 1 p13.txt
T_3.	(57 bytes)	list 2 anim.txt
T_4.	(68 bytes)	list 2 p14.txt
T_5.	(229 bytes)	list 3 p 17 school things.txt
T_6.	(132 bytes)	list 4 p18 school commands.txt
T_7.	(79 bytes)	list 5 p53 .txt

---

[140] We restrict the list to the first 40 most frequent words
[141] Results obtained by Lextutor Software

The results:

A very long table was obtained; it contains the 1024 words with general details, in the following sample. As mentioned above, we have limited the result table to the first 40 words. This table permits to have the frequencies of the target words and their localisations in the texts or the lists where they appear.

Rank	Word	Frequency	The Texts/lists where it appears
1	A	24	7 ;8 ;10 ;22 ;23 ;24
2	And	09	22 ;23 ;24
3	He	08	22
4	Of	08	5 ;24 ;21
5	Play	08	12 ;16 ;18 ;21
6	Live	07	12 ;18 ;21 ;24
7	The	07	6 ;22 ;24
8	You	07	6 ;23 ;21
9	Be	06	21 ;22,23,24
10	Book	06	5 ;6 ;21
11	Drive	06	7 ;13 ;21
12	In	06	21 ;22 ;24
13	Like	06	12;18;21,23
14	Work	06	12;18;21;22
15	Ball	05	5,21
16	End	05	12;18;21
17	Food	05	21;23
18	Name	05	21;24
19	Pen	05	5;21
20	Ride	05	16;21;24
21	She	05	24
22	Some	05	21;22;24
23	Stay	05	12;18;21
24	Take	05	21;23;24
25	Telephone	05	12;13;18;21
26	To	05	6;23;24
27	Wonder	05	11;19;21
28	Act	04	21
29	Awful	04	11;19;21
30	Cook	04	12;18;21
31	Dog	04	3;17;21;23
32	Eat	04	13;21;23
33	Educate	04	20;21
34	Fantastic	04	11;19;21
35	Fast	04	21,23
36	Five	04	21
37	Foot	04	21;14
38	Forest	04	21;24
39	Friend	04	21
40	Go	04	6;21;24

Table 53: The 40 most frequent words and the text where they appear (1st year)

By analysing the above result, we can quickly synthesise the texts or even the files' compatibility. Normally the verb "play" collocates strongly with "ball", but the first one exists in the lists/texts number 12, 16, 18 and 21; however the second exists in the lists/texts 5 and 21. As a result, we have more efficiency in the list/text 21 than the other texts where the two words exist. It is worthy to mention that a lot of situations could be analysed by the same way.

The 24 texts and lists have only few words[142] with 5frequencies and more

- Play 08
- Live 07
- Book 06
- Drive 06
- Like 06
- Work 06
- Ball 05
- End 05
- Food 05
- Name 05
- Pen 05
- Ride 05
- Stay 05
- Telephone 05
- Wonder 05

As far as the frequency words is concerned, the processed texts/lists of the first year middle school textbook presents only 1% of academic words among 1024 processed words:

Academic Wordlist:

Active, Africa, Algeria, article, employ, examine, figure, item, actor, represent, sport, xylophone

---

[142] Articles, prepositions, pronouns and conjunctions are not taken into account because they appear with very high frequencies in each text.

3.1.1.2. Second Year Middle School Texts and Wordlists

In this study[143] and as mentioned above, we have processed 11 wordlists and 4 short texts (333 items)

Input files:

T_1.	(102 bytes)	list 1 p15 verbs.txt
T_2.	(533 bytes)	list 2 p16.txt
T_3.	(60 bytes)	list 3 p 28 words with th.txt
T_4.	(348 bytes)	list 4 p132 words with y.txt
T_5.	(319 bytes)	list 5 pp 50;55 wordlists.txt
T_6.	(162 bytes)	list 6 p60 wordlist .txt
T_7.	(264 bytes)	list 7 pp 74;79.txt
T_8.	(155 bytes)	list 8 p83 wordlist.txt
T_9.	(109 bytes)	list 9 p 82 sentences.txt
T_10.	(572 bytes)	list 10 pp 84;96;101;105 wordlists.txt
T_11.	(251 bytes)	list 11 p109 verbs.txt
T_12.	(468 bytes)	text 1 p 10.txt
T_13.	(293 bytes)	text 2 p 58 about adjectives.txt
T_14.	(419 bytes)	text 3 p 62 about vitamins.txt
T_15.	(351 bytes)	text 4 p 63 about food.txt

---

[143] Results obtained by Lextutor Software

A very long table was obtained from the second year middle school texts and lists; it contains the 330 words with general details, in the following sample. The table shows just the 40 first words of the obtained results. It permits to have the frequencies of the target words and their localisations in the texts or the lists where they appear.

Rank	Word	Frequency	The Texts/lists where it appears
1	A	18	9 ;12 ;13 ;14 ;15
2	And	15	12 ;13 ;14 ;15
3	To	11	9 ;12 ;13 ;14 ;15
4	I	10	4 ;13
5	The	09	9 ;12 ;13 ;14 ;15
6	Be	08	11 ;12 ;13 ;14
7	Go	08	9 ;11 ;12
8	Have	08	11 ;12 ;13 ;14
9	In	08	12 ;13 ;14 ;15
10	She	08	12
11	They	06	4 ;10 ;12 ;14 ;15
12	At	05	12
13	Clock	05	12
14	Of	04	13 ;14 ;15
15	Paint	04	2 ;10
16	Play	04	4 ;9 ;14 ;15
17	Teach	04	2 ;5 ;11
18	Vitamin	04	14
19	You	04	4 ;13 ;14
20	Advice	03	5 ;7 ;8 ;
21	College	03	7 ;8
22	Concert	03	7 ;8 ;9
23	Drive	03	11 ;13
24	Each	03	5 ;14 ;15
25	Eat	03	11 ;12 ;15
26	Exercise	03	2 ;7 ;8
27	Explain	03	10
28	Find	03	11 ; 13 ; 14
29	Food	03	14 ; 15
30	Fruit	03	14 ; 15
31	Get	03	7 ; 11 ; 12
32	Health	03	14 ; 15
33	Important	03	14 ; 15
34	Job	03	13
35	Must	03	15
36	Prepare	03	10
37	See	03	9 ; 11
38	This	03	5;13;14
39	Transform	03	6; 14
40	Understand	03	2; 10;11

Table 54: The 40 most frequent words and the text where they appear (2nd year)

By analysing the above result, we can quickly synthesise the compatibility that exists between processed texts or files'. This time again, the list is dominated by grammatical words (articles, prepositions…). We can find verbs (be, go…) with important frequencies, but the first noun is "clock" with 5 frequencies and it exists in only one text. Other nouns exist but with less important frequencies such as vitamin, fruit, health…

As far as the frequency words is concerned, the processed texts/lists of the second year middle school textbook presents 7% of academic words among 330 processed words:

Active, Algeria, compose, computer, deficiency, develop, essential, example, identify, language, meaning, objective, promote, regulate, role, science, specific, subject, substance, transform, vocabulary

The 15 texts and lists have only 4 words[144] with 5 frequencies and more:

- Be 08
- Go 08
- Have 08
- Clock 05

---

[144] Articles, prepositions, pronouns and conjunctions are not taken into account because they appear with very high frequencies in each text.

3.1.1.3. Third Year Middle School Texts and Wordlists

In this study[145] and as mentioned below, we have processed 5 wordlists and 7 short texts (459 items)

Input files:

T_1.	(373 bytes)	list 1 p18;131;144 adjectives.txt
T_2.	(282 bytes)	list 2 p23;143 wordlist.txt
T_3.	(69 bytes)	list 3 p 122 adjectives ending in ful and less.txt
T_4.	(108 bytes)	list 4 p125 verbs.txt
T_5.	(109 bytes)	list 5 p 146 nouns and adjectives.txt
T_6.	(759 bytes)	text 1 p39 Guards or killers.txt
T_7.	(1248 bytes)	text 3 p111 Comprehensive schools in Britain.txt
T_8.	(1491 bytes)	text 4 p 133 The United Kingdom.txt
T_9.	(1651 bytes)	text 5 p 141 Washington DC.txt
T_10.	(678 bytes)	text 6 p148 English in the world.txt
T_11.	(505 bytes)	text 7 p 166 A tourist guide speaking.txt
T_12.	(1454 bytes)	travel vocabulary pp61;69 (for ESP).txt

---

[145] Results obtained by Lextutor Software

A very long table was obtained from the third year middle school texts and lists; it contains the 459 words with general details, in the following sample. The table shows just the 40 first words of the obtained results. It permits to have the frequencies of the target words and their localisations in the texts or the lists where they appear.

Rank	Word	Frequency	The Texts/lists where it appears
1	The	104	6 ; 7 ; 8 ; 9 ; 10 ; 11 ; 12
2	Be	68	6 ; 7 ; 8 ; 9 ; 10 ; 11 ; 12
3	A	59	6 ; 7 ; 8 ; 9 ; 10 ; 11 ; 12
4	Of	55	6 ;7 ;8 ;9 ;10 ;11 ;12
5	In	38	6 ; 7 ; 8 ; 9 ; 10 ; 11 ; 12
6	And	35	6 ; 7 ; 8 ; 9 ; 10 ; 11
7	To	30	6 ; 7 ; 8 ; 9 ; 10 ; 11 ; 12
8	It	19	6 ; 7 ; 8 ; 9 ; 10
9	English	13	6 ; 8 ; 10 ; 12
10	Unite	13	8 ; 9 ; 10
11	Britain	12	6 ; 7 ; 8 ; 10
12	Million	12	8 ; 9 ; 10
13	With	12	7 ; 8 ; 9 ; 10
14	You	12	7 ; 11 ; 12
15	Hotel	10	12
16	School	10	7
17	Who	10	6 ; 7 ; 9 ; 12
18	For	09	6 ; 7 ; 9 ; 11 ; 12
19	Four	09	6 ; 7 ; 8 ; 10
20	House	09	7 ; 9 ; 11
21	On	09	6 ; 7 ; 9 ; 10 ; 11 ; 12
22	Make	08	6 ; 8 ; 9 ; 12
23	One	08	6 ; 8 ; 9 ; 11
24	People	08	6 ; 8 ; 9 ; 10 ; 12
25	This	08	8 ; 9 ; 10 ; 11
26	City	07	8 ; 9
27	Country	07	8 ; 10 ; 12
28	Go	07	4 ; 7 ; 11
29	Have	07	7 ; 8 ; 10 ; 12
30	King	07	8 ; 10
31	States	07	9; 10
32	Tour	07	6 ; 9 ; 11 ; 12
33	Capital	06	8; 9
34	Guard	06	6
35	Irish	06	8; 10
36	Two	06	8; 9; 12
37	At	05	7; 8; 9; 12
38	Beauty	05	1; 9
39	Build	05	6; 9
40	Five	05	9; 10; 11

Table 55: The 40 most frequent words and the text where they appear (3rd year)

This time, we can say that the processed results of the selected texts of the third year middle school textbook are really interesting. Many important words have high frequencies spread over many texts and wordlists. The words "English", "Britain", "million" appear in more than 3 texts with 12 and 13 repetitions.

As far as the frequencies are concerned, the third year middle school textbook present presents more than 6% of academic words among 459 processed words:

Absent, actual, between, Canada, centre, climate, comprehensive, compulsory, consist, develop, example, form, geography, immigrate, include, inform, language, mathematics, passage, patient, pattern, philosophy, phonetic, population, situate, student.

The list of words[146] with 5 frequencies and more

- English 13
- Unite 13
- Britain 12
- Million 12
- Hotel 10
- School 10
- Four 09
- House 09
- Make 08
- People 08
- City 07
- Country 07
- Go 07
- Have 07
- King 07
- States 07
- Tour 07
- Capital 06
- Guard 06
- Irish 06
- Two 06
- Beauty 05
- Build 05
- Five 05

---

[146] Articles, prepositions, pronouns and conjunctions are not taken into account because they appear with very high frequencies in each text.

3.1.1.4. Fourth Year Middle School Texts and Wordlists

In this study[147] and as mentioned below, we have processed 11 texts (498 items)

Input texts:

T_1.   (688 bytes)   text 1 file 1 p23.txt

T_2.   (1249 bytes)   text 2 file 2 p 57 ROBOT.txt

T_3.   (1003 bytes)   text 3 file 2 p 64 I have a dream.txt

T_4.   (975 bytes)   text 4 file 4 p 107 Martin Luther King.txt

T_5.   (396 bytes)   text 5 file 4 p 112 Clothes.txt

T_6.   (653 bytes)   text 6 file 6 p 145 untitled.txt

T_7.   (581 bytes)   text 7 file 6 p 156 untitled.txt

T_8.   (639 bytes)   text 8 file 6 p 158 untitled.txt

T_9.   (563 bytes)   text 9 file 3 p 169 listening script.txt

T_10.   (1404 bytes)   text 10 file 3 p 170 listening script.txt

T_11.   (859 bytes)   text 11 file 4 p 172listening script.txt

---

[147] Results obtained by Lextutor Software

A very long table was obtained from the fourth year middle school texts and lists; it contains the 498 words with general details, in the following sample. The table shows just the 40 first words of the obtained results. It permits to have the frequencies of the target words and their localisations in the texts or the lists where they appear.

Rank	Word	Frequency	The Texts/lists where it appears
1	The	107	1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 7 ; 8 ; 9 ; 10 ; 11
2	Be	82	2 ; 3 ; 4 ; 5 ; 6 ; 7 ; 8 ;9 ; 10 ; 11
3	A	57	1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 7 ; 8 ; 9 ; 10 ; 11
4	Of	44	2 ; 3 ; 4 ; 6 ; 7 ; 8 ; 9 ; 10 ; 11
5	And	41	1 ; 2 ; 3 ; 4 ; 5 ; 6 ; 7 ; 8 ; 9 ; 10 ; 11
6	To	38	2 ; 3 ; 4 ; 5 ; 6 ; 8 ; 10 ; 11
7	In	37	1 ; 2 ; 3 ; 4 ; 6 ; 7 ; 8 ; 9 ; 10 ; 11
8	You	34	1 ; 2 ; 5 ; 10
9	They	27	1 ; 2 ; 3 ; 4 ; 6 ; 8 ; 9 ; 11
10	Will	27	2 ; 3 10
11	We	26	3 ; 4 ; 6 ; 10 ; 11
12	He	25	4 ; 8 ; 9 ; 11
13	She	23	7 ; 8 ; 9 ; 10
14	This	21	2 ; 3 ; 4 ; 8 ; 10 ; 11
15	For	17	2 ; 3 ; 4 ; 6 ; 7 ; 8 ; 10
16	Have	15	1 ; 2 ; 3 ; 6 ; 10 ; 11
17	With	15	1 ; 3 ; 7 ; 8 ; 10 ; 11
18	Robot	14	2
19	At	13	1 ; 2 ; 3 ; 4 ; 6 ; 7 ; 9 ; 10 ; 11
20	I	13	2 ; 3 ; 4 ; 8 ; 10
21	On	13	1 ; 3 ; 6 ; 10 ; 11
22	As	12	3 ; 7 ; 9 ; 10 ; 11
23	It	11	1 ; 2 ; 5 ; 7 ; 8 ; 10 ; 11
24	White	11	3 ; 4 ; 5 ; 7 ; 8
25	Able	10	2 ; 3
26	One	10	1 ; 2 ; 3 ; 8 ; 10 ; 11
27	While	09	1 ; 2 ; 6 ; 7 ; 8 ; 9 ; 10
28	Who	09	2 ; 4 ; 5 ; 7 ; 11
29	Should	08	1 ; 4
30	Snow	08	7 ; 8
31	There	08	4 ; 7 ; 10
32	Together	08	1 ; 3 ; 10
33	When	08	1 ; 5 ; 6 ; 8 ; 10 ; 11
34	Which	08	2 ; 3 ; 6 ; 10 ; 11
35	But	7	2 ; 3 ; 4 ; 10 ; 11
36	Man	07	2 ; 4 ; 5 ; 11
37	Two	07	6 ; 10
38	Can	06	2
39	Day	06	3; 4; 8
40	Girl	06	3; 5; 7; 11

Table 56: The 40 most frequent words and the text where they appear (4th year)

In the processed texts of the fourth year middle school, we can find different important words having scientific tendencies such as "robot", "white", "snow"…This is due to the type the types of files that form the fourth year textbook. More than 25 words occur more than 10 times in the processed texts.

List of words[148] with 5 frequencies and more:

- Will 27
- Have 15
- Robot 14
- White 11
- Able 10
- One 10
- While 09
- Should 08
- Snow 08
- Together 08
- Man 08
- Two 07
- Can 06
- Day 06
- Girl 06
- Group 06
- Dream 06
- Food 05
- Mouth 05
- Put 05
- Day 05
- Wear 05

---

[148] Words with a frequency that exceeds 5

The processed texts/lists of the fourth year middle school textbook presents 3% of academic words among 498 processed words:

Apparent, between, content, defence, example, fulfil, generate, grade, latter, student, table

3.1.1.5. Middle School Recapitulative Study

	Processed words	Range 1 (1-500)	Range 2 (501-3000)	Range 3(>3000)
1st Year Middle School Textbook	369 Words	85%	8%	7%
2nd Year Middle School Textbook	333 Words	82%	8%	10%
3rd Year Middle School Textbook	359 Words	84%	6%	10%
4th Year Middle School Textbook	498Words	82%	6%	12%

Table 57: Middle School Recapitulative Study

The middle school textbook study leads to many important results. The first range is dominating in all the four middle school textbooks with more than 80%; however the two other ranges are presented by rates comprised between 6% and 12%. As mentioned before the first range which contains words ranked between 1 and 500 most frequent used words in the English language are very important for beginners such pupils studying English from the 1st year middle school to the 4th year middle school. The other ranges are also of great importance but with very moderate rates because the priority is given to the 500 most frequent words.
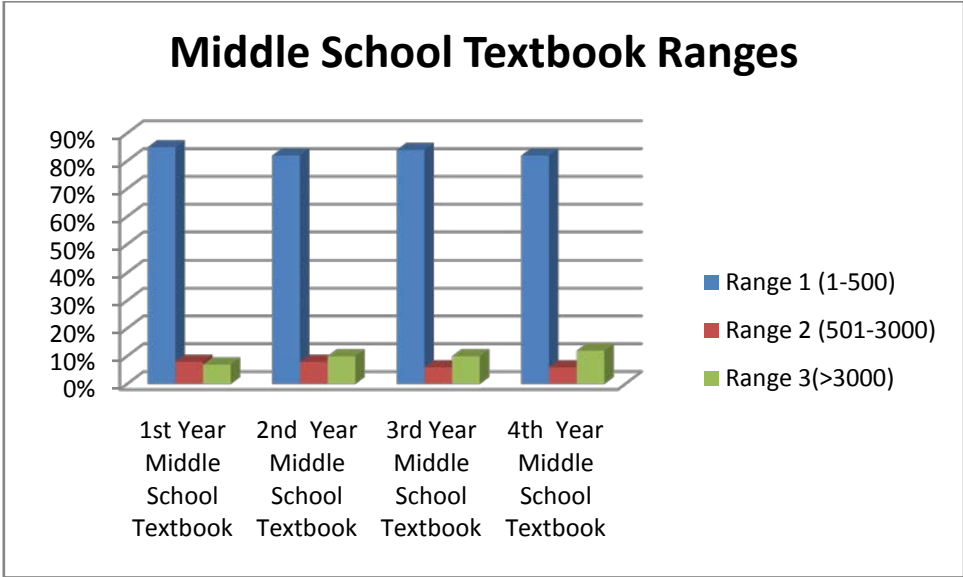
Graph 11: Middle School Textbook Ranges

3.2. Secondary School Textbooks

After the middle school textbook study, where a general processing of the most important texts and wordlists of the four officials textbook took place. The investigation was about the different frequency ranges of the most frequent words and the texts where they appear. This section will be a replica to the first investigation; it will focus on the study of some secondary school texts. As an illustration, some texts will be dissected in order to analyse deeply their atomistic composition. The study will shed light on the frequency ranges and the academic words.

In this sub-section, we will deal with a very important investigation which is the academic range study. We will see to which extent the academic words are present in some selected texts taken from Algerian secondary school textbooks. It will check the rate of this important part if compared to the other word frequency ranks.

14 texts will be studied as samples:

3.2.1. Text 1

The target text is entitled *"Barber or Doctor[149] ?",* it is from the second year secondary school textbook, it contains approximately 298 words.

3.2.1.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
298 words	70%	12%	18%
Academic list 3%	(2) services (1) anaesthetic, firstly, functions, nineteenth-century, patients, professional, variety		

Table 89: Academic and Frequency Rates (Text 1)

As seen from the statistics, the 1st range is presented with a rate of 70%, the two other ranges present a logical rate of 30%; however the academic list is very poor with just 9 words (3%).

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[149] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:33)

3.2.2. Text 2

The target text is entitled *Do it in style[150]!* , it is from the second year secondary school textbook, it contains approximately 108 words.

3.2.2.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
108 words	75%	19%	6%
Academic list 2%	(1)Defined, meaning		

Table 90: Academic and Frequency Rates (Text 2)

As seen from the statistics, the 1st range is presented with a rate of 75% the two other ranges present a logical rate of 25%; however the academic list is very poor with just 2 words (2%).

3.2.3. Text 3

The target text is entitled "*The language of fashion[151]*" *and* it is from the second year secondary school textbook, it contains approximately 120words.

3.2.3.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
120 words	73%	12%	15%
Academic list 2%	(1) Language, society		

Table 91: Academic and Frequency Rates (Text 3)

As seen from the statistics, the 1st range is presented with a rate of 73% the two other ranges present a logical rate of 27%; however the academic list is very poor with just 2 words (1%).

---

[150] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:34)

[151] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:34)

3.2.4. Text 4

The target text is entitled "*What can we tell from the way someone looks[152]?*" ; and it is from the second year secondary school textbook, it contains approximately 135words.

3.2.4.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
135 words	77%	13%	10%
Academic list 2%	His/her, psychologist		

Table 92: Academic and Frequency Rates (Text 4)

As seen from the statistics, the 1st range is presented with a rate of 77% the two other ranges present a logical rate of 23%; however the academic list is very poor with just 3 words (1%).

3.2.5. Text 5:

The target text is entitled ""*People start pollution. People can stop it*"[153]", it is from the second year secondary school textbook, it contains approximately 225 words.

3.2.5.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
225 words	74%	10%	16%
Academic list 5%	3)pollution (1)emission, governments, incinerators, institutions, municipalities, subject, treatment		

Table 93: Academic and Frequency Rates (Text 5)

As seen from the statistics, the 1st range is presented with a rate of 74% the two other ranges present a logical rate of 26%; however the academic list is very poor with just 10 words (5%).

---

[152] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:34)

[153] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:54)

3.2.6. Text 6[154]:

The target Text[155] is an untitled one, it is from the second year secondary school textbook, it contains approximately 183 words.

3.2.6.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
183 words	71%	16%	13%
Academic list 11%	(3)mental (2)physical (1)between, disturbances, effect, established, experiments, frequency, higher, increase, levels, linking, pollution, present, researchers, specialists, studies, urban		

Table 94: Academic and Frequency Rates (Text 6)

This time, and in contrast to the previous examples, the above text presents an important academic range rate (11%) with 21 words from a text of 183 words. The other statistics are as follows: the 1st range is presented with a rate of 71% the two other ranges present a logical rate of 29%.

3.2.7. Text 7

The target text is entitled "*The conservation of human resources*[156]*,*" it is from the second year secondary school textbook, it contains approximately 252 words.

3.2.7.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
252 words	67%	20%	13%
Academic list 18%	(3)conservation, negative, positive, resource, resources (2)beings, production, services (1)appropriated, automation, contribute, education, employed, employment, form, further, greatly, however, impel, improvement, industrial, materials, organizations, physical, ranging, result, scarcity, sum, teaching, types, various		

Table 95: Academic and Frequency Rates (Text 7)

This time, and in contrast to the previous examples the above text presents a very important academic range rate (18%) with 44 words from a text of 252 words. It presents really an important vocabulary source for pupils in what concerns this category (the academic word list). The other statistics are as follows: the 1st range is presented with a rate of 67% the two other ranges present a logical rate of 33%.

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[154] Untitled text from Getting Through SE2 (2nd Year Secondary School Textbook). (2006:69)

[155] Untitled text from Getting Through SE2 (2nd Year Secondary School Textbook). (2006:69)

[156] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:76)

3.2.8. Text 8

The target text is entitled *The World's Water Supply[157]*; it is from the second year secondary school textbook, it contains approximately 164 words.

3.2.8.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
164 words	74%	13%	13%
Academic list 3%	(2)essential (1)aquatic, exist		

Table 96: Academic and Frequency Rates (Text 8)

As seen from the statistics, the 1st range is presented with a rate of 74% the two other ranges present a logical rate of 26%; however the academic list is very poor with just 4 words (3%).

3.2.9. Text p 9

The target text is entitled *"Electrostatics[158]"*, it is from the second year secondary school textbook, it contains approximately 319 words.

3.2.9.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
319 words	59%	19%	22%
Academic list 9%	(5)electrons, positive (3)between, negatively, positively, uncharged, (1)acquires, experiments, illustrates, material, proton, static		

Table 97: Academic and Frequency Rates (Text 9)

This time again the "electrostatic" text presents a very rich list of academic words with 28 words, which presents approximately a rate of 9% from a general text of 319 words. The 1st range is presented with a rate of 59% the two other ranges present an important rate of 41%.

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[157] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:77)
[158] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:89)

3.2.10. Text 10

The target text is entitled "*The Property of Buoyancy[159]*", it is from the second year secondary school textbook, it contains approximately 458 words.

3.2.10.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
458 words	64%	15%	21%
Academic list 4%	(4)displaces (2)object, objects, principle (1)additional, degree, density, exerts, possess, varying, wholly, within		

Table 98: Academic and Frequency Rates (Text 10)

This time, and even when the text has a scientific tendency, it presents a very poor list of academic words (18 words from 458 words of total number of words of the studied text). The 1st range is presented with a rate of 64%, the two other ranges present a logical rate of 36%.

3.2.11. Text p 11

The target text is entitled "*Tsunami in the News[160]*", it is from the second year secondary school textbook, it contains approximately 258 words.

3.2.11.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
258 words	70%	15%	15%
Academic list 6%	(2)countries, nationality (1)between, distinguish, due, ethic, industrial, phenomenon, religion, similar, south-east, thus, universal		

Table 99: Academic and Frequency Rates (Text 11)

As seen from the statistics, the 1st range is presented with a rate of 70%, the two other ranges present a logical rate of 30%; however the academic list is very poor with just 15 words (6%).

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[159] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:97)

[160] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:100)

3.2.12. Text 12

The target text is entitled "*Learning the Hard Way[161]*", it is from the second year secondary school textbook, it contains approximately 126 words.

7.12.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
126 words	69%	15%	16%
Academic list 4%	(1)Indians, learning, pasturing, quantity		

Table 100: Academic and Frequency Rates (Text 12)

As seen from the statistics, the 1st range is presented with a rate of 69%, the two other ranges present a logical rate of 31%; however the academic list is very poor with just 4 words (4%).

3.2.13. Text 13

The target text is entitled "*The Little Girl and the Wolf[162]*"; it is from the second year secondary school textbook, it contains approximately 165 words.

3.2.13.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
165 words	75%	9%	16%
Academic list 0%			

Table 101: Academic and Frequency Rates (Text 13)

This time and as special case study, the academic word rate is not presented at all (0%) in a text of 171 words; however, as seen from the statistics, the 1st range is presented with a rate of 75% the two other ranges present a logical rate of 25%.

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[161]Getting Through SE2 (2nd Year Secondary School Textbook). (2006:114)
[162] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:114)

3.2.14. Text 14

The target text is entitled "*The story of the Chest[163]*", it is from the second year secondary school textbook, it contains approximately 501words.

3.2.14.1. Frequency Ranges

Frequency Ranges	1-500	501-3000	>3000
501 words	82 %	7 %	11 %
Academic list 1%	(1)dispersed, meaning, reflected, subjects		

Table 102: Academic and Frequency Rates (Text 14)

This time and as special case study, the academic word rate is presented by only 1% (4 words) in a text of 501 words; however as seen from the statistics, the 1st range is presented with a rate of 82% the two other ranges present a logical rate of 18%.

4. Recapitulative Study

The following investigation illustrates a recapitulative study of the range and academic frequencies throughout the studied text samples.
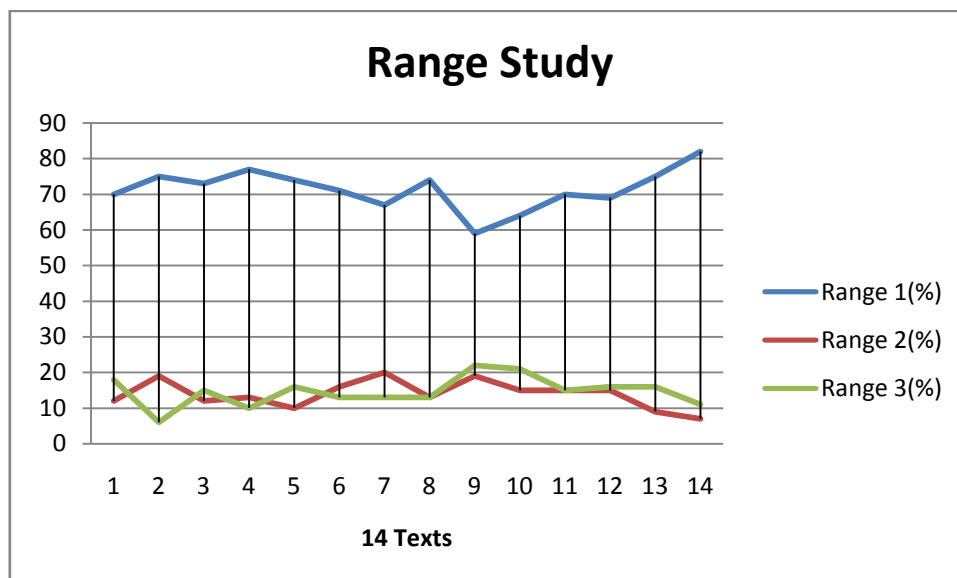
4.1. Range Recapitulative Study

Texts	Words	Range 1(%)	Range 2(%)	Range 3(%)
1	298	70	12	18
2	108	75	19	06
3	120	73	12	15
4	135	77	13	10
5	225	74	10	16
6	183	71	16	13
7	252	67	20	13
8	164	74	13	13
9	319	59	19	22
10	458	64	15	21
11	258	70	15	15
12	126	69	15	16
13	165	75	09	16
14	501	82	07	11

Table 103: Range Recapitulative Study

From the above table and the below graph, we can notice that the range 1, dominates largely the other ranges in the studied texts. The average is between 82% as a maximum and 59% as a minimum.

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[163] Getting Through SE2 (2nd Year Secondary School Textbook). (2006:115)

Graph 12: Range Study

4.2. Academic Recapitulative Study

This sub-section deals mainly with the academic range. The study aims to shed light to which extent the academic English words are present in the Algerian textbooks.

Texts	Words	Academic (%)	Academic (words)
1	298	3	9
2	108	2	2
3	120	2	2
4	135	2	3
5	225	5	10
6	183	11	21
7	252	18	44
8	164	3	4
9	319	9	28
10	458	4	18
11	258	6	15
12	126	4	4
13	165	0	0
14	501	1	4

Table 104: Academic Recapitulative Study

As seen from the table above and the below figure, we can easily notice that almost all the selected texts existing in the Algerian textbooks are poor in academic words. Except from some texts reaching rates between 9% and 12%. These texts are scientific ones such as:

- Noise [164]
- The Conservation of Human Resources [165]
- Electrostatics [166]
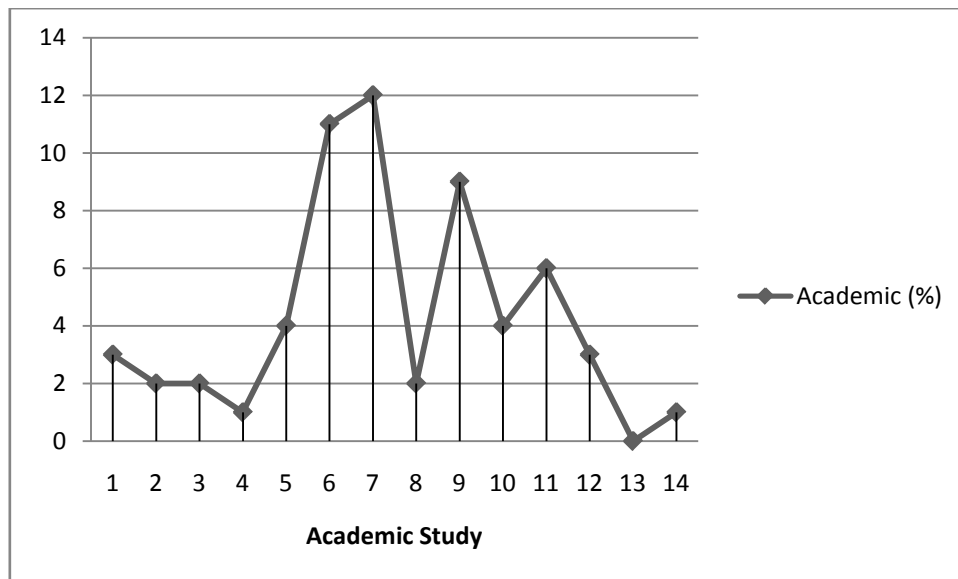
Graph 13: Academic Study

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[164] 2nd year secondary school textbook (2006:69)

[165] 2nd year secondary school textbook (2006:76)

[166] 2nd year secondary school textbook (2006:89)

5. Corpus Text Analysis

After wordlists and glossaries, texts are also of paramount importance in the textbook investigation simply because they present a very important part in the target textbooks. As with glossaries, it is also possible to undertake the same or more advanced investigations by sophisticated software. This consists basically to make a top-down approach in which a text will be dissected into many constituents (words). In the following sections we'll see to which extent an ordinary text could be analysed and investigated by advanced software and what are the importance of the obtained results for linguists, textbook designers and specialists.

5.1. "Computers Vs Books" Corpus Study

In this sub-section, we have taken a text to be dissected, first of all, we were attracted by the title and by the text's topic which is computer science, but at the end of the investigation and mainly in the genre and period investigations, we have obtained valuable results that could never be obtained without corpus software or other similar advanced technologies.

The text to be analyzed is entitled "*Computers Vs Books*" from New Prospect book (page 254) designed for 3rd year secondary school pupils:

Text:

One area of specialization that I'm particularly sceptical of is computers. Frankly? I'm not so sure that the ability to work a computer is all that essential to the future of this world. After all, what is a computer? It's a sort of brain that you can nimbly call on with your fingers to obtain information. But what are you going to do with all that information once you get it?

Some of the little kids in my neighbourhood are absolutely fantastic with computers. At twelve years of age, they 're masters of the Macintosh. Day after day, they plug themselves into that machine as if it were a life-support system. But does all that time at the screen really teach them to think? I doubt it.

Now, I don't dispute the importance of computers. My secretary uses a word processor, so now she has time to do important things instead of just pecking away at a typewriter. Still, at Chrysler the cost of projects for computers

has been increasing at an unbelievable rate. Unfortunately, the computer can't make a decision for me. It can only serve up alternatives quickly.

There are some essentials that have to precede technical skills. One of the most important habits students ought to pick up from an education is the love of reading. You've got to read a diversity of things in order to have opinions. Then you've got to know how to communicate those opinions to your fellow men and finally, you've got to learn to collect your thoughts and be able to write – at least modestly well. Some kids can't write a letter home to their parents because they are unable to spell or put sentences together. The grammar and spelling of kids today just blows my mind. Their compositions read as if they were written by cavemen. You know, "Me Tarzan, you Jane".

I always tell my kids that they ought to read as much as they can. You don't have to be a voracious reader, but if a day passes and you 've read nothing, then you 've learned zero from that body of knowledge out there which has accumulated over the past two thousand years.

5.1.1. Corpus Analysis

Once we input the text in the space provided for this purpose, we will immediately obtain the following results.

Figure 14: COCA Frequencies of "Computers Vs Books" Text
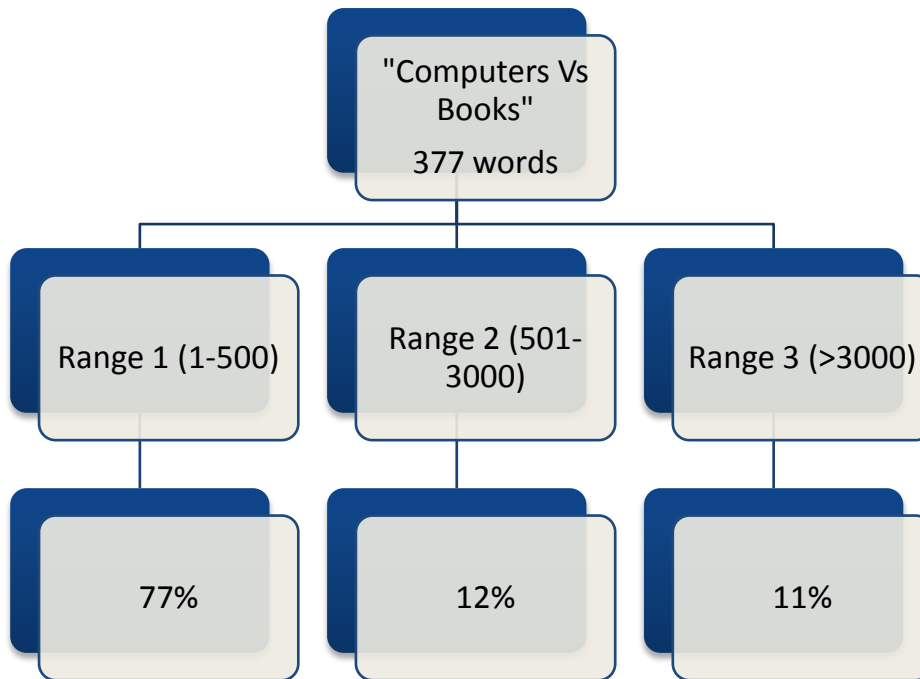
One can notice that in the question of efficiency the goals are largely reached, simply because more than the ¾ of the total number of the words used in this text are among the first 500 frequent used words in the English language (77%), the other range present almost the ¼ of the text with 23%.
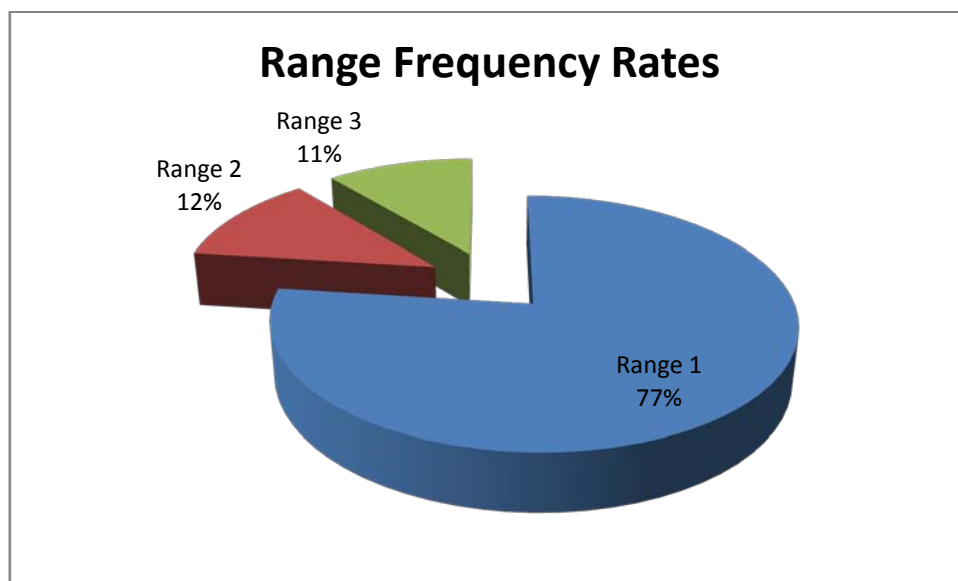

Figure 15: Different Range Frequencies of "Computers Vs Books" Text.

5.1.2. The Frequency Lists

As seen in figure 1, the dissection of "*Computers Vs Books*" text led to three main ranges:

- Range 1: from 1 to 500 first frequent words

- Range 2: from 501 to 3000 first frequent words

- Range 3: > 3000 first frequent words

Among the options offered by the corpus software, the user can explore each range alone; by a simple click we can obtain a large list of detailed frequencies about each category. The following tables show and explain clearly the content and type of each range.

Range 1: (from 1to 500)

Frequencies	Words
20	To
15	Of
12	The
11	a, you
10	That
6	at, they
5	I, it
4	all, are, as, do, is, kids, my, not, read
3	and, but, can, day, got, has, have, if, some, with, your
2	after, an, be, for,from, important, in,information, just, know, me,now, one, so, there, then, things, time, up, were, what, write, years
1	able, age, always, area,away, because, been, body,by, call, cost, does,education, future, get,going, home, how,increasing, into, learn,learned, least, little, love,make, men, mind, most,much, not,nothing, on,once, only, or, order, out, over, parent, passes, past, projects, put, rate, reading, really, serve, she, still, student, sure, system, tell,them, themselves, think,this, those, today, together, two, uses, well, which, word, work, world, written

Table 105: COCA List, (Range 1: from 1 – 500)

According to results obtained[167], all the statistics show that the large majority of the "*Computers Vs Books*" content is from the first 500 most frequent used words in English. Prepositions, articles and some pronouns present the lion's part.

Range 2: (from 501 to 3000)

Frequencies	Words
5	Computers
3	Computer
2	Opinions, ought
1	ability, absolutely, alternatives, blows, brain, collect, decision, doubt, essential, essentials, fellow, finally, finger, importance, instead, knowledge, letter, machine, master, obtain, pick, particularly, quickly, reader, screen, secretary, sentences, sort, skills, teach, text, thoughts, thousand

Table 106: COCA List, (Range 2: from 501 – 3000)

The second frequency range [168] is also very important for learners, as advised by Oxford 3000 TM which is a dictionary for the 3000 most frequent words used in English that should any non native speaker know and master in order to speak easily the English language. The two above ranges present a very important rate of 89% of the total number of words that form "*Computer Vs Books*" text.

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[167] Results obtained by using word and phrase BNC software
[168] Results obtained by using word and phrase BNC software

Range 3: (> 3000)

Frequencies	Words
1	accumulated, caveman, communicate, composition, dispute, diversity , fantastic, frankly, grammar, habits, life, modestly, neighbourhood, nimbly, pecking, plug proceed, processor, sceptical, specialization, spell, spelling, technical, twelve, typewriter, unable, unbelievable, unfortunately, voracious, zero

Table 107: COCA List, (Range 3: > 3000)

This frequency[169] range table shows 10% of the total number of the words used in the text "*Computers Vs Books*", this means not that we try to lessen from the importance of these words because they are not among the first 3000 frequent words but they present only 10%, they are used as "helping words" and sometimes they have no equivalent words in the list of the 3000 most frequent used words.

Academic Frequency List

Frequencies	Words
1	Ability, alternative, composition, diversity, education, essential, grammar, importance, increasing, knowledge, obtain, reader, skills, specialization, students, technical, text

Table 108: Academic Frequency List

Unfortunately, the above list presents just 4%[170] (17 words) of the total number of words that forms "Computers Vs Books" text, this problem could be easily resolved by reinforcing the list by other academic words when dealing with activities (Fill in the gaps, match concepts with their definitions, reorder sentences…).

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[169] Results obtained by using word and phrase BNC software

[170] The academic rate (4%) is calculated from the total number of words independently from the other ranges

5.1.3. Advanced Investigations

These technological tools permit also to make plenty of very advanced investigations; we will limit our research to the following investigations. The following investigations are just samples, but they could be applied for any text or word lists.

5.1.3.1. Synonymy Investigation

Each word has a direct link that permits to make deeper investigation about the target word alone, if we take the first word of the above list (ability) and we click on it, we'll obtain:

Ability: Statistics

Ability [Noun]	Frequencies
Rank	783
Frequency	55884

Table 109:"Ability" Statistics from COCA (Academic Frequency List)

Then, if we click again on synonym section, we'll obtain all the synonyms of the target word with the necessary frequencies.

According to the research, the word "ability" has two head words as main synonyms "aptitude and "power". Each head word in its turn has a list of synonyms with their respective frequencies as shown in the tables below.

	Aptitude	
1	822	Skill
2	1386	Gift
3	2041	Talent
4	5245	Competence
5	10437	Proficiency
6	11964	Knack
7	12821	Aptitude
8	51407	Adeptness

Table 110: Synonyms of "Aptitude"Statistics from BNC

Power	
783	Ability
1301	Facility
1787	Capacity
1995	Faculty
2977	Capability

Table 111: Synonyms of "Power". Statistics from BNC

Not only one can obtain the rank of the target word, and its frequency, but he can also obtain invaluable data concerning this word such as its synonyms and their respective frequencies. So as noticed in the table above, the word "ability" used in the target text has two main synonyms: Aptitude and power

- The meaning of "aptitude": (skill, gift, talent, competence, proficiency…)
- The meaning of "power" :(capacity, faculty, capability, facility…)

These results could not be obtained without the help of these powerful tools which prove high proficiency of the investigations made by both linguists and textbook designers.

5.1.3.2. Genre Investigation

It is also possible to make a genre investigation about any word used in the analysed text, as example, we have taken the word "computer" which presents a general frequency of 57232 according to the BNC which contains 100 million words of written and spoken English. The distribution of "*computer*" frequency genre is as follows:

	Genres	Frequencies
1	Spoken	7407
2	Fiction	8072
3	Magazine	18105
4	Newspaper	12673
5	Academic	10975

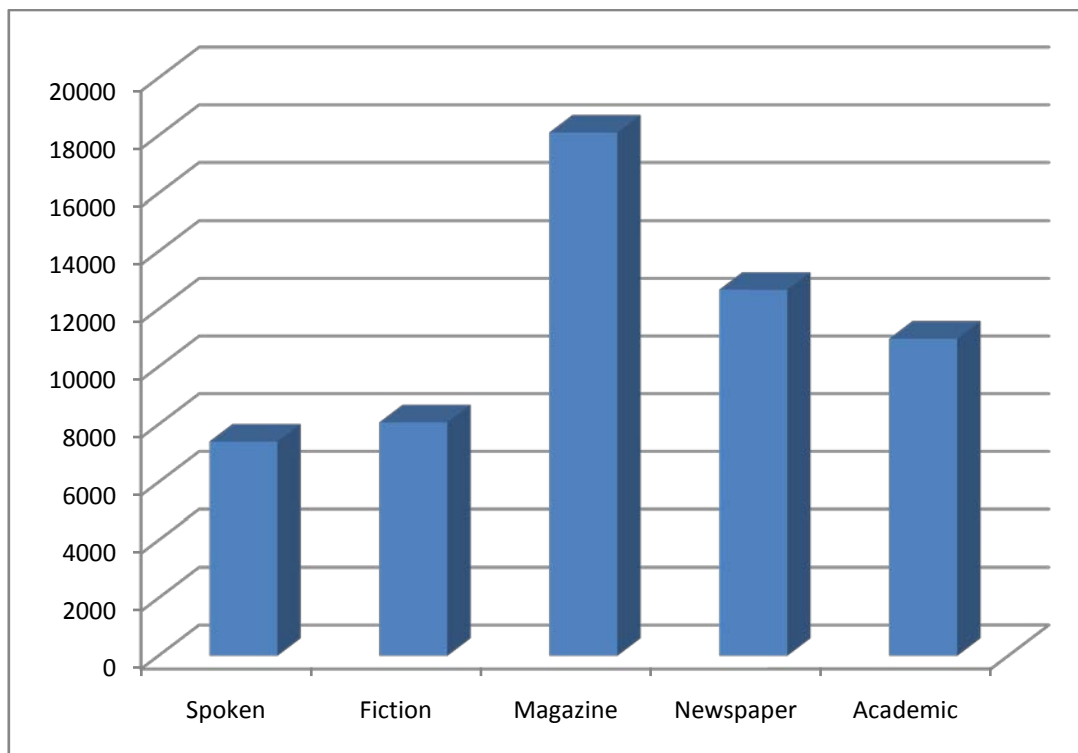Table 112: Frequency Distribution of "Computer" in the BNC

Figure 16: "Computer" Genre Distributions

From the first sight, the scrutiny leads to the following statements: the word "*computer*" is mainly used in specialized magazines and newspapers, especially scientific technical ones, in contrast the same word has very weak use in "spoken" genre with less than 50% (7407) if compared with the 2 first genres listed above(18105 for magazines and newspapers (12673).

Period Investigation for Newspaper Genre:

	Periods	Frequencies
1	1990-1994	13956
2	1995-1999	15616
3	2000-2004	13353
4	2005-2009	9611
5	2010-2012	4696

Table 113: Genre Frequency of "Computer" in the BNC

In addition to the options offered by the corpus software, it is also possible to investigate about the periods when the target word was used. The statistics permit to discover the strong and weak "moments" of the target word use.

In order to explore deeply the obtained results, it is preferable to transform the above table into a graph, where some events could be easily detected and permit to make the adequate analyses.
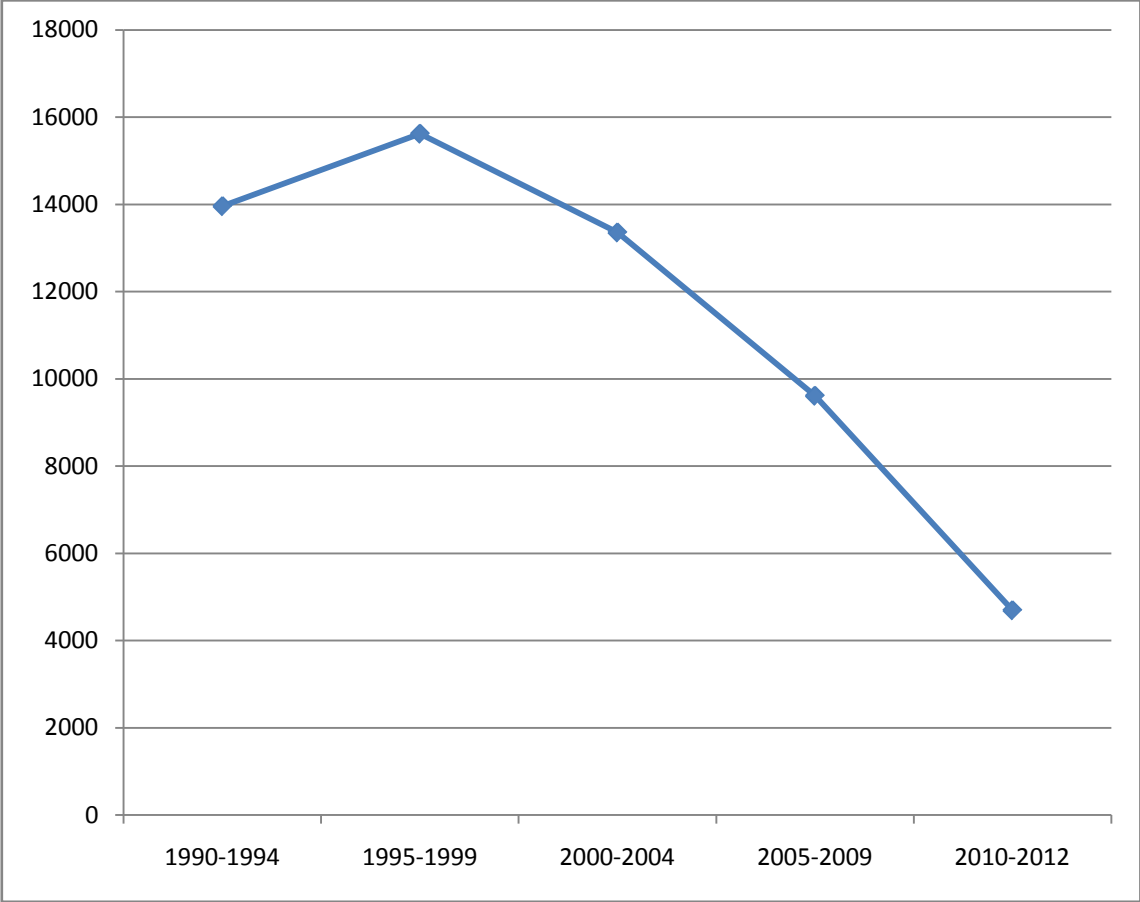
Fig17: Graph of "computer" Period Study during 2 decades

Normally, it is conceived that the word "*computer*" is strongly used during the 2000's, but in reality and as shown in the above graph, the recent millennium is not really a "*computer*" era. This decline could be easily explained and argued by the reason that in this last years and thanks to the advanced technology "*computer*" is challenged strongly by I pads, smart-phones, note books…

We can say that a language can strongly reflect the reality, and without any doubt we'll witness in the next decade the decline of "*computers*" which will be replaced by other powerful, less expensive, lighter and with more new capabilities than the recent computers.

5.1.3.3. Related Word Frequencies

In this sub-suction, we have made an advanced "*Computers Vs Books*" investigation in what concerns the target words frequencies and even their related collocations.

The list of "*computer*" related words:

Supercomputer	17608
Mainframe	15321
Workstation	12348
Notebook	4467
PC	3072

Table 114: "Computer's Related Words"

The list of "*book*" related words

Book: Noun (rank) 241. Frequency 168369

Tome	15792
Manuscript	5168
Volume	1927

Table 115: "Book's Related Words"

5.1.3.4. "*Computers Vs Books*" Collocation Study

Not only the corpus software permits to get any target word frequencies, and its related synonyms with their respective frequencies but it permits also to obtain a very detailed list of any word with all its collocations. In the bellow table, the words "*computer*" and "*book*" are taken as examples:

	Computer	Frequency	Book	Frequency
1	Screen	1605	Published	1642
2	Software	1380	Comic	791
3	Systems	1271	Passage	311
4	Science	1247	Guinness	221
5	Personal	1045	Poetry	212
6	Technology	963	Chapters	206
7	Programs	697	Rule	191
8	Apple	690	Poems	179
9	Games	675	Revelation	177
10	Industry	558	Rare	144

Table 116: Collocations of "Computer" and "Book"

5.1.3.5. "*Computers Vs Books*" Word Study

The following study aims to explore almost all the details about all the words that exist in any text. As an illustration, we carry on with the same text studied above "*Computers Vs Books*". This option permits quickly to have a glance on the main distinctive parts of the studied texts.

Distinctive parts of the text	Category total number
Verbs	73
Nouns	65
Connectors	14
Modalities	37
Adjectives	21
Pronouns	26

Table 117: "Computers Vs Books" Distinctive Parts

The used software permits also to make deeper investigations and explore each part alone. If we want to explore the nouns' distinctive part, we'll obtain very important results that can help linguists in general and textbook designers in particular; their tasks will be restricted only on making the right analysis and taking the best decisions.

5.1.2.6. Text's Highlights
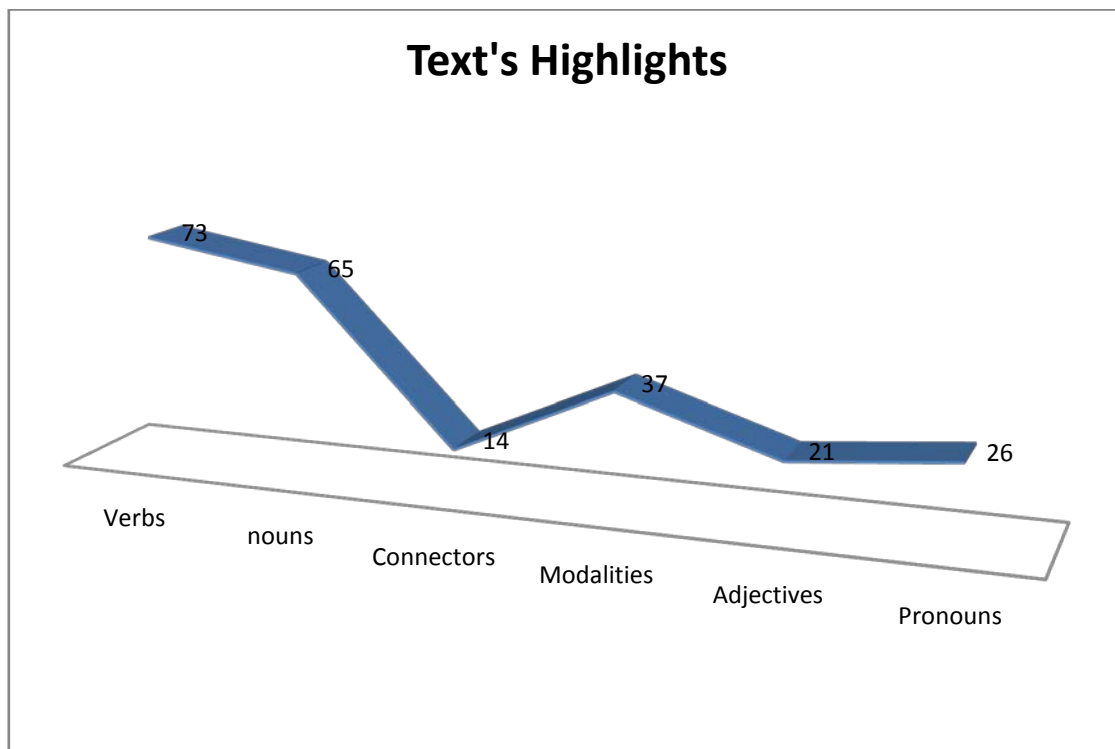
Graph 18: "Computers Vs Books" Text's High Lights

By this option offered by the advanced software, we have got invaluable information about the studied text. It could be applied to any text whatever its type is. By this study, we have transformed a literal text into a graph, where we easily obtain its formula or its mathematical function. We can claim and confirm that literature and text analysis is strongly related with exact science. It could be easily investigated by computer tools and advanced software.

5.1.3.7. Noun Frequencies

| Nouns	Frequencies
Computer	7 times
Year	4 times
time, thing, opinion, information , essential	2 times
world , future, caveman, secretary, brain, day support system, diversity , alternative, reading blow, finger , spelling, reader, ability, project, importance, Jane, rate, Chrysler, cost, knowledge know-how, mind, machine, word processor Macintosh, area, screen, typewriter, grammar, love, parent, man, life, sentence, body, letter, thought, neighbourhood, student, education	1 time

Table 118: Noun Frequencies

5.1.3.8. Distinctive Parts of the Text Study

Distinctive parts of the text	Detailed frequencies	Category total number
Verbs	- Static: 45.2% (33 times) - Active: 30.1% (22 time) - Reflexive: 24.7% (18 times)	73
Connectors	- Opposition: 37% (5times) - Addition: 28.6% (4times) - Condition: 7.1% (1 time) - Cause: 7.1% (1 time) - Goal : 7.1% (1 time) - Disjunction: 7.1% (1 time) - Comparison: 7.1% (1 time) -	14
Modalities	- Time: 29.7% (11 times) - Intensity: 29.7% (11 times) - Manner: 16.2% (6 times) - Negation: 10.8% (4 times) - Assertion: 8.1% (3 times) - Place: 5.4% (2 times)	37
Adjectives	- Objective: 42.9% (9 times) - Subjective: 38.1% (8 times) - Numeral: 19% (4 times)	21
Pronouns	- I: 23% (7times) - You : 36.7% (11 times) - They: 23.3% (7 times) - He: 3.3% (1 time)	26

Table 119: Text's Distinctive Parts

By transforming the above table into a corresponding figure, we can immediately conclude that the displayed proportions are accurately logical if compared to the text nature.
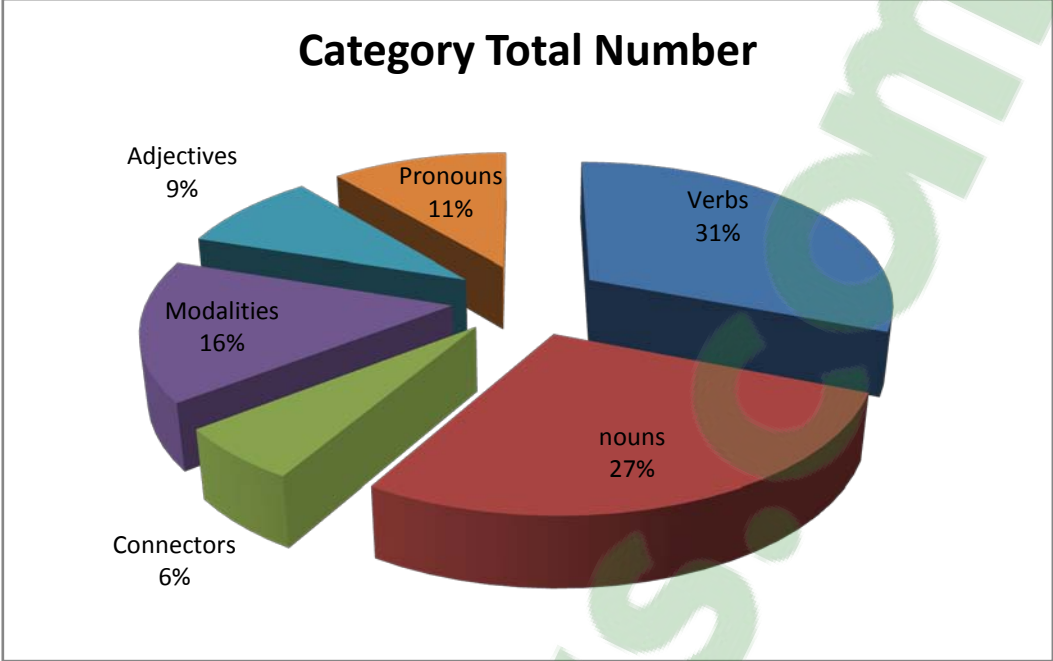
Graph 19: the Main Text's Parts

5.1.3.9. Words' Category Study

The words' category study permits to have the main text dissection in what concerns "headwords" that have an importance influence on the text. It highlights all the main and important word categories that affect deeply the text nature. As seen in the table above "computer science" related words are strongly presented in this text with nine appearances in the text.

The software permits to obtain detailed information about each sub-section of any distinctive part that form the text. The following table illustrates clearly a part of the possible results obtained by the used software.

Rank in the text	Word related category	Frequencies in the text
1	Computer science	09
2	Time	06
3	Child	04
4	Communication, device, body	03
5	opinion , education, language, social group	02
6	Man, system, world, feeling, money, location, life, family, environment, transport	01

Table 120: Words' Category Study

5.1.3.10. Head Word Frequencies

The following lists show all the head words listed above with their respective frequencies and the sentences they appear in.

-Body (2 times):

 *It's a sort of **brain** that you can nimbly call on with your fingers to obtain information.*

*then you've learned zero from that **body** of knowledge out there*

-Child (4 times):

*Some of the little **kids** in my neighbourhood are absolutely fantastic with computers.*

*Some **kids** can't write a letter home to their parents*

*The grammar and spelling of **kids** today just blows my mind.*

 *you Jane. I always tell my **kids** that they ought to read as much as they can.*

-Cognition (4 times):

 *Then you've got to **know how** to communicate those opinions to your fellow men and finally,*

 *you've got to learn to collect your **thoughts***

*The grammar and spelling of kids today just blows my **mind**.*

*then you've learned zero from that body of **knowledge** out there*

-Communication (3 times):

 *It's a sort of brain that you can nimbly call on with your fingers to obtain **information**.*

*But what are you going to do with all that **information** once you get it?*

*Some kids can't write a **letter** home to their parents*

-Computer science   (9 times):

*One area of specialization that I'm particularly sceptical of is **computers**.*

*I'm not so sure that the ability to work a **computer** is all that essential to the future of this world.*

*After all, what is a **computer**?*

*Some of the little kids in my neighbourhood are absolutely fantastic with **computers**.*

*At twelve years of age, they're masters of the **Macintosh**.*

*Now, I don't dispute the importance of **computers**.*

*My secretary uses a **word processor**,*

*Still, at Chrysler the cost of projects for **computers** has been increasing at an unbelievable rate.*

*Unfortunately, the **computer** can't make a decision for me.*

-Device (3 times):

*Day after day, they plug themselves into that **machine***

*But does all that time at the **screen** really teach them to think?*

*So now she has time to do important things instead of just pecking away at a **typewriter**.*

-Education (2 times):

*One of the most important habits **students** ought to pick up from an **education** is the love of reading.*

-Environment (1 time):

*Some of the little kids in my **neighbourhood** are absolutely fantastic with computers.*

-Family (1 time):

*Some kids can't write a letter home to their **parents***

-Feeling (1 time):

*One of the most important habits students ought to pick up from an education is the **love** of reading.*

-Language (2 times):

*Or put **sentences** together.*

*The **grammar** and spelling of kids today just blows my mind.*

-Life (1 time):

*as if it were a **life**-support system.*

-Location (1 time):

*One **area** of specialization that I'm particularly sceptical of is computers.*

180

-Man (1time):

 *Then you've got to know how to communicate those opinions to your fellow **men** and finally,*

-Money (1 time):

 *Still, at Chrysler the **cost** of projects for computers has been increasing at an unbelievable rate.*

-Opinion (2 times):

 *In order to have **opinions**.*

*Then you've got to know how to communicate those **opinions** to your fellow men and finally,*

-Social group   (2 times):

 *My **secretary** uses a word processor,*

 *As if they were written by **cavemen**.*

-System (1 time):

*As if it were a life-**support system**.*

-Time (6 times):

 *I'm not so sure that the ability to work a computer is all that essential to the **future** of this world.*

*At twelve **years** of age, they're masters of the Macintosh.*

*But does all that **time** at the screen really teach them to think?*

 *So now she has **time** to do important things instead of just pecking away at a typewriter.*

 *But if a **day** passes and you've read nothing,*

 *Which has accumulated over the past two thousand **years***

-Transport (1 time):

*Still, at **Chrysler** the cost of projects for computers has been increasing at an unbelievable rate.*

-World (1 time):

*I'm not so sure that the ability to work a computer is all that essential to the future of this **world**.*

5.1.3.11. Modality Investigation

It's also possible to investigate texts in what concerns modalities, so that all the modalities could be studied such as time, manner, and place:

- Manner Modality:

-Frankly?
-After all, what is a computer?
It's a sort of brain that you can nimbly call on with your fingers to obtain information.
so now she has time to do important things instead of just pecking away at a typewriter.
-Unfortunately, the computer can't make a decision for me.
and be able to write at least modestly well.

-Time Modality

But what are you going to do with all that information once you get it?
Day after day, they plug themselves into that machine
Now, I don't dispute the importance of computers.
so now she has time to do important things instead of just pecking away at a typewriter.
Still, at Chrysler the cost of projects for computers has been increasing at an unbelievable rate.
It can only serve up alternatives quickly.
Then you've got to know how to communicate those opinions to your fellow men and finally,
The grammar and spelling of kids today just blows my mind.
you Jane. I always tell my kids that they ought to read as much as they can.
then you've learned zero from that body of knowledge out there
which has accumulated over the past two thousand years

5.2. *"The Story behind Supermarket Success"* Text Analysis

To carry on with the facilities offered by corpora and their related software, we have extended the investigation to another ESP text that is about business, marketing and advertisement.

The sample is a text taken from the third year secondary school textbook. The focus will be only on the ways this text could be dissected and analysed, the approach could be easily applied and generalised on any text whatever its form or content.

The chosen text is entitled *"The Story behind Supermarket Success"*, it is a 3rd year secondary school text taken from "New Prospects" the official book of the ministry of the national education of Algeria. The technological tools are electronic corpora such the BNC, the COCA and others when necessary.

The target text to be analyzed is entitled *"The Story behind Supermarket Success"*[171] from New Prospect book (page 255) which is designed for 3rd year secondary school pupils.

Are supermarkets designed to persuade us to buy more? When you enter a supermarket, the manager knows better than you do how you will behave, which way you will walk, where you will look, what will make one want to buy particular product rather than another. When customers go into a shop, they naturally look to their left but move clockwise, towards the right. Se supermarket entrances are usually on the left of the building, and the layout is designed to take shoppers around the store, aisle after aisle, from left to right .Then shoppers will pay attention to all products.

Fresh fruit and vegetables are displayed near supermarket entrances. This gives the impression that only healthy food is sold in the shop. Basic foods that everyone buys, like sugar and tea, are not put near each other. They are kept in different aisles so customers are taken past other attractive foods before they find what they want. In this way, shoppers are encouraged to buy product that they do not really need.

People walk quickly through narrow aisles, but they move more slowly in wide aisles and give more attention to the products. One best-selling position for products

---

[171] From Looking Ahead, p.40 (Longman edition), in "New Prospect" book (page 255) designed for 3rd year secondary school pupils

is at the end of the aisles, because shoppers slow down to turn into the nest aisle. Another is on the shelves at eye level. Supermarkets are paid by food manufacturers to put their products in each of these high-selling places.

Sweets are often placed at children's eye level at the checkout. While parents are waiting to pay, children reach for the sweets and put them in the trolley.

More is bought from a fifteen-foot display of one type of product (e.g. cereals, washing powder) than from a ten-foot one. Customers also buy more when shelves are full than when they are half empty. They do not like to buy from shelves with few products on them because they feel there is something wrong with those products that are there.

5.2.1. Corpus Results

The corpus software tools used in this experience permit to obtain a multitude of possibilities in what concerns the results among them:

5.2.1.1. Frequency Ranges

Once we input the text in the space provided for this purpose, we'll immediately obtain the following results. The frequency range is a set of statistics that dissects the text into distinctive parts:

- The first range concerns the word category of the 500 most frequent words in the Corpus of Contemporary English (COCA).
- The second range concerns the word category comprised between 501 and 3000 most frequent words in (COCA).
- The third range concerns the word category that exists beyond the 3000 most frequent words of the same corpus (COCA).
- A special range concerns the academic word category that exists in (COCA), but the displayed statistics are independently calculated from the three above ranges.

The following table illustrates the frequency range statistics obtained from the corpus.

Frequency Range	1-500	501-3000	> 3000
	72%	13%	15%

Table 121: COCA Frequencies of "*The story behind Supermarket Success*" Text

Transforming the statistics of the above table into graph permits to have a quick glance of the text's word categories.
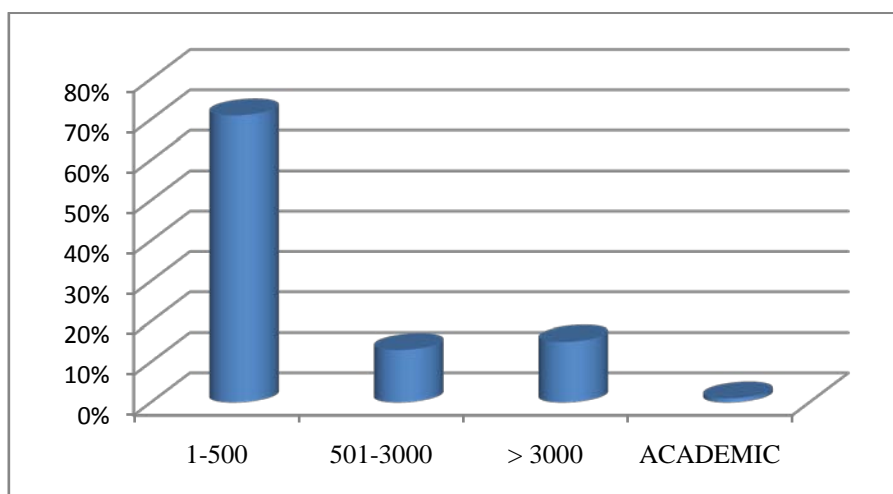
Figure 20: Statistics of "The story behind Supermarket Success" Text

One can notice that in the question of efficiency the vocabulary goals are largely reached, simply because almost ¾ of the total number of the words used in this text are among the first 500 frequent used words in the English language (72%). If we take into consideration that the first 3000 frequent words are necessary to understand, speak and write English correctly, we'll find that this range is presented with 85%[172].

The academic range frequency doesn't respond to the learners' needs, it exists just with (1%) of the total number of this text.

---

[172] 84% presents the addition of the 2 first ranges (1-500) and (501-3000)

5.2.1.2. The Frequency Lists

As seen in figure 1, the dissection of "The story behind Supermarket Success" text leads to four main ranges:

- Range 1: from 1 to 500 first frequent words with 72%

- Range 2: from 501 to 3000 frequent words with 13%

- Range 3: > 3000 frequent words with 15%

Among the options offered by the corpus software, the user can explore each range alone; by a simple click on the selected category, one can obtain a large list of detailed frequencies about each category. The following tables show and explain clearly the content and type of each range.

Range 1: (from 1to 500)

Frequencies	Words
16	The
13	Are, to
9	They
6	in, is
5	and, buy, of, will, you
4	A, at, from, more, one, than, that, when
3	Do, left, not, on, put
2	Another, because, but, children, designed, each, eye, foods, for, into, level, like, look, move, other, pay, right, their, them, this, walk, want, way, what, with.
1	After, all, also, around, before, better, bought, buildings, buys, by, different, down, end, feel, few, find, give, gives, go, half, how, kept, knows, make, need, often, only, paid, parents, past, placed, places, rather, reach, really, so, sold, something, take, taken, there, these, those, through, turn, us, waiting, where, while.

Table 122: COCA (word and phrase info list), (Range 1: from 1 – 500)

186

As mentioned above and according to results obtained, all the statistics show that the large majority of "*the Story behind Supermarket Success*" content is from the first 500 most frequent used words in English. Prepositions, articles and some pronouns present the lion's part.

Range 2: (from 501 to 3000)

Frequencies	Words
11	Product(s)
5	Customers
2	Attention, near, shop
1	Basic, display, displayed, empty, encouraged, enter, everyone, fruit, full, healthy, manager, narrow, particular, position, quickly, slow, slowly, store, sugar, sweets, type, usually, washing, wide, wrong.

Table 123: COCA List, (Range 2: from 501 – 3000)

The second range frequency is also very important for learners, as advised by Oxford 3000 TM which is a dictionary for the 3000 most frequent words used in English that should any non native speaker know and master in order to speak easily and fluently English language. The two above ranges present a very important rate of 85% of the total number of words that form "*The Story behind Supermarket Success*" text.

Range 3: (> 3000)

Frequencies	Words
7	Aisle(s)
4	Shoppers
3	Shelves, supermarket
2	Entrances, supermarkets
1	Attractive, best-selling, cereals, checkout, clockwise, fifteen-foot, high-selling, impression, layout, manufacturers, naturally, nest, persuade, powder, tea, ten-foot, towards, trolley, vegetables.

This range frequency table shows 15% of the total number of words used in "*The Story behind Supermarket Success*" text, this means not that we try to lessen from the importance of these words, but they play a vital role in the English language. Yes it's true that they are not among the first 3000 frequent words but they present only 15%, they are used as "helping words" and sometimes they have no equivalent words in the list of the 3000 most frequent used words.

Academic Frequency List

The academic frequency list is a word list category that exists in the previous three ranges, the five words[173]: the word "level" belongs to the first range (among the 500 first words); however the three other words "*basic*", "*encouraged*" and "*particular*" belong to the second range (from 501 to 3000).

Frequencies	Words
2	Level
1	Basic, encouraged, particular

Table 125: COCA List, (Academic Frequency List)

Unfortunately the above list presents just 1% of the total number of words used in the text. This problem could be easily resolved if teachers will reinforce the list by other academic words when dealing with activities (Fill in the gaps, match concepts with their definitions, and reorder sentences…).

5.2.1.3. Specific Word Frequencies

The interested researchers can make deeper investigations about the related frequencies of a target word, by extracting all the results concerning those words and their frequencies; we restrict the following list to the five first related words of "manager" [174]

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[173] The word "Level" exists twice in addition to the three other words with a simple frequency.
[174] More extended results could be obtained at the BNC.BYU.EDU

N°	WORDS	FREQUENCIES
1	Manager	36103
2	Co-manager	121
3	Micromanager	28
4	Resource manager	16
5	Ex-manager	16

Table 126: The First Five Related Words of "Manager" with their Frequencies

We can have plenty of frequency results by clicking on any word. For example, we investigate the related words of "*manager*". The first important result is that word has a general frequency of 36103 divided as follows:

Word	General frequency	Spoken	Fiction	Magazine	News	Academic
Manager	36103	3300	3128	8478	17431	3101

Table 127: "*Manager*" Genre Frequency List (from COCA)

As seen in the table above "*manager*" takes the lion's part with a general frequency of 36103, in contrasts the "co-manager" exists with only 121 times divided mainly between the (magazine and news) genres , respectively 59 times for the first genre and 51 times for the second:

Word	General frequency	Spoken	Fiction	Magazine	News	Academic
Co-Manager	121	7	2	59	51	2

Table 128: "*co-manager*" Genre Frequency List (from COCA)

5.2.1.4. Advanced Investigations

These technological tools permit also to make plenty of very advanced investigations; we limit this research to the following investigations.

5.2.1.4.1. Synonymy Investigation

Each word has a direct link that permits to make deeper investigation about the target word alone, if we take the word (manufacturer) that exists in the range 2 (>3000) with a general frequency of 2265 times in the corpus and we click on it, we'll obtain a detailed list of its synonyms with their respective frequencies.

Synonyms of "*manufacturer*" (frequency 2265)					
Synonyms	Maker	Builder	Creator	Industrialist	constructor
Frequencies	2358	4591	5138	15449	33299

Table 129: "*Manufacturer's*" Synonym Frequency list

According to the research, the word "*manufacturer*" has five head words as main synonyms "*maker, builder, creator, industrialist* and *constructor*". Each head word, in its turn has a list of concordances and collocations with their respective frequencies.
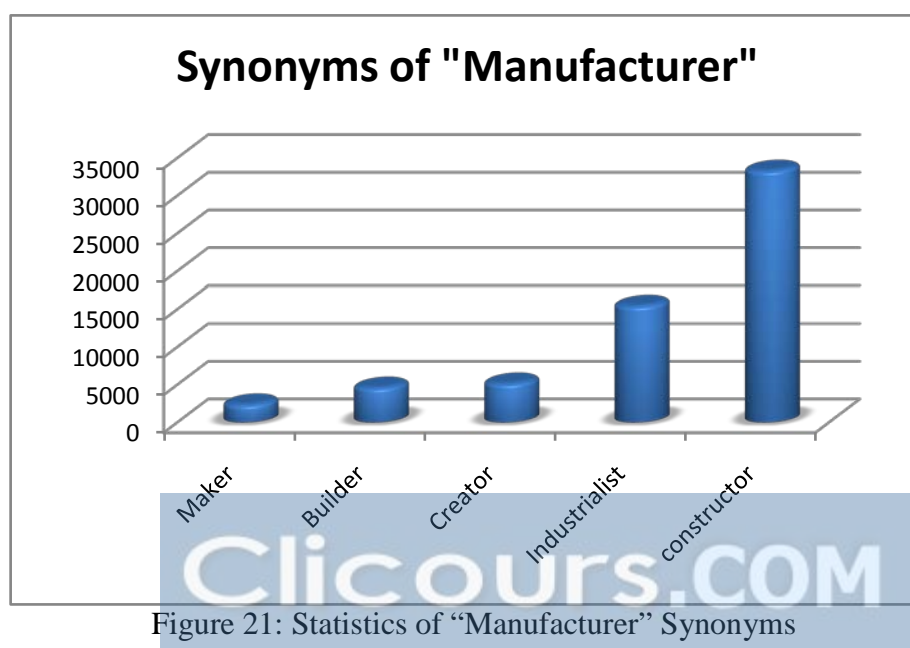

Figure 21: Statistics of "Manufacturer" Synonyms

According to the above graph presented in figure 2, it is evident that the best synonym of "manufacturer" is "constructor" with a large frequency of 33299.

5.2.1.4.2. Singular Vs Plural Investigation

In this section, we try to shed light on the power of the technological tools when investigating words deeply, for instance we can take the singular and the plural forms of the word "*supermarket*" as an illustration.

Words	Spoken	Fiction	Magazine	News	Academic
Supermarket	148	75	677	633	175
Supermarkets	151	76	703	638	178
Total	299	151	1380	1371	353

Table 130: Supermarket Vs Supermarkets

As seen from the table above and the graph below, it is clearly evident that the plural form of "supermarket" is preferred than its singular form, these results are true for all the main genres (spoken, fiction, magazine, news and academic).
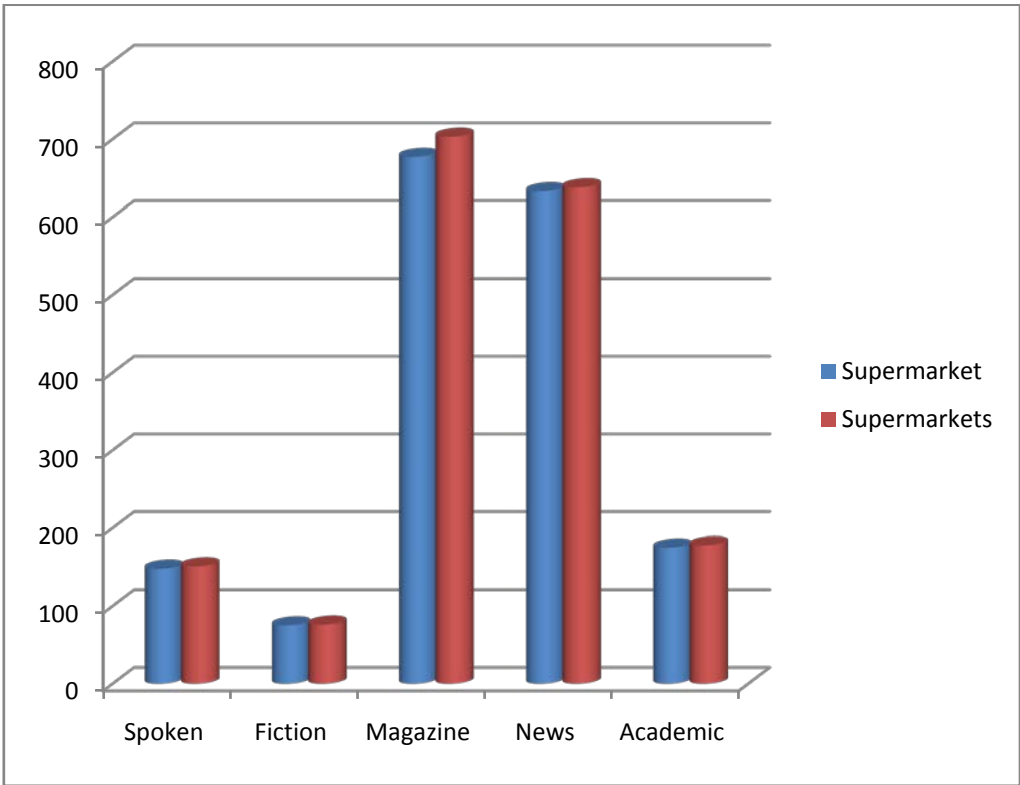
Figure 22:   The Singular and the Plural Forms of "*Supermarket*" Graph

In contrast the following example is taken to show that not always the plural form is preferred than the singular one; but it depends on situations. The singular form of "*manufacturer*" is highly used than its plural form.

Words	Spoken	Fiction	Magazine	News	Academic
Manufacturer	1178	115	4766	2696	2087
manufacturers	1165	118	4663	2632	1994
Total	2343	233	9429	5328	4081

Table 131: Manufacturer Vs Manufacturers

Figure 23:   The Singular and the Plural Forms of "Manufacturer" Graph

5.2.1.4.3. Recapitulative Study

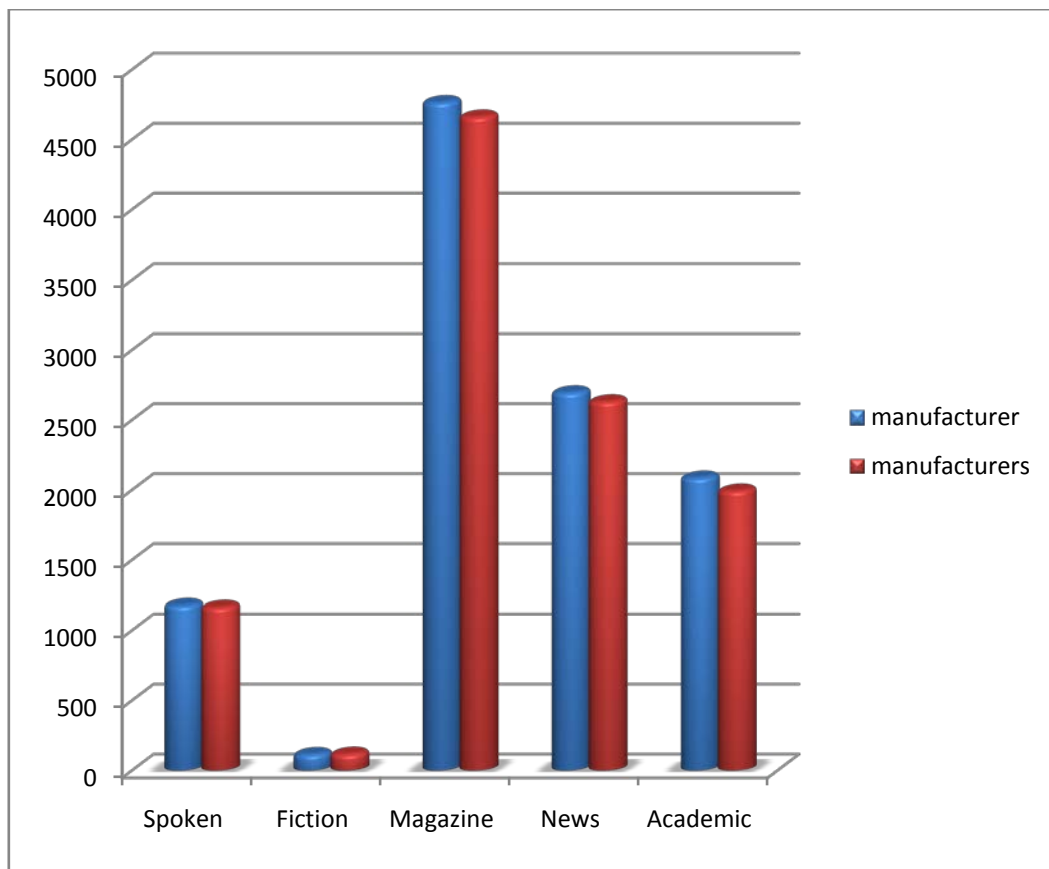As seen in the tables and the graphs above the plural of "*supermarket*" is preferred to the singular form of the same word, in contrast, the singular form of "*manufacturer*" is preferred to its plural form, simply because perhaps customers prefer products from one manufacturer (preference, fashion and trust questions), but they can buy them from many supermarkets (for price questions). But customers and people in general talk a lot about manufacturers (1165) than supermarkets (151). More details are given in the tables and graphs below: Manufacturer(s) Vs Supermarket(s) in the spoken genre.

Words	Spoken
Manufacturer	1178
manufacturers	1165
Supermarket	148
Supermarkets	151

Table 132: Plural Vs Singular Recapitulative Study
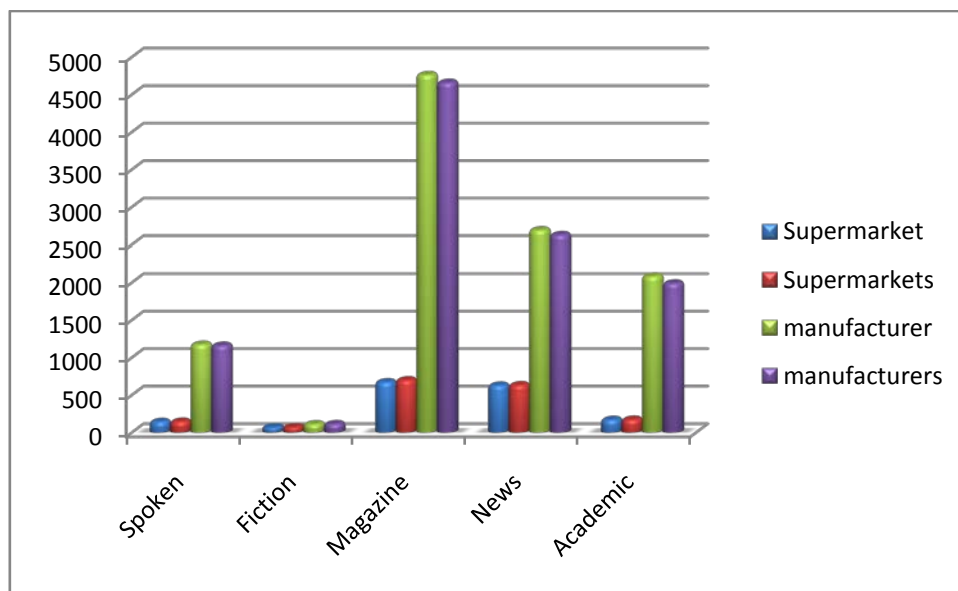
Figure 24: Plural Vs Singular Recapitulative Study
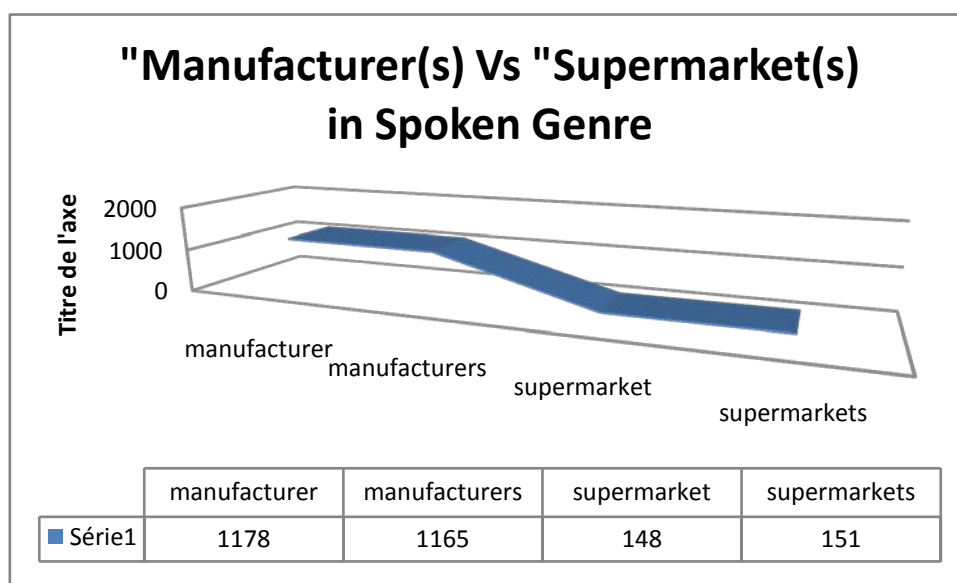
Figure 25: "Manufacturer(s)" Vs "Supermarket(s)" in the Spoken Genre

5.2.1.5. Genre Investigation

It is also possible to make an investigation about the genre of any word used in the analysed text, as example, we have taken the word "manufacturer" which presents a general frequency of 57232 according to the BNC which contains 100 million words of written and spoken English. The distribution of "manufacturer" frequency genre is as follows:

	Genres	Frequencies
1	Spoken	1178
2	Fiction	115
3	Magazine	4766
4	Newspaper	2696
5	Academic	2087

Table 133: Frequency Distribution of "Manufacturer" in the BNC

Figure 26: "Manufacturer's" Genre Distribution

The results lead to the following statements: the word "*manufacturer*" is mainly used in specialized magazines and newspapers, especially technical ones, in contrast the same word has very low use in "spoken" genre with only 11% (1178) if compared with the 2 first genres listed above(4766 for magazines and for newspapers (2696).

5.2.1.6. Style Investigation

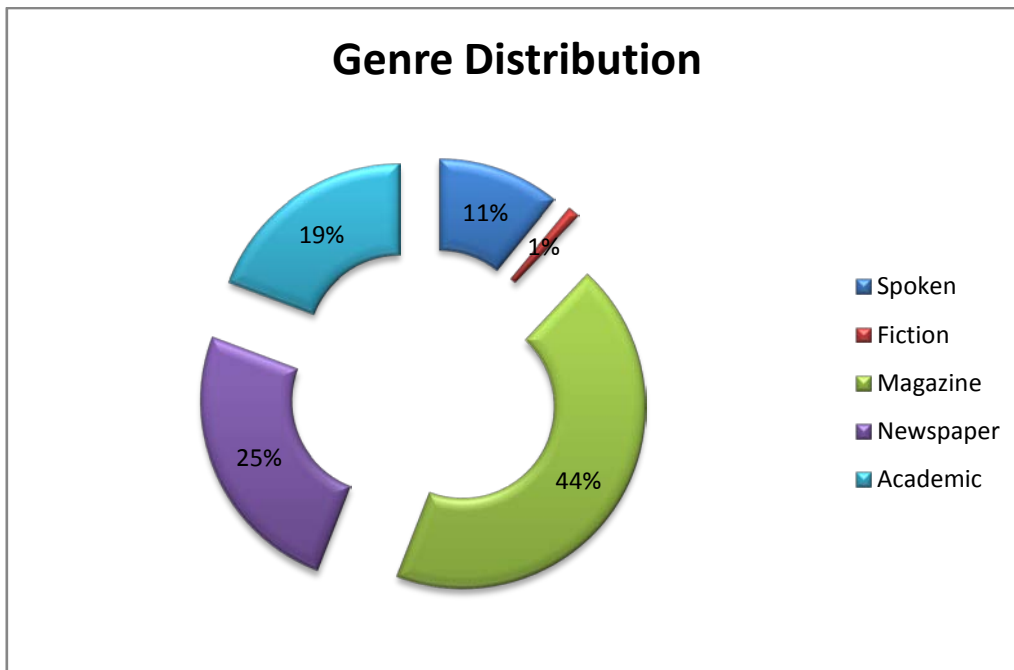Other powerful software can highlight the most important parts of any text, by this dissection; we have detected 11 most characteristic parts in "*The Story behind Supermarket Success*" text. These parts can help to know the most important themes or characters as well as the most important events of the text.

- *When you enter a **supermarket**,*
- *When **customers** go into a shop,*
- *they naturally look to their **left** but move clockwise, towards the right.*
- *The **supermarket** entrances are usually on the left of the building,*
- *and the layout is designed to take **shoppers** around the store, aisle after aisle, from left to right.*
- *Fresh fruit and vegetables are displayed near **supermarket** entrances.*
- *This gives the impression that only healthy **food** is sold in the shop.*
- *so **customers** are taken past other attractive foods before they find what they want.*

195

- *In this way, **shoppers** are encouraged to buy product that they do need not really.*
- *because **shoppers** slow down to turn into the nest aisle.*
- ***Supermarkets** are paid by food manufacturers to put their products in each of these high-selling places.*

In order to study the style deeply, the list of the most frequent word category is also necessary. Here is the list of the main frequent word categories of "*The Story behind Supermarket Success*" text

5.2.1.7. Frequent Word Categories

Words	Types	Number of words	Percentage
Verbs	- Active	26	46.4%
	- Static	19	39.9%
	- Reflexive	11	19.6%
Connectors	- Cause	3	15%
	- Addition	5	26.3%
	- Opposition	2	10.5%
	- comparison	4	21.1%
	- time	5	26.3%
Modalities	- time	8	33.3%
	- place	5	20.8%
	- manner	5	20.8%
	- Assertion	1	4.2%
	- Negation	2	8.3%
	- Intensity	3	12.5%
Adjectives	- Objective	20	69%
	- Subjective	4	13.8%
	- Numeral	5	17.2%
Pronouns	- They	11	61.1%
	- you	5	27.8%
	- we	1	5.6%
	- Somebody	1	5.6%

Table 134: Frequent Word Categories

The obtained results permit to study deeply the word frequency by type, by number and by percentage. We can click on any category to have a detailed list of the selected category:

-Manner Modality

*The manager knows better than you do **how** you will behave*
*What will make one want to buy particular product **rather** than another.*
*They **naturally** look to their left but move **clockwise**, towards the right.*
When they are half empty.

-Place Modality:

***Where** you will look,*
*They naturally look to their left but move clockwise, **towards** the right.*
*And the layout is designed to take shoppers **around** the store, aisle after aisle, from left to right.*
*Like sugar and tea, are not put **near** each other.*
Because they feel there is something wrong with those products that are there

-Places of business:

*are designed **supermarkets** to persuade us to buy more?*
*When you enter a **supermarket**,*
*Se **supermarket** entrances are usually on the left of the building,*
*Fresh fruit and vegetables are displayed near **supermarket** entrances.*
***Supermarkets** are paid by food manufacturers to put their products in each of these high-selling places.*

5.2.1.8. Head Word Frequencies

List of Classes	Frequency	Details
Customer	03	(Customer(s)
Food	04	Food
Left	03	Left
Merchandise	09	Product(s)
Passage	07	Aisle(s)
Places of Business	05	Supermarket(s)
Shelves	03	Shelves
Shop	03	2 Shops + 1 Store
Shopper	04	Shoppers

Table 135: Head Word Frequencies

After software investigation, the obtained results permit to analyse the main key words of the studied topic and their frequencies. The above table shows clearly all the text's headwords as well as their respective frequencies.

By transforming the table statistics into a graph, one can directly have a general idea about the text composition and the dominant key words.

Graph 27: Text's Main Head Words

198

9. Conclusion

As seen in this chapter and according to the results obtained from corpus software in what concerns statistics, graphs about words, collocations, sentences and texts. We can say that electronic corpora and their related software could be easily used and introduced not only by textbook designers and specialists but also by ordinary teachers, mainly ESP, literature, sociolinguistic teachers as well as postgraduate students conducting a survey in stylistic or genre studies.

Nowadays, with the emergence of technology and with equipped laboratories, it is possible to integrate electronic corpora in the learning process mainly when we know that the majority of famous corpora such as the BNC (British National Corpus) and the ANC (American National Corpus) and others are freely available via the net. Pupils and students can find what they need in scientific fields such as physics, chemistry, biology, electronics, computer science, business…via specialised corpora designed for scientific purposes.

Many approaches could be applied to corpus activities but the common thing about these approaches is that corpora and computers will be the basic elements of the investigation.

The first step, teachers have to initiate students about corpora:
- What is a corpus?
- How it is formed and what is its content?
- Initiate students with corpus linguistics: frequencies, collocations, concordances….

The second step is to teach and to train students:
- How to use electronic corpora and how to use concordancers?
- How to extract concordances, collocations and frequencies?

The third step is to exploit all the results with the help of the corpus by interpreting the results obtained and using them in the teaching process. Teachers move from the position that considers them as sources of knowledge and providers of information, towards guides, facilitators, and even co-researchers, they help the learners when they need to be assisted, guided and advised so as that final decisions could be taken collaboratively.

General Conclusion

"Corpora and Textbook Design: The Case of Algerian Middle and Secondary School Textbook", is an investigation about the official middle and secondary school textbooks in English and their design. This experience, is just an attempt to explore the content of these textbooks and make analysis according to the international norms, which consist on the use of scientific methods and approaches by using statistics and results obtained from powerful and software or by using very advanced technology such as electronic corpora or dictionaries and books such as Oxford, Cambridge, Longman and others   that are based on corpus approaches in what concerns their design. This investigation is one among many methods used in the world by linguists and textbook designers. The power of this method consists on the large amount of data it can offer to researchers, the different forms of the obtained results according to the needs, the processing speed; but it can't replace definitively the existing methods used for analysing texts and making linguistic research but it could be used as well as other modern methods to enhance, help and support the classical ones.

Thanks to the actual technology and software, an ordinary text could be dissected in thousands of parts. They permit to rediscover what was considered as ordinary expressions, collocations and words with new linguistic profiles accompanied with detailed statistics. The remaining role of both linguists and textbook designers is to make the right analyses and take the necessary decisions in any text, sentences, expressions, collocations and word selection.

Nowadays, almost all the linguistic domains are investigated with the help of corpora or computational linguistics. Not only corpora are important because they bring to classroom a large number of examples of texts, but they assist users to investigate deeply words, phrases and scientific texts by using statistics obtained by powerful software. Computer Linguistic investigations are possible by using concordances, collocations and frequencies. Many of the famous corpora are available via the internet where one can freely make linguistic research.

At the end we can say the corpora play a paramount role in what concerns data offered to linguists and textbook designers. The recent corpus software can generate a multitude of frequency lists from many genres and domains such as (General science list, physics and chemistry list, biology list…).

Electronic corpora will transform the textbook design into an accurate and exact science where each word, each collocation, each expression, and each text will have strong reasons to appear in this textbook. Any text's item could have his mathematical signification; it could be a graph, a statistical table, or a formula. The randomness will not find a place when the technology by its advanced software is dominating the situation.

In what concerns concordance lines, they give more information than the quotations used in dictionaries. They reflect the real use from real situations where the language was captured before being stored in the corpus. Collocations are also of great importance for users in what concerns the choice of the right and left co-words that can accompany this target word, mainly when it concerns writing scientific reports…

In general, one can notice the great importance of corpora and the rich information they present for professional users and beginners in ESP. It is a very rich resource when we know the rich composition of corpora that contain millions of words obtained from different text types (books, periodicals, dialogues…) and covering a multitude of domains (Arts, science, technology, literature…).This leads immediately to help corpora users to obtain:

- The most frequent words from different genres
- The most frequent sentences
- The most frequent collocations
- Very understandable sentences
- Easy expressions taken from the source used by native speakers
- The necessary list of words that a learner needs first to write reports…

Nowadays, it is a technology era (computers and internet networks), so it is primordial to make analyses using statistics, values and numbers extracted from computers. Computational linguistics in general and corpus linguistics in particular offer new perspectives to linguist researchers. The dimensions offered by these tools are very far from the traditional methods used in linguistic investigations.

Thanks to the free availability of many corpora via internet as well as the availability of computers and the accessibility of the internet, and mainly the recent computers with the actual storage capacity, speed and accuracy as reliable technology; so, it is possible to handle analyses from corpora that contain millions of words; whatever are their contents and their forms. Many domains are analysed thanks to electronic corpora: lexicography, dictionaries,

register studies, stylistics, sociolinguistics, translation and forensic linguistics are among domains that are possible to be analysed by corpora and by computers.. It's only the question of motivation and willing.

To sum up we can say that a corpus alone can do nothing at all; it is nothing other than a store of used language. A corpus does not contain new information about language but the software offers us perspective to make investigations about the corpus content.

What we have got as results are only drops from an ocean, but what remains will be without any doubt of paramount importance. These results and analyses can never be done without the help of computers and corpus software. Corpora can't replace definitively the existing text analysis methods, but they are used mainly to assist, enrich and enhance them.

BIBLIOGRAPHY

- **Aitchison**, J. (**2003**) <u>**Longman Dictionary of Contemporary English**</u> (New words.B26)

- **Aston**, G. (**1995**). <u>**'Say "thank you": Some Pragmatic Constraints in Conversational Closing"**</u>   Applied   linguistics   16:   57-86.

-Aston, G. (**1997**). <u>**Enriching the Learning Environment**</u>: Corpora in ELT. In A. Wichmann, S. Fligelstone, T. McEnery & G. Knowles (Eds.), *Teaching and Language Corpora* (pp. 51-64). New York: Addison Wesley Longman

-**Barlow** .M.(**1996**). "Corpora for Theory and Practice "<u>**International Journal of Corpus Linguistics**</u>1:1-37

-**Barnbrook** G. (**1996**). <u>**Language and Computers : A Practical Introduction to the Computer Analysis of Language**</u>. Edinburgh: Edinburgh University Press.

-**Baugh**.S,**Harley**.A, and **Jellis**.S.(**1996**). "The Role of Corpora in Compiling the Cambridge International Dictionary of English". <u>**International Journal of Corpus Linguistics**</u>1: 39-59

- **Biber** Douglas. **, Susan** Conrad. **& Randi** Reppen. (**1998**) <u>**Corpus Linguistics: "Investigating language Structure and Use"**</u> . Cambridge: University Press.

-**Biber**, D, **Johansson** S, **Leech** G, **Conrad** S and Finnegan E. (**1999**).<u>**Longman Grammar of Spoken and Written English.**</u> London: Longman.

-**Brodine,** Ruey (**2001**): <u>**Integrating Corpus Work into an Academic Reading Course**</u>. In Aston Guy (ed).

- **Burnard,** L. (**2000**). <u>**Reference Guide for the British National Corpus**</u> (World Edition). Oxford: Oxford   University   Computing   Services.

-**Carter** & **McCarthy** (**1988**). <u>**Vocabulary and Language Teaching**</u>. London: Longman

-**Carter**,R and **Mc Carthy**, M.(**1995**). <u>**"Grammar and the Spoken Language"**</u> Applied Linguistics 16: 141-158.

- **Coady**, J. & **Huckin**, T. (**1997**). Second <u>**Language Vocabulary Acquisition. A Rationale for Pedagogy.**</u> Cambridge University Press.

- **Cook**, **G. (2003)** <u>Applied Linguistics</u> *:* **Oxford university press**

- **Firth**, J.R. (**1957**) *Papers in Linguistics: 1934-1951*, London: Oxford University Press.

- **Fligelstone**, T. **Teaching and Language Corpora**. in McEnery & G. Knowles (Eds.)New York: Addison Wesley Longman. (pp. 27-39)

- **Flowerdew,** L**. (2001) "The Exploitation of Small Learner Corpora in EAP Materials Design".** In M. Ghadessy, A. Henry and R.L. Roseberry (2001) **Small Corpus Studies and ELT**. Studies in Corpus Linguistics. Amsterdam: John Benjamins.

- **Francis**, W,N. & **Kucéra**,H. (**1982**) **Frequency Analysis of English Usage** . Boston,MA: Houghton Mifflin;

- **Granger,** Sylviane. (**2004**). "Computer Learner Corpus Research: Current Status and Future Prospects". In: CONNOR, Ulla and Thomas A. UPTON (Eds.) 2004: **Applied Corpus Linguistics**.   Pp.   123-145.

-**Hunston**, S. (**2002) Corpora in Applied Linguistics**. Cambridge: University Press.

- **Johns**, T. (**1997**). Contexts: The Background, Development and Trialling of a Concordance-Based CALL program. In A. Wichmann, S. Fligelstone, T. McEnery & G. Knowles (Eds.), **Teaching and Language Corpora** (pp. 100-115). New York: Addison Wesley Longman.

-**Johns and King (1991):** Classroom Concordancing. **ELR Journal 4. University of Birmingham**

 -**Johansson** ,S. & **Hofland**, K. (**1989**) **Frequency Analysis of English Vocabulary and Grammar** . Oxford: Clarendon Press.

-**Kennedy** G. (**1998**). **An Introduction to Corpus Linguistics** . London :Longman.

- **Kennedy Graeme.** (**2003**) **Structure and Meaning in English** (Pearson-Longman

- **Kennedy**, G. and **Miceli**, T. (**2001**). An Evaluation of Intermediate Students' Approaches to Corpus Investigation. *Language Learning and Technology,* 5(3), 77-90. Available online, http://llt.msu.edu/vol5num3/kennedy/default.html.

-**Leech** G. (**1992**). **Corpora and Theories of Linguistic Performance** . In starvick (ed.) 105-102

-**Leech** .G. (**1997**). **Introducing Corpus Annotation** in Garside et al (eds.) 1-12

- **Leech**,G (**2004**) **Developing Linguistic Corpora: "a Guide to Good   Practice" Adding Linguistic Annotation** : Lancaster University

-**Leech.**G. and **Eyes**.E.(**1997**).**Syntactic Annotation : Treebanks'** in Garside et al(eds)34-52.

- Geoffrey Leech et al, (2000). **Word Frequencies in Written and Spoken English**, UCREL. Pearson Education

- **Long** M,H. & **Richards** J,C "Series Editors Preface" for **Corpora in Applied Linguistics.** S,Hunston.(**2002**). Cambridge :University.Press.

-**Louw**.B. (1997) . '**The Role of Corpora in Critical Literary Appreciation'** in Wichmann et al (eds.)pp140-251

- **McEnery**, T. & **Wilson**, A. (**2001**, 2nd ed.) **Corpus Linguistics**. Edinburgh University Press.

-**Mukherjee,** J. (**2004**) .**Corpus Linguistics and Language Pedagogy** .Justus Liebig University, Giessen

-**Neddar, B.A. (2004) . Applied Linguistics (eds) Ibn khaldoun. Algeria**

- **O' Grady,W** M **. Dobrovolsky ,** F**. Katamba.** (1987) **Contemporary   Linguistics**. Longman. Pearson Education

- **Rayson, P., Leech, G., and Hodges, M.** (**1997**). Social Differentiation in the Use of English Vocabulary: some Analyses of the Conversational Component of the British National Corpus. International Journal of Corpus Linguistics. Volume 2, number 1. pp 133 - 152. John Benjamins, Amsterdam/Philadelphia.

- **Sinclair**, J.M. (ed.) (1**987**) **Looking Up: An Account of the COBUILD Project in Lexical Computing** (London: HarperCollins).

- **Sinclair** J.M.(**1991**). **Corpus Concordance Collocation**. Oxford :OUP.

-**Sinclair**, JM.(**1992**)."**The Automatic Analysis of Corpora".** Starvik (ed.)

- **Sinclair**, J.M. (**1997**). Corpus Evidence in Language Description. In A. Wichmann, S.

- **Sinclair**, J.M. (**2004**) *Trust the Text: Language, Corpus and Discourse*. London: Routledge.

- **Sinclair**, J.M. (**2004**). **Developing Linguistic Corpora**: a Guide to Good Practice Corpus and Text — Basic Principles .John Sinclair, Tuscan Word Centre

- **Stubbs** M.(**1996**). **Text and Corpus Analysis** .Oxford: Blackwell.

-**Summer,** D. (**1996**). **Computer Lexicography: The Importance of Representativeness in Relation   to   Frequency**.   In   Thomas   and   Short   (eds.).   260-265
-**Summer.**D.(director of dictionaries), Longman   and **Gadsby, A** (Editorial Director): **Longman Dictionary of Contemporary English** 2001. Longman (eds.)

- **Tannen,** D**.** (**1991**) **You Just Don't Understand: Women and Men in Conversation**. London: Virago Press. 76-77

- **Tognini**-**Bonelli**, E. (**2001**). <u>**Corpus Linguistics at Work**</u>. Amsterdam: John Benjamins.

- **Tribble**, C. (**2000)**. Practical Uses for Language Corpora in ELT. In P. Brett & G. Motteram (Eds.), <u>**A Special Interest in Computers**</u> (pp. 31-42). Whitstable, Kent: IATEFL.

- **Tribble**, C. & **Jones**, G. (**1990**) <u>**Concordances in the Classroom**</u>. London: Longman.

- **Tsui, Amy** B.M**.** (**2004**). "What Teachers Have Always Wanted to Know - and how Corpora Can Help". In: Sinclair, John McH. (ed.), <u>**How to Use Corpora in Language Teaching**</u>, pp. 39-61.

- **Widdowson**, H.G. (**1989**). "Knowledge of Language and Ability for Use". <u>**Applied linguistics**</u>, 10. 128-137.   - **Widdowson** , H.G.(**2000**). 'On the Limitation of Linguistics Applied'. <u>**Applied Linguistics.**</u> Oxford :   Oxford   University.Press.

-**Willis**, J.D. (**1990**). <u>**The Lexical Syllabus**</u>. London: Collins.

- **Willis** (**1993**). "Syllabus Corpus and Data Driven Learning" IATEFEL Conference Report: Plenaries (in Willis .J and Willis. D (eds.) 1996:67.<u>**Challenge and Change in Language Teaching**</u>. London: Heinemann.

Algerian Middle School Textbooks

-Spotlight on English (1st Year Middle School Textbook). L. Merazga et al(2004) O.N.P.S.

-Spotlight on English (2nd Year Middle School Textbook).L. Merazga et al(2004) O.N.P.S.

- Spotlight on English (3rd Year Middle School Textbook).S.A.ARAB et al (2005) O.N.P.S.

-On the Move (4th Year Middle School Textbook).S.A.ARAB; B.Riche (2006) O.N.P.S.

Algerian Secondary School Textbooks

-At the Crossroads SE1 (1st Year Secondary School Textbook). B.Riche; S.A.ARAB(2005)

-Getting Through SE2 (2nd Year Secondary School Textbook). B.Riche; S.A.ARAB(2006)

-New Prospects (3rd Year Secondary School Textbook). S.A.ARAB; B.Riche (2007)

<u>Dictionaries</u>

<u>-Cambridge Learner's Dictionary</u> (2001)

<u>-Collins COBUILD English Dictionary</u> (1995).

<u>-The Earlier Collins COBUILD English Language Dictionary</u> (CCELD)

-**<u>Harrap's Compact Dictionary</u>** (2006) Chambers Harrap Publishers Ltd

<u>-Longman Dictionary of Contemporary English</u> 2nd edition (1987)

-**<u>Longman :Active Study Dictionary</u>**.1991 Oxford University Press.

<u>-Longman Dictionary of Contemporary English</u> 3rd edition (1995)

-**<u>Oxford Advanced Learner's Dictionary</u>** (2006)

-**<u>Oxford Learner's Pocket Dictionary</u>** (1990) Oxford University Press.

-**<u>Oxford   Pocket English Grammar</u>** (1991) Oxford University Press.

Web-sites:

- www.bnc.byu.edu (professor: Mark Davies: Brigham Young University)

-Michael Barlow:http://www.ruf.rice.edu/ barlow.parac.html

-http://www.longman-elt.com/dictionaries

- http :/www.oxford.com/dictionaries

- http://www.cambridge.com/dictionaries

- www.dictionary.cambridge.org

- http://dictionary.oed.com (oxford)

- http://www.ruf.rice .edu/- Barlow.parac.html

- Oxford Natural Grammar. http://www. oup. Com

- http://www.teachingenglish.org.uk

- Joseph Rézeau*: http://www.uhb. Fr/joseph. reseau/concord.htlm*

- Wordnetweb.princeton.edu

Free/affordable corpora and corpus tools:

- **British National Corpus Sampler**: http://www.natcorp.ox.ac.uk/getting/sampler.html. Also, free, but restricted, access to the full BNC: http://sara.natcorp.ox.ac.uk/lookup.html

- **Collins Word Banks *Online* English corpus** (concordance and collocation samplers): http://www.collins.co.uk/Corpus/CorpusSearch.aspx

- **The Complete Lexical Tutor**

- **Michigan Corpus of Academic Spoken English** (MICASE): http://www.hti.umich.edu/m/micase

- **Variation in English Words and Phrases** (**Mark Davies**, Brigham Young University). Interface to the full **British National Corpus** (100 million words): http://view.byu.edu/

- **Web Concordancer** (works with a variety of corpora): http://www.edict.com.hk/concordance/

- **WebCorp**: The Web As Corpus (University of Liverpool): http://www.webcorp.org.uk/

- **WordNet:** A Lexical Database for the English Language (Princeton University): http://www.cogsci.princeton.edu/~wn -
WordSmith Tools: http://www1.oup.co.uk/elt/catalogue/Multimedia/WordSmithTools3.0

- **The International Corpus of English** http:////www.ucl.ac.uk/english-usage/