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Faculty of Letters and Languages

Department of Foreign Languages

English Section



Dissertation ACADEMIC MASTER

Domain: Letters and Foreign Languages

Field: English Language and Literature and Civilization

Speciality: Applied Linguistics and ESP

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Title

**The Role of Authentic Text in Enhancing the EAP Learner's
Reading Skill**

The Case of 2nd Year Academic Production

Publically defended

On : 27/06/2013

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Academic Year: 2012 /2013

Dedication

I dedicate this work to my precious PARENTS

To my only brother and my beloved sisters

To all the students of 2nd year Master ESP /Applied Linguistics

To all my friends

To Badereldine

*To all those who encouraged me, and contributed in the
elaboration of this work*

To all the teachers who taught me ...

Acknowledgments

*In the name of Allah, Most Gracious, Most Merciful
Praise be to Allah, the Cherisher and Sustainer of the Worlds
Peace be on His Prophet Mohammed.*

*I wish to express my gratitude and my appreciation to Dr.
CHAOUKI Nouredine, my supervisor, for his valuable guidance,
patience, generosity and for the time that he devoted to us during
the period of our research and our studies.*

*I owe a lot of thanks to all the teachers of the English section
especially my teachers during the five years*

Also, I wish to express my sincere thanks to our team work.

*I am equally thankful to all the members of the board of
examiners who accepted to examine and evaluate my
dissertation. Their comments are warmly welcomed.*

*I also thank the students of 2nd year Academic Production who
helped me in conducting the pre and post-test.*

Abstract

Teachers of English as a foreign language (EFL) and English for Specific Purpose (ESP) often look for what may help their learners enhance their reading comprehension. The present study aims at investigating the role of authentic texts in enhancing reading comprehension. We have chosen as a sample second-year Hydrocarbures and Chemistry students at the University Kasdi Merbah Ouargla. We hypothesize that if authentic texts are introduced into the reading course, this will motivate students to perform more effectively in the reading skill. We adopted a needs analysis sheet to our sample, and we administered a pre-test and a post-test to the sample to test the reliability of the model adopted. Results revealed that ESP learners are able to understand authentic texts through a top-down mode of processing and hence to achieve more effectively in reading comprehension.

List of Abbreviations

CLT: Communicative Language Teaching

EAP: English for Academic Purpose

EFL: English as a Foreign Language

EGAP: English for Academic General Purposes

ESAP: English for Academic Specific Purposes

ESL: English as a Second Language

ESP: English for Specific Purposes

GE: General English

L1: First Language

L2: Second Language

SL: Source Language

TALO: Text as a Linguistic Object

TAVI: Text as a Vehicle of Information

TL: Target Language

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Chapter One: Research Background

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Research Background

1. Background:

ESP courses should contain all the major elements of a course such as, the content, methodology materials according to learners' need. Materials in particular must be relevant to ESP learners' needs. The text whether written or spoken, is a very useful material in learning. Widdowson (2007) defined a written text as the printed record that is familiar in the study of literature and it can be presented in different editions. Whereas, he defined the spoken text as the verbal record of a communication act. While Halliday and Hassan (1976) defined text in particular as '*semantic unit not of form, but of meaning*'.

In the world of ESP, many studies have shown that materials have a crucial impact on the learning process. Using texts as materials (written/spoken) helps in learning, but texts themselves never teach. Material designers should take into consideration various criteria that define the basis of selecting and preparing appropriate materials in general and a text in particular according to the learner's needs mainly the authenticity which plays a role in the learners' reading comprehension performance.

2. Statement of purpose

After reviewing many studies dealing with text as material in the learning process, and from different points of view, we try to explain the role of text, in general, and the authentic text, in particular, and how the authentic text can enhance understanding reading texts within the area of ESP.

This work deals with the effect of using authentic text on ESP learners' reading comprehension and the ability to understand the authentic text when reading. We shall look at the extent to which text as material can be a motivating factor for ESP learners, and at the ways they use in dealing with texts.

3. Statement of problem

In this study, we try explore the extent to which an authentic text material may motivate and enhance ESP learner's learning process in class. On the basis of the above statements, the following questions will be explored.

- 1- How can text materials facilitate ESP students' learning process?
- 2- To what extent can the authentic text encourage ESP learners' in reading?
- 3- Does an authentic text help ESP learners' in their reading comprehension?
- 4- Which method of reading is suitable to help learner's text comprehension?

4. Hypothesis:

Different variables can interfere in one way or another to establish the purpose of the present study. The following hypotheses are put forward to be proved along the development of this topic.

- 1- Authentic text may help in the learning process.
- 2- Authentic text motivates learners to perform effectively in their reading comprehension.

5. Methodology

5.1. Method:

For the purpose of testing the above-stated hypothesis, we adopted a *descriptive method*, dealing with *quantitative* data. It is based on the collection and analysis of these data by applying the model chosen on a selected sample.

The approach adopted along the present study is CLT which views that syllabus design should prepare learners to act communicatively in the target language. Material, according to CLT, should be designed in accordance with the communicative needs of the learners, presenting language functions, notions and linguistic elements in a balanced way

serving the learner's needs. This approach deals with text as a means to present language in meaningful contexts. According to Richard and Rodgers (1986), CLT provides important theories to learning which provide learners with activities that involve real communication to support learning as well as using language to carry out meaningful tasks. They (ibid) claimed that the activities are selected only if they engage the learner in a meaningful and authentic language use. The current inquiry aims to use the authentic material as advocated by CLT principles.

5.2. Tools of investigation

First, we have administered a need-analysis sheet to determine the needs of the population of learners making our sample. Also, in order to answer the questions and the hypotheses set in this study, we have adopted an experimental test to assess learners' comprehension of authentic texts and the non-authentic texts. This test is applied to the chosen sample that consists of a group of 25 students at 2nd year of Academic Production at the University of Ouargla.

The test is used to assert the validity of variables. We have administered a pre-test to review the learner's level of reading comprehension of authentic texts, since they have not been exposed to authentic texts. In the post-test, we have investigated the student's performance in comprehending an authentic text using the top-down processing. It should be noted that we have administered a non-authentic text in the pre and post-test to have reliable results. Results are analyzed and interpreted to show the extent to which the hypotheses and questions are confirmed.

6. The structure of the study

The present work consists of four chapters dealing with the text as an authentic material and its role in promoting ESP learners' reading comprehension. The first Chapter is

an introduction to the present research; it presents a general view of the study: the aim of study, the research questions, and the tools used in this study. Chapter Two reviews some definitions of ESP as a branch of English language teaching and EAP as a sub-branch of ESP. It, also, explores the issue of material within ESP and its purpose, as well as the criteria of material selection. Also, we present different notions of a written text as a teaching material for ESP learners, highlighting the main elements of texture that makes the text a meaningful unit. In addition, we discuss authenticity as a key element in the ESP context and the use of authentic texts.

The third Chapter presents a description of the reading skill both as a process and as a product. Approaches to reading, the bottom-up and the top-down, and learners' reading strategies to draw an appropriate comprehension and interpretation of the text, are all accounted for in this chapter.

The fourth Chapter is devoted to applications. It contains the practical part devoted to the analysis of the findings of the needs analysis sheet, pre-test and post-test findings of the use of authentic and non-authentic text.

7. Definitions of terms

A. Reading

According to William (2009) 'reading contains different processes that define its nature, ... it can be rapid, effective, comprehensive, interactive, strategic, flexible, evaluative and linguistic process'.

B. Reading comprehension

Koda (2005:5) posits that “Comprehension occurs when the reader extracts and integrates various information from the text and combines it with what is already known” (Koda, 2005 qtd in William 2009:14)

C. Text

Hassan & Halliday (1976) defines text as follows “The word TEXT is used in linguistics to refer to any passage, spoken or written, of whatever length, that does form a unified whole” (ibid 1976:1)

D. Authentic material

Nunan (1989) defines authentic material as ‘any material which has not been specifically produced for the purpose of language teaching.’

(Nunan1989 cited in academic.research.microsoft.com)

Chapter Two: The Text As Material For ESP Learners

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Introduction

The present chapter is devoted to the introduction of ESP in general and EAP as a sub-field, in particular. Moreover, it tackles the role of materials in the EAP branch as well as the purposes for which they are designed to and the criteria against which they are selected. We talk about different notions of the text as an EAP classroom material dealing, focussing mainly on the written text. As we deal with texts, we will consider the notion of texture or textuality as the unit of a cohesive and coherent text. Further, we will account for the issue of authenticity in general and authentic text in particular. All these points will be discussed within the ESP context.

1.1 English for Specific Purposes

ESP is a wide field of English language teaching. Many works have been written about the origins and the emergence of this subbranch of English language teaching (ELT). In their seminal work, Hutchinson & Waters (1987) provide the main motives that led to the emergence of ESP. The demand of a brave new world wherein the expansion in scientific, technical and economic world before the Second World War created a united technological and commercial world that demanded for an international language hence the demand for English for specific needs. Widdowson (1978) claimed that Linguistics was shifting attention from the rules of English usage (grammar) to the rules of use (communication). In addition, the development of psychological education was more interested in the learners and their attitudes to learning. These developments paved the way to the emergence and growth of ESP.

ESP seems, then, to overpass the mere language teaching. Because it is a step further to meet the special needs and demands of special groups of learners than language teachers.

1.2. Definition of ESP

Dudley-Evans and Maggie St John (1988) postulated a definition of ESP derived from Strevens' (1988) original definition. They set absolute and variable characteristics to define ESP as follow.

Absolute Characteristics:

ESP is defined to meet specific needs of the learner

ESP makes use of the underlying methodology and activities of the discipline it serves

ESP is centred on the language (grammar, lexis, and register), skills, discourse and genres appropriate to these activities

Variable Characteristics:

ESP may be related to or designed for specific disciplines

ESP may use, in specific teaching situations, a different methodology other than that of general English

ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be designed for learners at secondary school level

ESP is generally designed for intermediate or advanced students

Most ESP courses assume some basic knowledge of the language system, but it can be used with beginners. (Strevens 1988: 4-5)

Dudley-Evans and Maggie (1998) tackled the specificity of the ESP course. The methodology within an ESP course is different from the one used in GE. ESP courses reflect a specificity of the discipline. They also focus on the interaction between teacher and learner. This interaction may differ from that practiced in GE English class.

1.3. Types of ESP

According to Dudley-Evans and St John (1998), ESP is divided into sub-branches according to the learners' need. The main two areas of ESP are English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). It is the latter which will be highlighted in the present chapter.

1.3.1. English for Academic Purpose

The present study tackles the issue of the text as material within EAP framework. We shall talk about EAP as a sub-branch of ESP that is related to any English teaching in accordance with study purposes. In this regard, Hyland ((2006: 01) states that "EAP is usually defined as teaching English with the aim of assessing learners' study or research in that language"

EAP developed as the main branch of ESP that is concerned with both theory and practice in teaching English as a SL. Also, EAP aims mainly at teaching language use in the academic context.

Dudley-Evans and St John (1998) claimed that EAP needs both general and specific English language elements for language teaching and learning which have common characteristics in English for Academic General Purposes (EGAP) and English for Academic Specific Purposes (ESAP). Blue (1988) drew the attention to this relation in which EGAP can help in understanding EAP courses and *vice versa*, because EAGP concerns the language skills teaching that are common to all the disciplines and ESAP concerns the teaching of the features that distinguish one discipline from the others. Therefore, (ESAP) and (EGAP) have an overlap relation since ESAP helps learners in their subject study by using the skills of EGAP to help learners' understanding the task in the EAP.

1.4. Materials in ESP

Material is at the core of any ESP or language teaching course. It has a prominent place in language teaching due to its importance in the learning process. Therefore, a course designer should take into consideration various criteria on which materials in general and text in particular are selected and presented to the learner.

The main stage in designing an EAP course is the selection of relevant materials. It is argued that the more relevant and specific ESP materials are to the field of the learners, the more motivating the materials will be. Morrow and Shocker (1987) claim that

“...in this case the focus is not on process or model in terms of student use of pre identified areas of languages, but rather it is on the content of the text itself. The rationale for the choice of text has to do not with the users to which it can be put, but with the subject matter involved” (ibid: 249)

1.4.1. Purpose of materials

Dudley-Evans and St John Maggie (ibid) stated four reasons for using materials that are of great importance in the context of ESP; these are:

1.4.1.1. Source of language

Materials here play a crucial role in exposing EAP or ESL learners to English language because the classroom is the only source of presenting English language to learners. They rely on the language as the only basis especially in case of EFL classroom. Learners are exposed to the language to extract the required information. Whereas teachers or material providers may encounter some problems with low level learners or the less exposed to the TL. Thus, Dudley-Evans and St John Maggie (ibid) suggest using L1 as TL to explain and working on removing the L1 systematically. Accordingly, materials should present a real language to be used later in the outside world.

1.4.1.2. Learning support

Materials are also considered to be as a learning support that needs to be reliable with the intention of containing some recognizable pattern to assist learners' ability to understand the content of the materials. Besides, Dudley-Evans and St John Maggie (ibid) argue that the material as a learning support should not use a rigid or fixed structure since these can hinder the comprehension of the materials themselves.

In addition, learners should aim at involving learners in using the language cognitively and social-culturally rather than merely mechanically. In doing so, materials are likely to enhance the learning process.

1.4.1.3. Motivation

Another reason for using materials is to stimulate and motivate learners' ability to deal with that material in a flexible way. Materials need to be challengeable to motivate the learner to extract more information and manageable so that he/she can handle its content effortlessly. As well, materials should provide new information and new ideas to be grounded in the learners' knowledge. In other words, the material providers must take into account how an input (material) will be used in the target situation to help learners to prepare themselves to use language in real world.

1.4.1.4. Reference

Materials can also be used as a reference for ESP learners. In fact, ESP classes are usually time limited. Learners need to develop their language relying on the material as an orientation outside the classroom. Learners can use materials for self-study in that they will provide extra explanation and information related to the course subject.

In addition, materials need to be well-organized and using different learning styles, since the learner will deal with materials himself/herself. For this reason, materials are supposed to be clear, organized and well explained.

1.4.2. Criteria for selecting materials

Syllabus design in ESP focuses on material development, because it is a key element in most language programmes (Richards and Renandya, 2002). Hence, selecting an appropriate material that suits the learners' needs must be based on some criteria.

We can consider the following factors set by Hutchinson and Waters (1987) as criteria for selecting a valid material. They (ibid) argued that materials should consist of these four elements [the input, the content, the language and the task] to present language in a coherent framework made up of various aspects of learning. They viewed the material from a communicative perspective. That is to say, the material used for ESP students should be relevant to their area of study or their academic discipline.

According to Hutchinson and Waters (ibid) the four criteria that should characterize the materials are:

- The input: The input can be a text, dialogue or a diagram that provides various aids such a stimulus, new language items, correct model of language use, a topic for communication, opportunities to use the language and the subject matter.
- Content focus: Materials should provide a language as a means to convey information and knowledge about the subject matter to generate meaningful communication in the classroom.
- Language focus: A good and valid material should provide learners with the opportunities for the analysis and synthesis of the language they use.

- Task: The language material should be designed to be used with its knowledge and content for a communicative task to fit the purpose of language learning that is language use. (Hutchinson and Waters 1987: 108-109)

The main point Hutchinson and Waters (ibid) focused on is the task because materials play the role of a medium that provides the learner with the ability to apply the task, while the language and content are derived from the input (text) and selected according to the learners' need. It is clear that there is a coherent relation among the four elements suggested by Hutchinson and Waters (ibid) and which creates the core of knowledge and skills.

Wallace (2010) set other criteria for selecting materials and talked about text as material, claiming that a text

- Should be a vehicle for teaching specific language structure and vocabulary.
- Should be offering the opportunity to promote key reading strategies.
- Should present content which is familiar and of interest to the learners.
- Should be at appropriate language level.
- Should be authentic, that is naturally occurring text, not specially written for pedagogic purposes.
- Should be exploitable in the classroom, that is, it should lead to a range of activities. (Wallace 2010:71)

Wallace (ibid) claimed that teachers are not obliged to use barely these factors; rather they can use other criteria to select the appropriate text. In brief, we can say that the previous criteria for selecting materials set by Wallace (ibid), Hutchinson and Waters (ibid) can be integrated to design or to select a suitable material. As a result, material should consist of these criteria to fulfill what is intended to achieve, concerning facilitating, supporting and motivating the learning process.

1.5. Text as a material

We have proceeded with a brief and simple account of what a text is. Brown and Yule (1983) view the text as the ‘verbal record of a communicative event’. They explain that a text, being cohesive and coherent, works as a vehicle which conveys events and information in an explicit way. Cohesion and coherence are the two fundamental units that set relations between the parts of the text and provide the text with the meaning continuity that the reader is required to infer and interpret.

Halliday and Hassan (1976: 1-2) explain that: “A text is a unit of language in use... and is not defined by its size... a text is best regarded as a semantic unit: a unit not of form but of meaning.” They added that: “The word ‘text’ is used in linguistics to refer to any passage, spoken or written, of whatever length, that does form a unified whole” (ibid: 1-2)

In fact, learners communicate *via* language not only by means of words and sentences but also by means of text. A huge number of works defined the notion of the ‘text’ from different perspectives; we have selected a relative definition of written text, which goes in parallel with communicative language teaching (CLT).

1.5.1. Written text

For Beaugrande and Dressler (1981:63), a text is

“A naturally occurring manifestation of language i.e. as communicative event in a context that THE SURFACE TEXT is the set of expression actually used; these expressions make some knowledge EXPLICIT, while other knowledge remains IMPLICIT, though still applied during processing” (Beaugrande & Dressler 1981:63)

Beaugrande and Dressler (ibid) are concerned with the connectivity that constructs a text and the co-interpretation. Hence, the reader is expected to give an interpretation to this text.

1.5.2. Texture / Textuality¹

According to Beaugrande and Dressler (1981), any text is made up of sentences but there are some separate principles of text construction that make up sentences. Thus, they defined text as a communicative occurrence which meets seven standards of textuality, the so called “constitutive principles of textual communication” that consist of ‘cohesion’ and ‘coherence’ as the main standards which build a text as a whole.

According to Halliday and Hassan (1976), every text has a texture; “a text derives this texture from the fact that it functions as a unity with respect to its environment” (1976:02). This means that a text without a texture would just be a collection of isolated sentences that have no relationship to each other as each sentence has its own meaning and different context.

The texture of text is realized through cohesion and coherence and it differentiates a text from a non-text. In order to make the comprehension of material easier, teachers have to provide texts related to the students’s area of study and help them to practise proper strategies extract meaning.

From what has been said earlier texts, in fact, are not random sequences. They form a semantic unity and can be organized through elements of cohesion and coherence.

1.5.2.1. Coherence

Coherence is concerned with the development and establishment of meaning within a text, Van Dijk (1973:93) considered ‘coherence’ as the semantic property of discourse based on learners’ interpretation of the related sentences. This interpretation indicates the interaction between the text and the reader. Moreover, Watt (1959) claimed that ‘coherence’ is achieved

¹- The term ‘texture’ and ‘textuality’ are used changeable, see Beaugrande and Dressler (1981), Halliday, and Hassan (1976)

when the sentences follow each other in a logical order and are linked together by transition (cohesion elements)

According to Beaugrande and Dressler (1981), coherence is defined as the continuity of the text sense within a configuration of the concepts and relations. They referred to the textual world as the concepts and relations, in which they divided relation into causality relation and time relation. Moreover, they referred to textual world as the configuration underlying a text that may agree or not with the version of the real life. Therefore, the continuity of the text sense depends on the mutual access and relevance within a configuration of the concepts and relations.

- **Causality relation**

Beaugrande and Dressler (ibid) suggested the following four elements of causality relation

- A. 'Cause': E.g. the Saudi real oil revenues have declined more than other countries between the 1980 and 2005, because the Saudis maintained their output capacity. (Dr. A.F. Alhajji, 2005: 21)
- B. 'Enablement': E.g. The rotary table turns the Kelly, the Kelly turns the string and the string turns the rotary bit. (Victor Schmidt, 2005:19)
- C. 'Reason': The pressure of the bottom hole was lower than the reservoir, the oil will move through the reservoir's pores. (Victor Schmidt, 2000:21)
- D. 'Purpose': The University of Houston, with US Department of Energy funding, has developed tools for using and optimizing a WAG flood design. (Perry A. Fischer, 2005:17)

- **Time relations**

Malmkjaer (1991:545) asserted that 'time relations' deal with the arrangement of event in time. These time relations are, first, the forward directionality in which an event causes or enables a reason for the next event, that is to say the forward directionality consists

of the cause, enablement and the reason. Second, the backward directionality concerns the purpose, because the last event is the purpose for an earlier one. Moreover Winter (1977 qtd in Malmkjaer 1991:545) divided time relations into logical sequence relations and matching relations.

First the logical relations are divided into:

- A. 'Condition-sequences' signaled by 'if' (then) e.g. the formation pressure will cause permeable zones to flow, *if* conditions allow flow at the surface. (Medley & Reynolds 2006:41)
- B. 'Instrument-achievement' that is signaled by 'by' (means of) e.g. Saudi Arabia's central region had a significant fund, judging *by* tests and field outlines. Fischer 2005:17)
- C. 'Cause-sequence' which is signaled by 'because, so' e.g. the technique reduces the hydrostatic pressure of the drilling fluid column, *so* the pressure in the wellbore is less than the formation pressure.(Medley & Reynolds 2006:41)

Second, the matching relations are divided into:

- A. 'Contrast' is signaled by 'however' e.g. the OPEC members have pointed out that the prices are being set in the future markets, *however* , producers should note that the entire process above should be reversed. (Fischer 2005:17)
- B. 'Compatibility' is signaled by 'and, similarly' e.g. two major advances would help move this area forward: improved measurement capabilities and predictive geology. (Duey, 2007:45)

Now, we can recognize better the relations that define the coherence of the text and that will help the learner to determine which relation is signaled within a given text Malmkjaer (1991).

1.5.2.2. Cohesion

Cohesion in discourse has been tackled by many researchers and several definitions have, consequently, been set (Meyer 2009, Halliday & Hassan 1976, Malmekjaer 1991). Almost all researchers agreed that 'cohesion' is the grammatical and/or lexical relationship between different sentences or parts of sentences of a text.

Elements of cohesion

These elements were accounted for mainly in the work of Halliday and Hassan (1976). They described how 'cohesion' is achieved by the five elements of *reference*, *ellipsis*, *substitution*, *conjunction* and *lexical cohesion*.

Reference: It is of two types:

- *Endophoric*:

A. *Anaphoric*: Nunan (1993) defined it as denoting the linguistic items which refer to something that has been mentioned earlier in the text. Anaphoric reference is also called "a backward reference" (McCarthy 1991).

E.g., Jack built a house; it was very large (Malmekjaer 1991: 624)

The pronoun "It" refers backward to "a house".

B. *Cataphoric*: It is the reverse of anaphoric (forward reference) (McCarthy 1991: 35). It is the use of a linguistic item to refer to something that will be mentioned later in the text (Malmekjaer 1991:543).

E.g. They pressed round him in ragged fashion to take their money. Andy, Dave, Phil, Stephen, Bob (McCarthy, 1991: 35).

In this example, we do not establish what "they" refers to until the second sentence shows that the pronoun 'they' refers to other words that were not mentioned in the first sentence.

- *Exophoric:*

It is the use of the linguistic item to refer to something out of the text (Malmekjaer 1991:543). Usually the referent is a word shared by the sender and the receiver. It is called shared knowledge (McCarthy 1991:39).

E.g. The government is to blame for unemployment (ibid. 39).

The article “The”, here, refers, for example, to the Algerian government.

The items that can be included under the notion of ‘reference’ are pronouns (he, she, they, him, and it.), demonstratives (this, that, these.....) and the article (**the**) (Nunan: 1993).

2 – Ellipsis and Substitution:

For McCarthy (1991:43) *ellipsis* is the omission of words or elements when the use of these words in the text seems wordy; while *substitution* is to replace one or two words by others.

E.g. The children will carry the small boxes, the adults the large ones.

* “Will carry” have been omitted in the second sentence → *ellipsis*.

* “Boxes” have been replaced by “ones” → *substitution*.

It should be mentioned that both ‘substitution’ and ‘reference’ involve some linguistic items to substitute for others. (Meyer: 2009).

3 – Conjunction:

“A conjunction does not set off a search backward or forward for its referent, but it does presuppose a textual sequence, and signals a relationship between segments of the discourse.”(McCarthy, 1991: 46)

That is to say, conjunctions are not devices for reminding the reader of previous states, entities and actions of affairs (Nunan 1993). Also, Halliday and Hassan (1976) gave four types of conjunctions: ‘Adversative’, ‘Additive’, ‘Temporal’, and ‘Causal’ (ibid.). Later on, Halliday (1985) limited these types into three:

- Elaborations: such as, for example, either, in other words. E.g., the oil reservoir contains of rocks ‘such as’ the sandstones, limestones and dolomites.
- Extension (which includes Adversative and Additive): e.g. alternatively, and, instead, nor. E.g. the recent oil industry uses the rotary system to drill for oil, ‘instead’ of the cable system.
- Enhancement (which includes Temporal and Causal): such as; here, so, in this respects. E.g. the driller pumps mud to the sting, ‘so’ to make it cool.

4 – Lexical cohesion:

It is the relationship between vocabulary items in texts. Lexical cohesion according to Halliday and Hassan (1976) is of two distinct kinds, which are ‘Reiteration’ and ‘Collocations’.

- *Reiteration*:

A- *Direct repetition*: E.g., what we lack in a newspaper is what we should get. In a word, a “popular” newspaper may be the winning ticket (Nunan 1993: 29)

B- *Hyponymy*: Hyponyms are words related to the same family.

E.g. There was a fine old **rocking-chair** that his father used to set in, a **desk** where he wrote letters, a nest of small **table** and a dark imposing **book case** (McCarthy, 1991:66).

All the words (written) in bold above are hyponyms of the same family that is *furniture*.

C- *Synonymy*: E.g. There is a rise in the prices of oil and gas; this increase affected the sells movement. The word “increase” used as synonym to the word “rise” to avoid repetition

- *Collocations*:

They are words that appear together and never could be replaced.

E.g. A bar of chocolate. / A loaf of bread

So, it is not correct to say “a piece of bread” or “a loaf of chocolate”.

In any given text, cohesion and coherence are connected to each other. Cohesion helps in building up the text, by linking sentences to each other, so that it becomes easier for the readers to deduce the meaning of what they read. While if the text is poorly organized, it will not be more coherent. Therefore, cohesion and coherence of a text are the main elements that keep it in balance to be well understood and interpreted by receivers.

Another element that should be discussed within the ESP context is the *authenticity* of text. It is considered as a key issue in the ESP context.

1.6. Authenticity

Authenticity is one of the ESP material issues. The use of authentic materials may help or hinder ESP learners’ text comprehension. Selecting an appropriate text for learners requires various criteria on which a text can be chosen and presented to them. Many researchers have attempted to define the notion of ‘authenticity’ through their different works in multiple areas. Some of them state that one of the criteria for selecting text is authenticity. Johns and Price-Machado (cited in Celce Murccia 2001) claimed that ESP as a branch of language teaching is mainly based on designing curriculum out of authentic use of language.

Van Lier (1996:128 qtd in Freda Mishan, 2005:15) state that,

‘Authenticity is not brought into the classroom with the materials or the lesson plan, rather, it is a goal that teacher and students have to work towards, consciously and constantly[...] authenticity is the result of acts of authentication, by students and their teacher, of the learning process and the language used in it’ (Van Lier 1996: 128).

He sees that authenticity would be well presented by teachers and learners rather than by lesson plans. In other words, teachers and their learners have to deal with material in an authentic manner to achieve an authentic purpose.

1.7. Authentic material

According to Hutchinson and Water (1987), the authentic material can be well understood *via* the text itself, claiming that “The authenticity is not a characteristic of a text in itself: it is a feature of a text in a particular context” (Hutchinson and Water 1987:159)

Also, Kramersch claimed that “The term authentic [...] refers to the way language is used in non-pedagogic, natural communication.”(Kramersch 1993: 177 qtd in Freda Mishan, 2005:12)

That is to say, the language used in material should be presented in a way in which it represents a communicative purpose of the real world or the target situation.

1.7.1. Authenticity of text

1.7.1.1. Authentic text

Morrow (197:1327) defined *authentic text* as ‘A stretch of real language, produced by a real speaker or writer for a real audience and designee to convey a real message of some sorts’.

The point is that an authentic text provides for authenticity in every element in the communication act, including the writer and the reader to convey real and authentic message. Lee (1995: 324) supported the idea of Morrow(1977) positing that

“ a text is usually regarded as authentic if it is not written for teaching purposes but for a real life communicative purpose where the writer has a certain message to pass on to the reader; as such, an authentic text is one that possesses an intrinsically communicative quality” (Lee 1995:324 qtd in Freda Mishan, 2005:12)

1.7.1.2. Non authentic text

We can define a non-authentic text as an opposite to the authentic one; so the non-authentic is the text that has been written especially for language learners. The non-authentic text is artificial and unvaried, basing on something that should be taught (Sacha Antony & Berdardo 2006)

1.7.2. Types of Authenticity

Breen (1985:61) identifies four types of authenticity within language teaching. He indicates that these types are in frequent interrelationship with each other during any language lesson. These types include:

1. **Authenticity of the texts which we may use as input data for our learners:** It is the authenticity of the text, which teachers may use as input data for learners. It can be used as a means to help the learner to develop an authentic interpretation.
2. **Authenticity of the learners' own interpretations of such texts:** The learner must know the principle of communication in the TL that helps him to interpret meaning systematically within the text respecting TL conventions of use.

3. **Authenticity of tasks conducive to language learning:** Task authenticity refers to the purpose of language input. This means that the selected tasks should involve the learners in learning and make them aware of the learning purpose rather than involving learners only in authentic communication with texts and others in the classroom.
4. **Authenticity of the actual social situation of the language classroom:** The classroom is another social situation in which learners may share some social events or problems. So, also, in the classroom there must be authenticity. (Breen 1985: 61)

1.7.3. The use of authentic material

1.7.3.1. Advantages of using authentic material

Alejandro and Martinez (2002) mentioned some advantages of using authentic material and how this authentic material can help learners for more understanding and acquiring their needed knowledge and information. These advantages can be listed as follows:

- Students are exposed to real discourse, as in a written text in which authentic language is provided.
- Authentic materials keep students informed about what is happening in the outside world, so they have a fundamental educational value.
- Textbooks often do not include incidental or improper English.
- They can produce a sense of achievement, because students get real satisfaction from having made some sense out of real life language. They are more interesting and motivating and they give students confidence when they understand them.
- The same piece of material can be used under different circumstances if the task is different.

- Language change is reflected in the materials so that students and teachers can keep aware of such changes.
- Reading texts are ideal to teach mini-skills such as scanning (Richards 1983) e.g. students are given a news article and are asked to look for specific information (amounts, percentages, etc.).
- Books, articles, newspapers, and so on contain a wide variety of text types, language styles not easily found in conventional teaching materials.
- They can encourage reading for pleasure because they are likely to contain topics of interest to learners, especially if students are given the chance to have a say about the topics or kinds of authentic materials to be used in class.

(Alejandro and Martinez 2002 qtd in Karen p. 3)

1.7.3.2. Disadvantages of using authentic materials

As the authentic material has some advantages, obviously it may have some disadvantages about its use. The following can be considered as some disadvantages of using authentic materials.

- They may be too culturally biased, so unnecessarily difficult to understand outside the language community.
- The vocabulary might not be relevant to the student's immediate needs.
- Too many structures are mixed so the learners of low levels have a hard time decoding the texts.
- Special preparation is necessary which can be time consuming.
- The material can become outdated easily, e.g. news.

Guariento and Morely (2001) held that the authentic material is available to be used in the post-intermediate level because learners at that level are able to master a wide range of vocabulary in that target language. Whereas at a lower level the use of the authentic material may cause learners to be de-motivated because they lack many lexical items and structure of the target language at that level. Also, according to Ur (1996: 150), “the use of ‘authentic’ texts with less proficient learners is often frustrating and counter-productive”. The authentic material should, then, provide learners with authentic English, and teachers must be careful when selecting this material since learners may find difficulties in understanding these materials due to their level in English. In addition, materials should provide authentic tasks that suit the learners’ need.

Conclusion

In light of what has been said, EAP as a branch of ESP requires a range of elements. Material is one of these elements. In this chapter we have reviewed the importance of text as a material, being based mainly on coherence and cohesion. The issue of authenticity, as the key element in the selection of text for EAP learners was accounted for. We have, also, discussed the use of authentic material and the impact it may have on the learners’ reading competence. It is argued that the main reason behind using ‘authentic’ or ‘non- authentic’ texts is to get a whole understanding of the general meaning. The next chapter will be devoted to reading as a cognitive process, reading comprehension and the strategies used to enhance the reading potential of the learner in the EAP classroom.

Chapter Three: Reading

Introduction

3.1 Definition of Reading

3.2 Reading skill in English for Specific Purposes

3.3 Types of Reading process

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3.5 The product of reading

3.4 Reading comprehension

3.5 Approaches to reading

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3.6.2 Scanning

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3.6.4 Extensive reading

Conclusion

Introduction

Reading is a crucial skill in language teaching. It is a complex process which involves cognitive, linguistic, cultural and other abilities. Also, this process is an interaction between the reader and the text which depends on the writer's input and the reader's output i.e. comprehension.

This chapter deals with reading as one of the language skills that is integrated with other skills (listening, speaking and writing) to achieve effective learning. First, we will present different definitions of reading and discuss the nature of reading both as a *process* and as a *product*. Moreover, we will attempt to shed light on the different approaches to reading and the strategies that learners adopt to process a given reading text. Reading comprehension is at the core of reading. It helps readers to understand texts and extract the information they need. The present chapter will, also, tackle comprehension as the core component in the reading process.

3.1 Definition of reading

Reading has been the subject of many works in applied linguistics and language teaching pedagogy. Thus, many definitions of reading were suggested.

The Longman dictionary (2002) provides a simple definition of the term 'reading', claiming that it is

“The processes by which the meaning of a written text is understood. When this is done silently it is known as silent reading [...]. Reading employs many different cognitive skills, including letter and word recognition, knowledge of syntax, and recognition of text types and text structure”. (Richards & Schmidt 2002:483)

Urquhart & Weir (1998 qtd in William 2009) defined reading ‘ the process of receiving and interpreting information encoded in the language form via medium of print’ (Urquhart & Weir 1998:22). That is to say, the reading process is both a cognitive process in which the reader receives and interprets the information in the text, and it is a linguistic process that presents information and knowledge through written texts .

Widdowson (1979) views reading as:

“Not simply a matter of extracting information from the text. Rather, it is one in which the reading activates a range of knowledge with the reader’s mind that... may be refined and extended by the new information supplied by the text” (1979:56).

Widdowson (1979) described reading as a kind of interaction between the reader and the text. Also, Grabe (1988) supported this definition, claiming that reading “is a dialogue between the reader and the text”. Widdowson (ibid) emphasized the knowledge that exists in the reader’s mind i.e. *the schematic knowledge* or the pre-existed knowledge that helps in the process of reading. Not very far from this idea, Catherina (2010) defines reading as a process that is achieved with a good knowledge of the surrounding context.

3.2 Reading skills in English for Specific Purposes

Johns & Davies (1983) maintained that the process of reading within ESP context does not differ from that in GE. Rather, it requires two contributions: the shift from Text As a Linguistic Object (TALO) to Text As a Vehicle of Information (TAVI). The second contribution is the importance of the other skills in the efficiency of the reading comprehension. Alderson (1984:98) supported this view by stating that learners need an adequate level of knowledge of L2 to help them transfer their L1 skills to the L2 reading tasks.

Duddely and St. John (1998) considered that an ESP course requires a balance between the language development and skills. Successful learners generally use some strategies to explore the meaning (meaning prediction). Whereas, learners who have poor background (language and skills) in L1, this will affect L2 reading comprehension. Alderson (1984:98 qtd in Duddely and St. John 1998) suggested skills to be learnt and transferred to TL. He put these skills as follows:

- Selecting what is relevant for the current purpose ;
- Using all the features of the text such as heading and the layout ;
- Skimming for content and meaning ;
- Scanning for specifics;
- Identifying organizational patterns;
- Understanding relations within a sentence and between sentences;
- Using cohesive and discourse markers;
- Predicting, inferring and guessing;
- Identifying main ideas, supporting ideas and examples;
- Processing and evaluating the information during reading;
- Transferring or using the information while or after reading. (ibid: 98)

Wallace (2010) claimed that ESP and EAP learners will read to improve knowledge of specialist area because ESP learning is mainly related to a particular content. She emphasized that the text should be selected according to the learners' speciality to motivate reading comprehension.

3.3 Types of reading process

It is important to differentiate between reading as process, and the result of that process, that is the product.

3.3.1. The process of reading

Alderson (2000) stated that “the process is what we mean by ‘reading proper’, the interaction between a reader and a text”. According to him, reading is a cognitive process that comprises many components as *scanning the print, word recognition, meaning prediction* and *contextual cues*. He (ibid) added that reading is a mental operation that creates an interaction between the reader and the text. This process is subjected to changes according to the text type, context, reading purpose and the reader herself/ himself.

3.3.2. The product of reading

The product of reading refers to the comprehension or the understanding and the interpretation that the reader achieves when reading a text. This is the result of the reading process. Alderson (ibid) also maintains that a text can be interpreted in different ways from one reader to another according to the pre-experience she/he has. He claims that the comprehension of a given text may vary since readers differ in their knowledge.

3.4 Reading comprehension

Usually the main aim of reading is to understand a given written text. Grellet (1981) explains that reading comprehension means understanding a written text and being able to extract the required information from it as efficiently as possible.

Kendoeou *et al.* (2007) defined comprehension as follows:

“Comprehension is not a unitary phenomenon but rather a family of skills and activities. A general component in many definitions of comprehension is the interpretation of the information in the text.....at the core of comprehension in our ability to mentally interconnect different events in the text and form a coherent representation of what the text is about” (Kendoeou et al. 2007:28-9 qtd in Grabe 2009)

The author explained that comprehension process is a range of skills and activities that help to interpret the information in a text and to understand it as a coherent unit. Therefore, reading comprehension is a task that learners really need to draw a general idea about the text.

Grabe (2009) dealt with the notion of comprehension as building up a general understanding of the text through processing information and word recognition, sentence and prepositional encoding. He claimed that reading comprehension involves also the combination of the current information with the active meanings that exist in the textual input. So, comprehension is significant for an effective reading process in which readers infer meaning drawing upon their prior knowledge.

3.5. Approaches to Reading

Teaching reading is an essential step in language teaching in general and ESP teaching in particular. Teachers may choose among different methods and techniques the ones that are likely to help their learners understand the nature of reading and to teach them how to process a text. Villanueva (2006) talked about the main approaches to teach reading. First, the bottom-up type of processing that focuses on comprehending the meaning of a written text through matching sounds to their written forms and up to the higher units. The second is the top-down type of processing which is based on using background knowledge of the learners to comprehend a written text.

3.5.1. Bottom-up approach to reading

Omaggio (1993) claimed that the traditional bottom-up approach was influenced by the behaviorist psychology of the 1950s which held that learning was based upon 'habit-formation, repetition and stimulus response' (1993:45).

Villanueva (2006) stated that the bottom-up approach is associated with a phonic method. Further, Gray and Rogers (1956) see reading as a linear process in which the reader

decodes the text word by word, and this requires the reader to match sounds with letters in a defined sequence, linking words into phrases and finally sentences.

Villanueva (ibid) added that ESL and EFL material was influenced by the bottom-up view, basing on the literal comprehension, the perceptual and decoding dimension to recognize and recall the grammatical and lexical forms, where a little attention was given to the reader's experience and background knowledge of the subject matter. Hence, within this approach reading is referred to as the ability to decode written words and the perception of meaning is realized through preliminary units and relationships between sentences.

3.5.2. Top-down approach to reading

Ausubel (1968) claimed that the top-down approach or processing to reading is derived from the meaningful learning which is the way information is presented in its relevant context and related to what learners knew before (background knowledge). Accordingly, this focus on the meaning helps on shaping the top-down approach that takes into consideration the knowledge and the experience of the reader.

Villanueva (ibid) affirmed that reading in the top-down process is a process of relating and connecting information with the reader's previous knowledge rather than merely extracting information. In this connection, Tierney and Pearson (1994 qtd in Villanueva 2006) saw that reading is a cognitive process which includes the reader's background knowledge.

Smith (1994:2 qtd in Villanueva 2006) supported these ideas stating that reading is not a mechanical activity but it is 'Purposeful and rational, dependent on the prior knowledge and expectations of the reader (or learner). Reading is a matter of making sense of written language rather than decoding print to sound'

The top-down approach to reading has come to give an importance to the reader experience and prior knowledge. It is also known as schemata, defined by Nunan (1993) as "past experiences which lead to the creation of mental frameworks that help us make sense of

new experiences”. This model helps readers (learners) to make a sense of a written discourse and facilitate its comprehension.

The following diagram, from Celce-Murcia and Olshtain 2000, is a representation of the relation between the two types of processes.

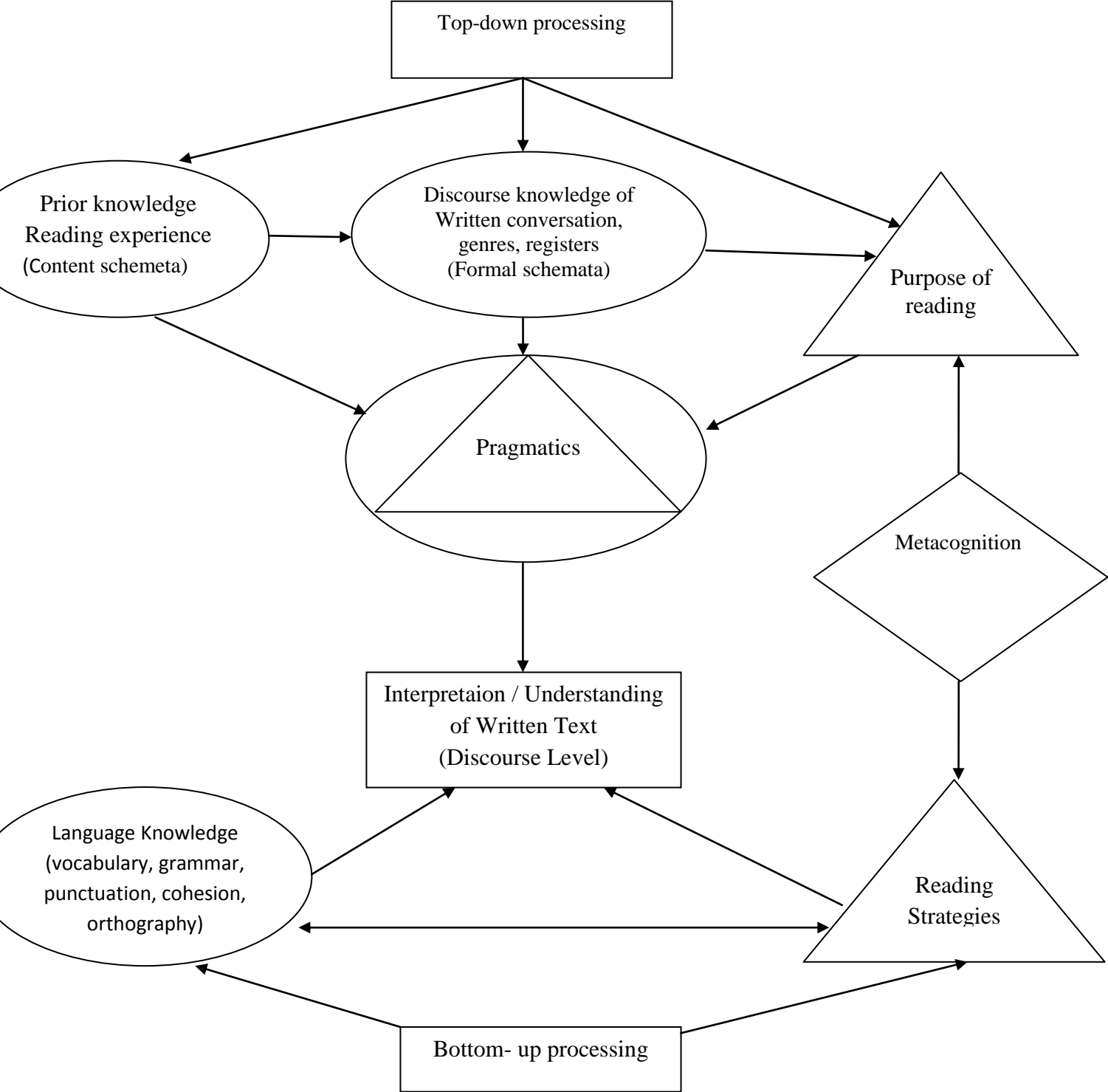


Figure 1: Reading: written Text Reception Framework (Celce-Murcia and Olshtain, 2000: 120)

Figure 1 shows the relation between the two types of processing and how a reader can move from one type to another. Celce-Murcia and Olshtain(2000) see that the two processes take place simultaneously in the reader's mind wherein the reader may use both of them. The reader needs to call up his/ her prior knowledge and prior reading experience which is referred to as the 'formal schemata' to help him/her to apply the knowledge of writing conventions such as genres and register, referred to as the 'formal schemata'. Then the reader should bear in mind the purpose of reading and he/she is engaged in the top-down processing. Simultaneously, in the bottom-up process, the reader needs to activate linguistic knowledge, using the reading strategies in order to decode a written text. Celce-Murcia and Olshtain(2000) claimed that using both types of processing is an effective way that enables the reader to comprehend the text effectively.

3.5.3. Interactive approach to reading

The interactive approach refers to the interaction between the two previous approaches: the bottom-up and the top-down.for Eskey (1988).

Stanovich (1980 qtd in Villanueva 2006) proposed a third approach called the interactive compensatory model that processes the text moving either from lower to higher or from higher to lower elements .

The interactive model takes into account the continuous interaction between the two approaches, where the good reader can decode the text automatically with little cognitive effort. But SL learners, for instance, will need some help in decoding that language since this cannot be solved by guessing. Hence, this approach integrates the skills of the two approaches in a balanced way.

In addition, reading in this approach, as explained by Alderson (2000: 18), means that the reader is able 'to synthesize a final hypothesis from the text from multiple knowledge sources interacting continuously and simultaneously.' According to this approach, the reader

can make use of the decoded printed text as he can rely on his pre-existing linguistic knowledge.

3.6. Reading strategies

Learners frequently use a set of strategies (such as *skimming*, *scanning*, *extensive reading* and *intensive reading*) when reading so that they can easily process and extract the information from the text. These strategies are different according to the purpose of reading.

3.6.1. Skimming

Grellet (1981) defined *skimming* as ‘*quickly running one’s eyes over a text to get the gist of it.*’ (ibid: 04). She sees that the reader achieves this by having a glance at the text and setting his eyes over the end of paragraphs or at the beginning where information is usually summarized. *Skimming* means looking at the main ideas in the text without investigating it carefully. Also, Grellet (ibid) claimed that *skimming* has sub-skills such as *prediction* i.e. when learners guess what the text is about or what comes next. Readers can predict and understand the holistic meaning at the first glance at the head of a given sentence.

3.6.2. Scanning

Scanning, on the other hand, is “quickly going through a text to find a particular piece of information” Grellet (ibid: 04).

The *scanning* strategy is not very different from *skimming*, since we can use the same skills used in *skimming* such as previewing and predicting but it is, in fact, a fast reading to reach a specific element. In *scanning*, the reader looks through a text quickly to extract specific information, such as a date or a name. In this strategy, the reader already knows the content of the text, but he is looking for a particular piece of information, and he neglects any information that does not serve his purpose of reading. For this reason, we can consider *skimming* as a general but *scanning* as a specific strategy.

Grabe(2009 :09) stated that the combination of both *skimming* and *scanning* helps the reader to grasp the meaning.

3.6.3. Intensive reading

Intensive reading, according to Grellet (1981), consists of ‘reading shorter texts to extract specific information. This is more an accuracy activity involving reading for detail’ (Grellet1981: 04).

This strategy involves careful reading of the text and a thorough analysis of each sentence, besides the role of getting the meaning. The reading speed is, then, reduced to make a critical reading in which learners are supposed to give their own interpretation and criticism of the texts.

Sarosdy *at al* (2006) defined intensive reading as ‘Reading for detailed information. Sometimes we read a text in order to understand everything we are reading in detail. We use this technique when we want to understand instructions or directions or when we are preparing for an exam’ (ibid 2006:54)

3.6.4. Extensive reading

Extensive reading, on the other hand, is more difficult than *intensive reading* as Grellet (ibid) explained. It consists of ‘reading longer texts, usually for one’s own pleasure. This is a fluency activity, mainly involving global understanding.’ (Grellet ibid: 04).

Also, Sarosdy *at al* (2006) sees that this type of reading ‘means reading for pleasure. We use this type of reading while reading an interesting model or a short story or an article taken from a popular paper etc’ (ibid: 55). In this reading strategy, learners read for pleasure to support their previously knowledge. This type takes more time and does not need careful attention.

Conclusion:

In this chapter, we discussed the reading process and reading comprehension skill in general within the ESP context, in particular. We started by discussing the reading process as a whole. The nature of reading as a process and as product was, then, tackled. In addition to discussions about reading approaches set by different applied linguists, some reading strategies involved in the reading process were discussed such as skimming, scanning intensive reading and extensive reading.

Part Two: Practical part
Chapter Four: Application

4.1. Needs Analysis sheet

4.1.1. The description of needs analysis sheet

4.1.2. The data analysis

4.1.3. The Results of the Data Analysis

4.2. The Pre-test and the Post-test Analysis

4.2.1. The pre-test results

4.2.2. Post test-results

4.3. Discussion of the results

4.4. Pedagogical Recommendations

General conclusion

4. 1. Needs Analysis sheet

4. 1.1. The description of needs analysis sheet

In order to understand the role of the authentic texts in enhancing ESP learners reading comprehension, we have adopted first a Needs analysis sheet. This aims at testing the extent to which the reading skill is important for the learners' subject-speciality. This needs analysis sheet was given to (25) students of 2nd year Academic production at the Department of Hydrocarbures and Chemistry at the University Kasdi Merbah Ouargla .

The questions are organized as follows: first, the importance of English for learners' as well as the importance of the reading skill.

4.1.2. Data analysis

Question 1: Do you think that studying English is important in your area of study?

Options	N	P%
Yes	25	100
No	00	00
Total	25	100

Table 1: The importance of English language in the learners' area of study

Table 1 shows that all the learners under study (100 %) agree that learning English is important in their area of study.

Question 2: Do you need spoken or written language?

Options	N	P%
Spoken	06	24
Written	12	48
Both	07	28
Total	25	100

Table 2: The language mode the learners need

The majority of our sample with 48% say that they need written language in their study, while 7 learners claim that they need both spoken and written language. Six (6) of them (24%) see that spoken language may help them in their area of study.

Question 03: What do you need English for?

Options	N	P%
To communicate	20	80
To help you in your area of study	5	20
Total	25	100

Table 3: The purpose of learning English

Twenty (20) students (80%) say that they learn English in order to communicate and just five (5) say that they learn English to help them in their speciality.

Question04: How do you find reading texts in your speciality?

Options	N	P%
Interesting	21	84
Not interesting	04	16
Total	25	100

Table 4: Reading texts that are related to the speciality

The majority of the learners with 84% say that they do not enjoy reading texts related to their subject-speciality in English, but 4 of them (16%) find it enjoyable to read texts.

Question 05: What are the difficulties you encounter when reading texts?

Options	N	P%
Meaning of words	19	76
Structure of the sentence (grammar)	06	24
Total	25	100

Table 5: The difficulties that students meet when reading texts.

Table 5 shows that 19 learners (76%) say that when reading a text they find difficulties in understanding the meaning of words, and 6 (24%) do not understand the structure of the sentences at all.

Question 06: Is one English session a week enough for you?

Options	N	P%
Yes	23	92
No	02	08
Total	25	100

Table 6: Learners' view as to the number of English sessions

From Table 6 we can see that the vast majority of learners (92%) are satisfied with one session of English, and only two learners say that one session is not sufficient.

Question07: Which text do you prefer to read in English?

Options	N	P%
Written by your teacher	10	40
Taken from a book or magazine in your speciality	15	60
Adopted by your teacher	00	00
Total	25	100

Table 7: Learners' preferred texts

Table 7 shows that 15 learners (60%) prefer to read authentic texts related to their speciality in English. While, 10 of them (40%) prefer to read texts written by their teacher, and none of them like to read texts adapted by the teacher himself.

Question08: Have you ever read a magazine about your study subject?

Options	N	P%
Yes	06	24
No	19	76
Total	25	100

Table 8: Learners' reading in their speciality

Table 8 shows that 19 learners (76%) say that they never read an English magazine in their speciality and six (6) of them (24%) do.

Question 09: When you read a text, do you prefer to

Options	N	P%
To understand the general idea then go into the details?	21	84
To understand the sentence-structure then go to the general idea?	04	16
Total	25	100

Table 09: Learners' preference of reading technique

Twenty (21) learners (84%) claim that they use the top-down technique when reading a text, and only 4 (16) say that they prefer the bottom-up technique of reading.

4.1.3. The Results of the Data Analysis

From the above data analysis, our research came out with these results concerning enhancing the ESP learners reading comprehension through authentic materials:

- English language is important for our sample's speciality
- The learners' purpose of reading is to communicate.
- The learners in our case are interested in reading authentic materials related to their speciality and they prefer the top-down technique. They, nevertheless, face difficulties in understanding vocabulary related to their area of study.
- The majority of students in our sample never read magazines relevant to their study in English (only few of them do)
- One session is fair enough for them to learn English related to their discipline.

4. 2. The Pre-test and the Post-test Analysis

Dealing with the reading text differs from one student to another and from one teacher to another. In many cases, students are assigned a text and asked to answer a certain number of comprehension questions. This procedure is, in fact, testing. It aims at determining whether students are able to extract information from authentic texts or not.

The present study aims to explore the role of the authentic text in enhancing the reading skills of EAP students.

The same technique was used to assess learners' reading performance in both authentic and non authentic texts. The kinds of activities used in the test are the true/false, the Multi Choice Question (MCQ), filling the gaps, and the opened questions. In addition, students use the scanning and skimming strategies to extract the required information.

4. 2.1. The pre-test results

Text type	Number of the students	Number of the students who got the average	P %
Authentic	25	10	40
Non-authentic	25	16	64

Table10: The Authentic and Non-authentic pre-test results

When assessing learners, we attempted to assess their reading comprehension. We administered both authentic and non authentic texts. In the authentic text, 10 students out of 25 got the average. The other 15 students did not, because they were not exposed to such a kind of texts before. On the other hand, when we administered non-authentic texts, 16 students out of 25 got the average. Students achieved better here because they are used to deal with this kind of texts; so they do not encounter comprehension difficulties such as the ones they encountered in the case of the authentic texts.

The results show that 60 % of the learners' performed better when tested with the non-authentic texts and 40 % got the average with authentic texts.

4.2.2. Post test results

Text type	Number of the students	Number of the student who get the average	P %
Authentic	25	14	56
Non-authentic	25	15	60

Table 11: The Authentic and Non-authentic post test results

It is obvious from Table 11 above that the majority of the learners (56%) got the average when authentic texts were used. Whereas, about (60%) of the total number students got the average with non authentic texts. The average of students in the non-authentic text does not mark an obvious change due to their being accustomed to this kind of texts. In the case of authentic texts, there was a remarkable improvement in the students' average in comparison with the results obtained in the pre-test.

4.3. Discussion of the Results

After administering both the pre-test and the post-test, we can observe that learners' reading comprehension of reading authentic texts has developed after teaching them through a range of this type of texts. The aim of our work is to enhance ESP reading comprehension *via* authentic texts. In the pre-test, using the non-authentic, the majority of learners (64%) have performed correctly in their reading comprehension, but dealing with authentic texts was difficult since learners were not used to deal with authentic texts.

After being familiar with authentic texts, in the post-test, students were assessed on the same kind of texts, as Table 11 shows, the result of the non-authentic text comprehension is still the same; while the result of the authentic text comprehension has changed, because students were exposed to this kind of texts during the 2nd semester. We note that students, first, met some difficulties to understand authentic texts due to a lack of using these texts in the classroom context.

Now, we can say that authentic materials are important and they enhance the reading comprehension in the context of ESP as Hutchinson & Waters (1987) assume. At the same time, we should not neglect the role of non-authentic materials in the learning process. It is important to point that EAP learners need authentic materials in general and the written authentic ones in particular since these materials provide learners with an authentic language which they need to perform effectively outside the classroom.

4.4. Pedagogical Recommendations

The findings of the current study have various pedagogical implications for both students and teachers. From the results obtained in the analysis, we put forward some pedagogical recommendations to help ESP learners in particular to improve their reading comprehension using authentic texts.

- Authentic materials should be given priority over non-authentic ones.
- Course designer should focus more on designing materials that meet ESP learners' needs.
- Teachers should do their best to help their learners to understand texts by devising appropriate techniques and strategies for this purpose.
- ESP course designers should include authentic materials in the curriculum of the courses to make their learners accustomed to authentic language use.
- There should be more than one English session per week, because one session is not enough to teach learners how to read authentic texts and extract the required information.
- Teachers should select among the appropriate authentic written texts the ones that motivate and help more learners in their learning process, and these texts should be related to their area of study. Also, teachers should activate their learners' knowledge by giving them different activities that help them to read authentic texts.
- Sometimes authentic texts are somehow difficult to be understood and interpreted by lower-level learners. In this case, teachers should modify the text in an acceptable way to facilitate the task for learners and make it manageable.

We hope that the above recommendations will be considered by teachers, course designers and material writers.

General conclusion

This work devoted four chapters to investigate the effect of the authentic text on ESP learners' reading comprehension performance. It was hypothesized that this type of text may motivate learners to read and comprehend or just de-motivate them.

The work is divided into two parts: a theoretical part and a practical one. The theoretical part contains three chapters in which we attempted to give an overview of the ESP materials and the text as material and how this material can be taught. Second chapter dealt with the reading skill as a complex process. The practical part provided data resulting from needs analysis sheet, the pre-test and the post-test. The aim was to support the view that authentic materials do enhance the reading skill and upgrade learners' comprehension.

The results obtained from the study bring us to a final conclusion that the use of authentic texts helps learners' reading comprehension. Also, it increases their motivation to read even outside the classroom, since using authentic texts will make them more exposed to real English language use. In addition, the pre-test and the post-test showed that learners feel more interested and motivated when reading authentic texts and they can easily infer meanings expressed in the text.

On the basis of all that has been said, it appears clear that the findings gathered in this study supported the hypothesis we have set before that the students can cope with using authentic text to develop their reading comprehension.

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Appendix

1. Needs analysis sheet

1- Do you think that studying English is important in your area of study?

- Yes
- No

2- Do you need spoken or written language?

- spoken
- Written
- Both

3- What do you need English for ?

- To communicate
- To help you in your area of study

4- How do you find reading texts in your specialty?

- Interesting
- Not interesting

5- What are the difficulties you encounter when reading texts?

- Meaning of words
- Structure of the sentence (grammar)

6- Is one English session a week enough for you?

- Yes
- No

7- Which text do you prefer to read in English?

- The one written by your teacher
- Taken from a book or magazine in your specialty

8- Have you ever read a magazine about your study subject?

- Yes
- No

9- When you read a text, do you prefer to

- Understand the general idea of the text then go into the details?
- Understand the sentence structure then move to understand the main idea?

2. Pre-test

2.1. The authentic text

Dear students,

Would you be so kind to read the text and answer the following questions?

The future of exploration

The National Petroleum Council published a report earlier this year entitled “facing the hard truths about energy: a comprehensive view in 2030 of global oil and natural gas”, which focuses on the challenges the world will face over the coming years regarding the global energy future.

The exploration technology subgroup worked to identify advances that could improve the effectiveness of the current techniques. Despite the substantial improvements in exploration technology and reduction in deployment costs since the 1970s, oil and gas explorers have not maintained the high volumes of that earlier period. This study, released earlier in 2007, outlines five key exploration technologies in which future developments have the potential to improve exploration results over the next 25 years.

First, Seismic technology. The report states that high-and ultra high density acquisition technologies have great potential. Rapid data processing can improve resolution of complex subsalt, deep or subtle geologic features. Second, Controlled-source electromagnetic (GSEM). Third, Interpretation technology, two key advances here would be in better integration of geophysical and geologic data to develop quantitative interpretation and the development of seismic “search engines” to interrogate increasing data volumes. Fourth, the earth –system modeling. Fifth, the subsurface measurements.

(Extracted from E&P, 2007 December)

Activity 1: Answer the following questions according to the text.

1. What is the problem the national petroleum council reported and on which basis does the report focus?
2. What are exploration techniques and how many are released?
3. What does the exploration technology subgroup work for?

Activity 2: Choose the correct answer

1. Seismic is ,
 - An Earthquakes movement
 - A Waterfall
2. Substantial is ,
 - Minor
 - Important
 - Insignificant
3. Geophysics refers to
 - The [geological](#) applications of the earth.
 - The [science](#) comprising the study of solid [Earth](#)
4. Density is ,
 - Relation of speed to mass
 - Relation of mass to gravity
 - Relation of mass to volume

Activity 3 Put “true” or “ false” next to each sentence .

- The exploration technology identifies a later technology that could improve the effectiveness of the current techniques
- New technologies are discovered to maintain oil and gas production for the coming years
- The integration of geophysical and geologic data is used in the interpretation technology

2.2. Non-authentic text

- Dear students,
Be so kind to read the text carefully and answer the following questions.

Traps and geology

Petroleum was formed by nature in very ancient times. Most of the petroleum that oilmen drill for was formed between 30 and 500 million years ago. Outside of the petroleum industry, many people believe that oil and gas are contained in a large underground lakes or caves. This belief is, of course, false. Petroleum is contained in the pores of the reservoir rocks, rather in the same way that water is contained in the pores of a sponge. The most common reservoir rocks are sandstone, limestone and dolomite. These are sedimentary rocks

the sedimentary rocks may be porous and permeable to oil, gas and water. They can, therefore, act as reservoir rocks.

Places where oil has reached the surface are called “seeps” or “shows”. In Trinidad in the West Indies there are number of active seeps. The first well in Trinidad was drilled in 1866. The method of drilling that first well was not the rotary method. In 1866, cables tool drilling was used. Today very few cable tool rigs exist.

Most underground oil is contained in traps. A trap is an underground formation which prevent the escape of oil contained in it. There is a cap rock at the top of each trap. Cap rock is non-porous and impermeable to the fluids below. Therefore, underground pressure cannot force the reservoir fluids through the cap rock and up to the surface.

How oilmen know where to drill? That’s the job generally of the petroleum geologist. He can use the result of seismic surveys to get information about rock features beneath the surface. Rocks at the surface also supply information, and fossils can help him to calculate the age of the rocks. (Extracted from English for the Oil Industry, 2009)

Activity 1: Answer the following questions.

- What are the three most common reservoir rocks?
- When was most of our oil formed?
- What does a geologist study?
- If a porous sandstone is impermeable to oil, it can’t be a reservoir rock .Why not?
- What are the differences between rotary drilling and the cable tool method?
- Which sedimentary rock was formed of calcium carbons?

Activity 2: Answer the following questions using “true” or “false”.

- The oil and gas formed in the pores of reservoir rocks
- The cap rocks help oil to move up the reservoir
- The oilmen work is based mainly on the result of seismic surveys to drill.....
- The cap rocks are porous and permeable
- The sedimentary rocks be considered as reservoir rocks

Activity 3: What is meant by the following words? Choose one correct answer

- Pores is ,
 - a. Very small holes or spaces

- b. Very large distance
- c. Big holes
- Reservoir rocks are ,
 - a. Rocks which allow oil to escape
 - b. Rocks which store oil and gas
- Permeability is ,
 - a. To prevent oil to pass through pores
 - b. To allow oil to pass through pores
 - c. To store oil
- Ancient means ,
 - a. Belong to recently distance
 - b. Belong to past distance
 - c. Between the ancient and recent times
- Oilman is ,
 - a. A man who buys oil
 - b. A man who produces , treats and drills for oil
 - c. A and B

3. Post test

3.1. Non- authentic text

Dear student,

Be so kind to read the text and answer the following questions carefully.

Reservoir fluids

In the reservoir rock, the distribution of fluids depends on their densities and on the capillary properties of the rock. Generally speaking, if a reservoir rock contains uniform pores, and if the pores are evenly disturbed, there will be three zones of fluids in the trap; an upper zone, a middle zone, and a lower zone.

The rock pores in the upper zone have been filled mainly by gas. This part of the trap is the gas cap. In the middle zone, the pores have been filled mainly by oil with gas in solution. In the lower zone, the rock pores have been filled mainly by water. A certain amount of water always occurs together with oil in the middle zone. The proportion of water to oil is usually about 10 to 13 per cent. Water also occurs in the gas cap, but the proportion of water

to gas is frequently lower than the proportion of water to oil. The water which is found in the oil and gas zones is called “interstitial water” or “connate water”.

Reservoir crudes differ. Some crudes are very heavy and viscous, others are light and thin. Crude of high viscosity contains little or no dissolved gas and is usually found under conditions of low pressure. Crude of a low viscosity contains a large amount of dissolved gas, and is usually found under conditions of considerable pressure. Algeria oil is an example of low viscosity crud, while Venezuelan crudes are of high viscosity.

(Extracted from English for the Oil Industry, 2009)

Activity1: Answer the following questions

1. What is the usual proportion of water to oil in the oil zone?
2. How is gas contained in reservoir crude?
3. Under what conditions is low-viscosity crude usually found?
4. Viscous liquids don't pour easily .Why don't they?
5. How much dissolved gas does a high viscosity crude contain?

Activity 2: Say whether the following statements are “true” or “false” and correct the false ones.

1. A crude of low viscosity is difficult to pour.....
2. The lightest of all the hydrocarbons is Heptane (C_7H_{16}).....
3. The proportion of water to gas in the gas cap is frequently lower than the proportion of water to oil in the oil zone.....
4. Water is a solution.....
5. The reservoir crudes are not different.....

Activity 3: Select the appropriate answer.

1. Density means the
 - a. Relation of speed to mass
 - b. Relation of mass to gravity
 - c. Relation of mass to volume
2. Uniform is
 - a. To have the same size and form
 - b. To have a different color and form
 - c. To have a different size and form

3. Solution is
 - a. A liquid that does not contain any substances
 - b. A liquid containing dissolved substances or substances
 - c. A and b

4. Proportion is
 - a. The relation of a part to the whole
 - b. The relation of the whole to a part

5. Magnified is
 - a. To enlarge the appearance of small objects
 - b. To minimize the appearance of small objects
 - c. To widen the appearance of big objects

6. The interstitial water is
 - a. Dissolved water
 - b. Connate water
 - c. Mineral water

Activity 4: Fill in the gaps with the suitable words.

1. It has been magnified (to show/ for to show/ to hide)..... the distribution of water and (compounds/ solutions/ hydrocarbons).....
2. In the (upper/ middle/ lower).....,(area /section/ zone)..... the pores have been filled (with /by/ from).....gas.
3. A solution is a liquid which contains a (dissolved /solved)....., (substances /compounds)and substances.
4. The rocks contain (layers/ reservoirs/ traps)these form the (reservoirs/ rigs/ wells)which are the place in which (gas and oil/ methane/ water)..... are accumulated.

3.2. Authentic text

Dear students please read the text carefully and answer the following questions.

What is new in production?

If we take to heart the musings of the general media, the worst element on the planet is carbon, especially oxide of carbon. In the oilfield, for cutting ability, wear resistance, and heat tolerance, natural diamond and man-made diamond cutters have a hallowed place in the driller's heart. Carbon also has good electrical conductivity, so is suitable for high-temperature electrical products.

Carbon is the most useful element. These are the hydrocarbons with the chemical structure $C_{4n+6}H_{4n+12}$ that occur naturally in oil and gas. A gallon of condensate can carry a couple of spoonfuls of diamonds. According to Chevron diamondoids are formed of carbon lattices (blue) surrendered by hydrogen atoms (silver) .

Molecular diamond technologies (MDT) , a unit of Chevron technology ventures LLC, first separated diamond from petroleum using reverse phase, high-performance liquid chromatography. The company has since improved its separation techniques into a continuous process and its producing enough diamond material for advanced application research and development .

Now, MDT and Stanford University are moving to explore the uses of diamondoids through a four year, nontechnology research program. The program will build upon recent MDT discoveries and focus on:

- Imaging and probing diamondoids with scanning electron microscopy
- Understanding electronic properties
- Creating self-assembled monolayers from them to grow-oriented crystals.

(Extracted from world oil 2006)

Activity1

Answer the following questions after reading the text

What is new in production in the oilfield in general?

1. What are the main things that took a place in the driller's heart in the oilfield?
2. What is the main technique used by MDT to produce oil?
3. What are the components of the daimondoids according to Chevron?

Activity 2

Choose the correct answer

1. A gallon is
 - A weight measure
 - A volume measure
 - A high measure
2. Cuttings are
 - Pieces of plastic melt by temperature
 - Pieces of rocks drilled by bit
3. 'Hollowed' means
 - Empty and blank
 - Filled
 - Packed
4. The electrical conductivity is
 - A measure of a material's ability to conduct an electric current.
 - A measure of the conductivity through ionic charge carriers

Activity 3

Put "true" or "false" next to each sentence

- MDT separates the diamond from petroleum by crushing the diamond
- Diamonds are formed of carbon lattices surrounded by oxygen atoms
- These hydrocarbons with the chemical structure $C_{4n+6}H_{4n+12}$ occur only in oil

الملخص

يبحث أساتذة اللغة الإنجليزية كلغة أجنبية و لغة اختصاص دوما عن أحسن الطرق و الوسائل لتطوير قدرات القراءة و الفهم لدى الطلبة . ومن بين الوسائل التي تساعد على تطوير قدرات القراءة لدى الطلبة اختيار النصوص الأصلية لتطوير هذه الملكة.

تهدف هذه الدراسة لإثبات دور النص الأصلي في تحسين الفهم عند القراءة لدى هؤلاء الطلبة، حيث قمنا بأخذ طلبة السنة الثانية من قسم المحروقات و الكيمياء بجامعة قاصدي مرباح ورقلة كعينة لهذه الدراسة.

و قد افترضنا أن النص الأصلي يهيئ و يحفز الطالب لأداء مهارة القراءة بطريقة فعالة.

ولاختبار فعالية النص المختار في هذه الدراسة قمنا بتحليل احتياجات الطلبة بالإضافة الى إجراء اختبارين، أحدهما قبلي وآخر بعدي للتأكد من مصداقية النموذج المطبق.

وقد أظهرت النتائج المحصل عليها بأن طلبة اللغة الانجليزية كلغة اختصاص قادرون على فهم النصوص الأصلية باستعمال تقنية القراءة المقترحة وذلك لترقية هذه الملكة .