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### Title

## **The Impact of Using Reading Strategies on Comprehending EAP Texts**

**Case Study: First Year MasterStudents- Applied  
Linguistics and English for Specific Purposes-  
KasdiMerbah University of Ouargla**

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## **Dedication**

*To the memory of my father and brother Hamza*

*To my mother*

*To my beloved husband and lovely children*

*To all people who care about me*

## Acknowledgments

I am infinitely grateful to my parents for everything: love, affection, education...

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I am grateful to everyone taught me never to give up learning.

## **List of Abbreviations**

**AL** stands for“Applied Linguistics”.

**DA** stands for“Discourse Analysis”.

**EAP** stands for“English for Academic Purposes”.

**ESP** stands for“English for Specific Purposes”.

**FL** stands for“Foreign Language”.

**L1** stands for“First language”.

**L2** stands for“Second Language”.

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**Conclusion**

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## **Introduction**

According to many researchers such as Saville-Troike (2006), reading is the most important skill in academic studies. For this reason, graduate and post graduate students are required to read a sizable number of textbooks so as to gain insights in their subject areas. Though students studying English as a second or foreign language have a good mastery of English grammar, vocabulary and the like, they miscomprehend academic texts, taking into account that these texts are informational but difficult at the same time (Grabe, 2009). Nevertheless, comprehending such texts can be accomplished when students are equipped with a number of strategies that assist them in constructing meaning from those texts, which is the ultimate goal in reading in general and in academic reading in particular.

Grabe and Stoller (2001) argue that reading in academic settings is the main means for getting information and gaining access to alternative explanations and interpretations (cited in Celce-Murcia). In addition, students should be aware of using some strategies that help them in making sense of the text, that is comprehension, for good readers use and apply a combination of reading comprehension strategies (Grabe, 2009). Moreover, reading as a skill makes the communicative competence easily acquired (Usó-Juan & Martinez-Flor, 2006). The communicative competence is one of the components of the communicative components and should be developed in reading in general and in academic reading in particular.

### **Statement of Purpose**

The major aim of this study is to shed light on the importance of using reading strategies for comprehending EAP texts, mainly the ones dealing with topics concerning ESP and AL at the Department of English at KasdiMerbah University of Ouargla. For this reason, we suggest a strategic-based approach within a pre-, during-, and post-reading framework.

### **Statement of Problem**

EAP students at the Department of English at KasdiMerbah University of Ouargla, particularly first year Master ones who study AL and ESP, are exposed to a variety of texts related to their subject area. The latter include issues in AL, ESP, DA, and the like.

The students, then, after having spent three academic years reading different kinds of genres, are supposed to read fluently and overcome miscomprehension problems. However, it has been noticed that students in that stream face difficulties in comprehending the suggested texts including articles, chapters, books, and the like, whether to be analysed, synthesised, summarised or for further reading, which resulted in their frustration towards reading. AL and ESP students claim that they have not been trained to read effectively. They argue that they have not been accustomed to such kind of material in terms of specific vocabulary and area of study. They claim that they dealt with Study Skills module in first year of graduation for only one semester and there were very few opportunities to ask questions or clarify ambiguities. Moreover, the one hour-and-a-half session includes no practical or intensive tasks.

### **Research Questions**

The main question to be asked in this thesis is the following: does the use of reading strategies lead the AL and ESP students to better comprehend EAP texts? This question is divided into two sub-questions:

1. What is EAP reading and what are its components?
2. What are the reading comprehension strategies and the components of a strategic- based reading instruction within a pre-, during-, and post-reading framework?

### **Hypothesis**

The hypothesis suggested in this study is that the lack of using reading strategies on the part of the students of ESP and AL at the department of English of Ouargla University may not help those students comprehend EAP texts and do related tasks.

### **Tools of Research**

In the present study, we designed a questionnaire for gaining insights, from the subjects, about their reading habits and their ways of reading academic texts to attain comprehension. Moreover, a pre-test will be administered, three training sessions and a post-test will take place.

## **Structure of the Dissertation**

The present dissertation will be divided into two main sections: theoretical part and practical part. The former is divided into two chapters. Chapter one deals with the interactive model to reading, the schema theory, and with EAP reading and its components such as the motivation for reading, the purpose of reading, EAP texts and the criteria for selection, genre and text type, text authenticity, vocabulary, automatic word recognition, discourse structure, grammar, reading rate, reading and writing integration, extensive reading, and reading assessment. The second chapter deals with reading comprehension strategies, strategic-based reading instruction, and the pre-, during-, and post-reading framework. First, we shall deal with the term strategy, reading strategies and their classification, and the reading strategies that support comprehension. Then, we shall describe the strategic-based reading instruction that is to say teaching reading strategies. The last point in chapter two will be about the pre-, during-, and post-reading framework. The practical part will be dealing with the data collection, data analysis, and discussion of the findings. Data collection consist of the questionnaire, the pre-test, the description of the training sessions, the post-test, the discussions, the pedagogical implications, and the conclusion.

## **Definition of Variables**

**Reading:** it is a complex cognitive activity (Grabe, 2006 cited in Usá-Juan & Martinez-Flor). Besides, it is an interactive process which involves a negotiated interaction between the written discourse (text) and the reader for the sake of extracting the intended meaning. According to Rivers (1981), reading is very important, for it provides the reader not only with information and pleasure, but also with a consolidation of his/her knowledge of language as well.

**EAP Reading:** it refers to reading in the area of English for Academic Purposes where students in academic settings such as the university are exposed to a variety of texts to be read, analysed, synthesised, and evaluated (Grabe and Stoller, 2001).

**Reading Strategies:** Wellman (1988) considers strategies as deliberate procedures used to achieve a goal (cited in Hudson, 2007). These, in reading, are conscious plans used by readers for solving problems of comprehension (Davies, 1995).

**Text Comprehension:** it refers to the ultimate goal behind reading. It involves knowledge of grammar, vocabulary, word recognition, text structure and discourse organisation and the like.

**EAP Texts:** these are texts in the area of English for Academic Purposes which refers to the teaching of English for the aim of assisting learners to study, do research or teach in that language (Flowerdew & Peacock, 2001).



# **Chapter One: Research on Second Language Reading**

## Introduction

### 1.1. The Interactive Model to Reading

### 1.2. Schema Theory

### 1.3. EAP Reading

#### 1.3.1. EAP Reading Components

##### 1.3.1.1. Motivation for L2 Reading

##### 1.3.1.2. The Purpose of Reading

##### 1.3.1.3. EAP Texts

##### 1.3.1.3.1. Criteria for Selecting Texts

##### 1.3.1.3.2. Genre and Type Text

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##### 1.3.1.6. EAP Reading and Text Structure and Discourse Organisation

##### 1.3.1.7. EAP Reading and Grammar

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##### 1.3.1.9. Integrated EAP Reading and Writing

##### 1.3.2.10. Extensive Reading

##### 1.3.2.11. EAP Reading Assessment

## Conclusion

## **Introduction**

Second language reading process, like L1 reading process, is complex (Grabe, 1991; 2009; Hudson, 2007) and requires ‘great attention’ in terms of types of knowledge that the reader brings to the text (Grabe, 2009). Put another way, making sense of a text calls for both systemic (linguistic knowledge) i.e. syntax and morphology, and schematic knowledge that is general world knowledge, sociocultural, topic, and genre knowledge (Grabe, 2009 ; Hedge, 2000; Widdowson, 1978). In other words, for the second language reader to interact with a text, s/he should be equipped with both types of knowledge. In the literature of reading, two types of processing have been used by L1 readers: bottom-up processing and top-down processing (Celce-Murcia & Olshtain, 2000; Davies, 1995; Hedge, 2000; Saville-Troike, 2006). In the former, the reader derives meaning by decoding written symbols into their aural equivalents (Nunan, 1995). In the latter, the reader guesses the meaning of words s/he has not encountered before, and makes sense out of larger chunks of written text (Saville-Troike, 2006). However, second language reading requires an interactive model, combining both types of processing (Hedge, 2000). In this chapter, we are going to see the interactive model of reading, the schema theory, and EAP reading and its components.

### **1.1. The Interactive Model to Reading**

Rumelhart (1977) introduced the so-called ‘Interactive Model of Reading’. It is an alternative to both bottom-up and top-down approaches (cited in Davies, 1995). In this model, as shown below (figure 1.1.), the process of reading begins with the entrance of graphic information in a *visual information store* (VIS). This graphemic input is operated by a feature extraction device. Then, a *pattern synthesiser* uses this information and all types of knowledge: syntactic, semantic, orthographic, lexical, and pragmatic so as to make words identification easy and subsequently reach the most probable interpretation (cited in Hudson, 2007). According to this model, a hypothesis can be accepted or rejected (ibid). This hypothesis can even lead to a new hypothesis until the reader attains the right interpretation (ibid).

In short, the reader uses, throughout the process of reading, the types of knowledge mentioned above in a non-linear way so as to make sense of a text.



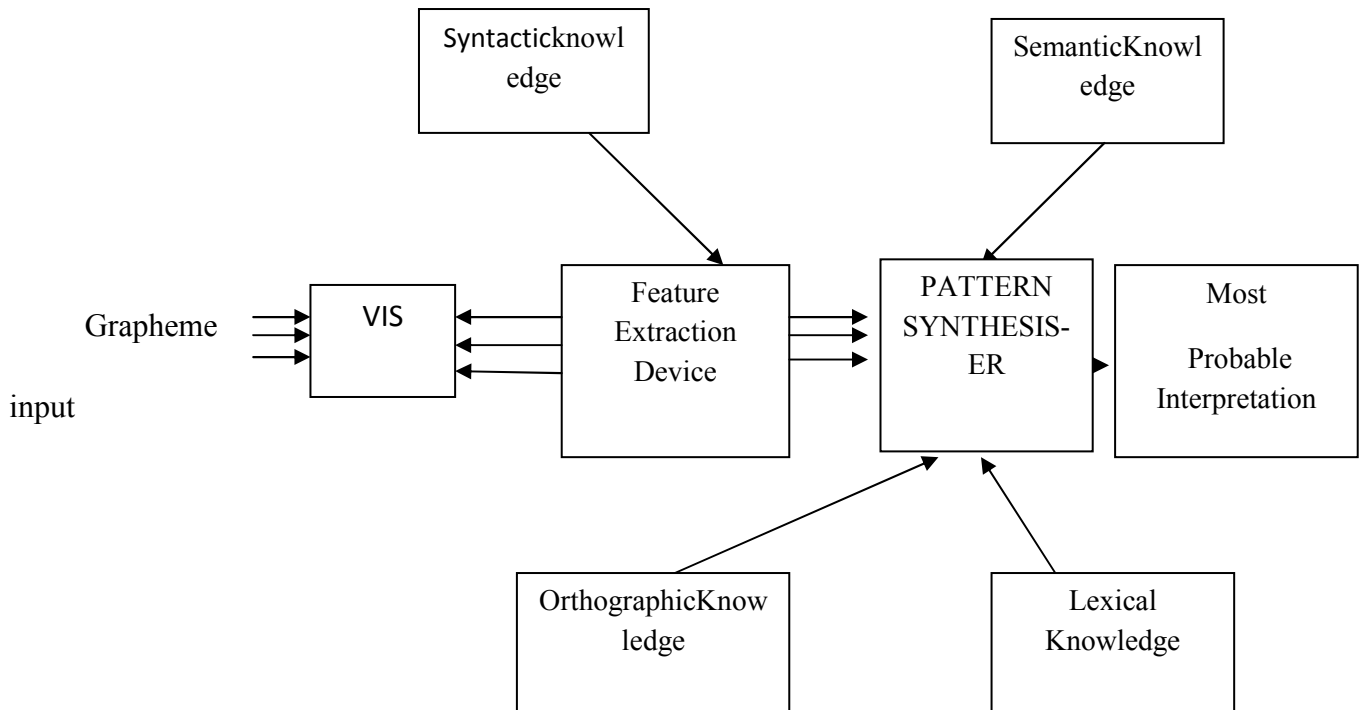


Figure 1.1. Graphic representation of the interactive model of reading (Davies, 1995 p. 64)

## 1.2. Schema Theory

Knowledge of the world, *the background knowledge*, as it is labelled in the reading literature, has been dealt with under *schema theory* (Barlett, 1932 ;Rumelhart, 1980 cited in Carrell&Eisterhold , 1983).The latter stresses that any text does not carry meaning by itself , which means that another element comes into play so as to enable the reader to make sense of text ( Carrell&Eisterhold , 1983). This element is referred to as the previously acquired knowledge or *the reader's background knowledge*, and its structures are called *schemata* (ibid). So, according to *schema theory*, making sense of text is an interactive process between the reader's prior or background knowledge and the text (ibid). In other words, the reader does not find the meaning of a text just in the sentences themselves, but s/he derives it from the previous knowledge stored in her /his mind and the process through which the reader tackles it (Cook, 2008 p. 121). Put another way, readers make use of the sentences and their prior knowledge to comprehend the topic of the text.

The process of interpretation, according to *schema theory* is guided by bottom-up (text-based)and top-down processing (knowledge-based) (Carrell&Eisterhold , 1983; Silberstein, 1994). Schemata (plural of schema), in this regard, are organised hierarchically, that is from

most general at the top to most specific at the bottom (ibid). There are two types of schemata that assist readers to comprehend texts: formal schemata and content schemata.

As for the former, formal/rhetorical schemata, they refer to the linguistic knowledge the reader has: syntax, lexis, morphology, and semantics besides the rhetorical organisations of texts. That is, L2 learners must acquire the second language before they can read. However, EAP learners should have access to the language of their disciplines, that is they should know the linguistic and syntactic knowledge before the rhetorical knowledge which comes in the second place. For instance, EAP students who study ESP and AL cannot read texts dealing with topics related to their speciality such as *cohesion, coherence, etc.* unless they have acquired those terms. In the same line, when students are not aware of how information is organised in texts, they will not be able to comprehend those texts easily. One example is a reading article where the introduction summarises the whole article. Unless the reader knows how an article is structured/organised, s/he will struggle to make a distinction between the main ideas and the supporting ones and as a result, the comprehension cannot be attained.

The second type, content schemata, refers to the familiarity of the text content to the reader, which facilitates the text comprehension and makes the text better recalled (Alderson, 2000; Carrell&Eisterhold, 1983). Moreover, content schemata consist not only of knowledge of the subject matter -the topic of the text- but knowledge of the world and cultural knowledge as well (ibid). Knowledge of the world, background knowledge, is crucial in making sense of a text. The following example shows the importance of background knowledge activation.

*The policeman held up his hand and the car stopped.*

(Rumelhart, 1985:267 cited in Alderson, 2000)

This sentence poses no difficulty when the background knowledge is being activated. Here, the logic suggests that the policeman orders the car to stop which means that the policeman holds up his hand. Cultural knowledge is also important to understanding texts. However, this depends on the shared culture between the reader and the text.

### **1.3. EAP Reading**

Academic reading and EAP reading in particular involve that L2 learners acquire a large body of vocabulary and develop knowledge in their subject area so as to be able to read relevant texts. Acquiring vocabulary includes both basic and subject-specific terms, focusing on their meaning, graphic representation, and their probable occurrence with other lexical items

(Grabe, 2002 cited in Saville-Troike, 2006). Developing knowledge involves the recognition of complex sentence structures, along with punctuation conventions that contribute to syntactic processing and organisation features at both the sentence level (identifying focused elements and distinguishing old and new information) and the discourse level (the way texts are structured and the way information is organised) (ibid). In this section, we are concerned with EAP reading components.

### **1.3.1. EAP Reading Components**

EAP reading entails many factors that lead L2/FL readers to better comprehend EAP texts. The following make the most important components of EAP reading.

#### **1.3.1.1. Motivation for L2 reading**

Day and Bamford (1998) define motivation as “what makes people do (or *not* do) something” (p. 27). As a matter of fact, the affective factor has had a considerable attention in second language acquisition in that it has been proved that whenever the learner is in good psychological conditions, s/he will perform better. The FL/L2 students’ commitment, enthusiasm and persistence, according to Dörnyei (2001), are key factors of success or failure (ibid). He argues that the lack of sufficient motivation may lead even the best learners fail at reaching their objectives to better acquire language (ibid). Similarly, Grabe and Stoller (2001) argue that motivation is a key factor to successful reading, and that it is ignored in reading instruction. However, motivation is complex in that it is associated with other notions such as interest, involvement, self-concept, etc (Ellis, 1997; Grabe&Stoller, 2001). According to Grabe (2009), L2 reading motivation can be promoted through content-based reading instruction which combines language, reading, and content learning in a coherent way in a course. To this end, Grabe and Stoller (2001) recommend that teachers are invited to develop the students’ motivation to reading. This can be achieved by conducting discussions on the importance of reading and the reasons for different activities used in class (ibid).

#### **1.3.1.2. The Purpose of Reading**

In academic settings, L1 and L2 learners read for a specific number of purposes (Grabe&Stoller, 2001). Grabe (2002) lists four functions for reading in academic settings:

- *Reading to find information:* scan or search text for a specific topic, word, or phrase.

- *Reading for general understanding*: get the main ideas and at least some supporting ideas and information
- *Reading to learn*: understand the main ideas and store meanings and supporting details in a coherent organizational frame
- *Reading to critique and evaluate*: in addition, reflect on text content, integrate it with prior knowledge, and judge quality and appropriateness of texts in relation to what is already known about the topic. (Saville-Troike, 2006 p. 157)

As a matter of fact, beginning L2 readers scan texts for a specific topic or word, and intermediate ones can comprehend the main ideas and get some supporting information (ibid), but it is only the advanced L<sub>2</sub> readers who achieve both ‘reading to learn’ and ‘critical/evaluative reading’ (Saville-Troike, 2006). EAP learners, in effect, read to learn content and, furthermore, read to evaluate that content and critique it.

### **1.3.1.3.EAP Texts**

Texts within EAP contexts are determined in terms of genre and type, authenticity or simplification, but before that whether they are suitable, exploitable or lexically and structurally difficult.

#### **1.3.1.3.1. Criteria for Selecting Text**

Selecting texts is not an easy task. There should be a number of criteria. Nuttall (1996) recommends three criteria that influence the choice of texts: suitability of content, exploitability, and readability.

##### **A- Suitability**

Suitability is the most important criterion, in that the teacher selects the text that interests both the students and the teacher (ibid). In other words, as Nuttall (ibid) pointed out that “interesting content makes the learner’s task far more rewarding” (p. 170). She maintained that if teachers are training students for academic studies, for example, they may get better results if they use simpler and more motivating material to begin with (ibid). Adult learners in many cases contribute to the selection of texts (ibid).

## **B- Exploitability**

Exploitability, the most important criterion after interest, as Nuttall (ibid) argued, has to do with the use of a text to “develop the students’ competence as readers” (p. 171). She stressed on the fact that a text which cannot be exploited is useless even if it is enjoyed by students (ibid). The focus in the reading lesson is on both language and content because the primary aim is that students learn language better when they focus on the meaning and on the purpose of the text (ibid). Nuttall (ibid) continued arguing that exploitability implies developing interpretive strategies, the use of authentic texts, and the length of texts.

## **C- Readability**

Readability, for Nuttall, refers to the structural and lexical difficulties encountered in texts, in educational settings (ibid). The former is not easy to assess, but in case the text is comprehensible, new grammatical forms such as tenses, structural words, and the like will often cause no problem (ibid). However, long and complex sentences do (ibid). The latter, lexical difficulty, has to do with vocabulary (ibid). This means that vocabulary can be assessed straightforwardly when the teacher knows his/her students by making lists which include new words or phrases with the addition of new idiomatic expressions and the use of familiar words such as phrases and verbs (ibid).

### **1.3.1.3.2. Genre and Text Type**

Academic texts, mainly in EAP settings, are dominated by expository prose (Aebersold & Field, 1997; Grabe, 2009; Silberstein, 1994). Once students recognise the rhetorical patterns of organisation which describe the organisation of information in texts, they will make sense of texts. The patterns of organisation include classification, comparison-contrast, cause-effect, description, process, argument and persuasion (ibid). EAP students are asked, for example, to read articles, papers and textbooks related to their field of study and which they are supposed to know their structures. In case students fail at recognising how texts are structured and organised, they will encounter difficulties in spotting the information and so in comprehending texts.

### **1.3.1.3.3. Authentic/Simplified Texts**

Though many researchers claim that authentic texts are the ones that are not written for pedagogic purposes (Edge & Garton, 2009; Harmer, 2007), Widdowson (1979) views authentic

texts as ones reconstructed on each occasion of their use along with the reader's purpose. Put simply, authenticity lies in the interaction between text and reader, which calls for specially written texts (Wallace,1992).To this end, EAP teachers should consider the second language learner's level (Kennedy&Bolitho, 1984). Authentic materials,which are most of the time reading texts (Edge &Garton, 2009), can be used if the learner's conceptual knowledge is higher than his /her linguistic level (ibid). Contrariwise, simplified texts lose some meaning as they are artificially written for language teaching purposes(Davies , 1995 ; Dudley - Evans & St John ,1998 ; Hutchinson & Waters,1987; Kennedy & Bolitho ,1984 ;Nuttall, 1982; 1996 ; Silberstein , 1994 ;Wallace, 1992 ). Despite this fact, simplified materials assist learners in developing their reading abilities (Davies &Widdowson, 1974 cited in Allen &Corder) and are to be used when both concepts and language are at a low level (Kennedy&Bolitho, 1984, p.48). In this line, Allen and Widdowson (1971) point out that it should be looked at a target situation (EAP) text as whether it fits the learning purpose or not (cited in Hutchinson &Waters ,1987). In this sense, as the authors argue, different stages of a course will require different types of text, depending on the purpose of the text (ibid).

#### **1.3.1.4. EAP Reading and Vocabulary Development**

Development of academic reading proficiency requires vocabulary knowledge (Koda, 2001 ;Grabe& Stoller,2001 ; Saville -Troike ,2006;Grabe, 2009).A great number of researches make a strong argument for a vocabulary and reading relationship (Stanovich 1986, 2000; Verhoven 2000; Pike, 1999; Qian (2002) cited in (Grabe, 2009). These researches and other ones demonstrated strong relations between vocabulary growth (knowledge) and reading abilities (Koda, 2004; Grabe, 2009). It has been noticed that poor readers have less vocabularies than good readers. For this reason, Widdowson (1978) calls for providing learners, before they start to read, with a list of words and phrases along with their meanings to anticipate miscomprehension.

Knowing a word can occur in a number of ways, beginning by its spelling (orthography) and its register (power, politeness, disciplinary domain, formality, etc) (Grabe, 2009). In the same line, Koda (2004) maintains the idea of multifaceted knowledge embracing information, grammar or syntactic properties which are all crucial in conceptualising a word meaning (ibid). However, fluent reading requires the students to be able to comprehend the meaning of the majority of words with a less focused attention (Light-Brown &Spada, 2006).

In the vocabulary literature, there exist two types of words: function words and content words (Aebersold & Field, 1997; Nation, 2001). The first type includes, for instance, prepositions, conjunctions, auxiliaries; the second *nouns, verbs, adjectives, and adverbs* (ibid). The two types are labelled *high-frequency* words (Nation, 2001). These high frequency words, according to Nation (ibid), contain many running words in written texts and they are found in all uses of language. Back to Grabe (2009), readers do not know everything about a word at a time, but gradually, *viz.* it is a lifelong learning (ibid). Word knowledge develops “through multiple encounters in multiple contexts” (ibid p. 267). This means that when students are exposed to words in many occasions and at many times, they will likely to know about its components: orthography, morphology, parts of speech, pronunciation, and so on.

The amount of vocabulary needed in L2 academic reading is not less than 10,000 words (without counting inflectional suffixation distinctions), which allows an understanding of an academic text, although it does not ensure fluent reading (ibid). This minimum of words permits students to acquire key vocabulary related to the topic of a text. To this end, readers should know at least 95 percent of vocabulary, 300 words on a page (ibid). However, readers who do not know 15 words on a 300-word page will need, in fact, some instructional support to understand the texts well, taking into account that the unknown words are probably the most informational ones in the text (ibid). Meara (1995), Nation (2001) and Schmitt (2000) argue that L2 students in academic settings will need more than 2,000 most frequent words families, which is very important in vocabulary instruction (cited in Grabe, 2009).

From above, a good percentage of word learning requires students be exposed extensively to texts and learn words from contexts (Grabe, 2009 ; Nation, 2001). Context here is a cue for both learning a word and getting a word.

### **Learning Words from Contexts**

This type of learning words involves incidental exposure to new words which means that the aim of the reader is to read and understand (Grabe, 2009). This, in turn, means that the reader may not notice a new word in any conscious way, but in case it is noticed, it may be skipped so as to focus on text comprehension (ibid). Many researchers argue that learning from context is related to extensive reading (Nation, 2001), in that if a student acquires one word in ten through contexts, s/he will acquire between 2,000 and 4,000 new words in a year (Grabe, 2009).

## **Guessing Words from Context**

According to Beck et al (2000) and Kuhn and Stahl (1998), guessing words from context is practised by readers to varying extents (cited in Grabe, 2009). A new word shows its form and part of speech. It may show some aspects such as some affixes that contribute to a guess (Grabe, 2009). The guess, in some cases, may be accurate, but in other ones may not (ibid). The overall comprehension may not be affected when a guess is not very accurate (ibid). But with many encounters with the word, the process of guessing develops and results in a reasonable meaning of the word (ibid). All in all, the strategic process of guessing words from context will be more important when one needs multiple exposures to a word and the very gradual nature of vocabulary acquisition, and if one knows the benefit of extensive reading (ibid).

By and large, vocabulary knowledge is important for text comprehension. For this reason, as mentioned earlier, L2 academic reading entails knowing at least 95% percent of vocabulary on a page.

## **Vocabulary Types and Coverage in an Academic Text**

According to Nation (2001), an academic text contains respectively 80% high-frequency words, 9% academic words, 5% technical words, and 5% low-frequency words as exemplified in Figure 1.2 below. The amount of academic words (9%) and technical words (5%) do not ensure making sense of text on the part of the students compared to high-frequency words (80%), which necessitates using other plans to attain text comprehension.



<p><b>High-frequency vocabulary</b></p> <p>2000 words</p> <p>80% or more text coverage</p>
<p><b>Academic vocabulary</b></p>
<p><b>Technical vocabulary</b></p>
<p><b>Low-frequency vocabulary</b></p>

*Figure 1.2. Vocabulary Type and Coverage in an Academic Text (Nation, 2001 p. 14)*

### **1.3.1.5. EAP Reading and Automatic Word Recognition**

Koda (2004) defines word recognition as “the processes of extracting information from graphic displays of words”. In actuality, as Koda (2004) argues, recognising individual words is very important in text-meaning construction. Cognitive psychologists maintain that automatic recognition is important to fluent reading (Adams, 1990; Beck & McKeown, 1986; Gough & Juel, 1991; Perfetti, 1991; Stanovich, 1986, 1991 cited in Grabe, 1991). Automaticity, at any rate, occurs when the reader is not aware of the process and uses little processing capacity, i.e. it is very fast (Adams, 1990 ; Just & Carpenter, 1987 ; Stanovich, 1990 cited in Grabe, 1991). To put it differently, Grabe (2009) states clearly:

In order for fluent word recognition to occur, a reader must recognize the word forms on the page very rapidly, activate links between the graphic form and phonological information, activate appropriate semantic and syntactic resources, recognize morphological affixation in more complex word forms, and must access her or his mental lexicon. (p. 23)

This means that the interaction of orthographic, phonological, semantic, and syntactic processes constitute automatic word recognition. In this case, comprehension is related to visual information and words.

### **1.3.1.6. EAP Reading and Text Structure and Discourse Organisation**

According to Grabe (2009), texts contain a certain amount of discourse information which assists readers in making coherent representations of texts. Silberstein (1994) states that most second language reading curricula are dominated by expository prose, as mentioned earlier, which is central for EAP settings. For her, once students recognise the structure of a text in terms of how arguments are structured, and in terms of grammatical/lexical features, they will comprehend the text easily (ibid). Confirming this, Grabe (2009) mentions that good readers are able to comprehend what they read by making use of text structure which is supported by some linguistic systems such as surface-level signals (cohesion), information structuring, lexical signaling, anaphoric signaling, text coherence, etc. Aebersold and Field (1997) point out that rhetorical structures “describe the organization of information in texts” (p. 11), and they are conventional, including “description, classification, comparison, contrast, cause and effect, process, argument, and persuasion” (ibid p. 12).

With regard to what has been aforementioned, if students are guided to see how texts are structured and how discourse is organised, they will acquire stronger comprehension skills (Grabe & Stoller, 2001 cited in Celce-Murcia; Thornbury, 1997). All this ensures text comprehension.

### **1.3.1.7. EAP Reading and Grammar**

In L2 contexts, reading comprehension is strongly affected by and related to syntactic awareness (Grabe, 2009). In fact, as Grabe (2009) states, many L2 assessment researches such as IELTS and TOEFL, have demonstrated strong correlations between reading and grammar. Nevertheless, it is not clear how this relationship occurs (ibid). In practice, when a reader starts looking at a text, “visual word-recognition processes are engaged, the first words are

recognized, and the extraction of syntactic information begins” (ibid p. 200). Syntactic processing constructs the phrasal and clausal units which support the building of semantic propositions, that is “meaning units”(ibid).Structural information is extracted from the visually recognised words(ibid).Moreover,specific word groupings show their structural information (DeKeyser,2001; Fender, 2001; Kempen, 1999; Pickering &Traxler,2000 cited in Grabe 2009 p. 200) such as prepositional phrases,adverbial clauses,and the like.For instance,the word *the* isrecognised to be followed by a noun phrase(ibid), and even the verb may have a specific meaning depending on the subject noun phrase(Kintsch,2001 cited in Grabe,2009).

In sum, L2 learners should have a good mastery of grammar if they are to comprehend texts. EAP learners are judged to be advanced learners and have no problem in syntactic informationfrom recognised words.

#### **1.3.1.8. Reading Rate**

Reading rate refers to the automaticity reached by the reader, which reflects his/her reading fluency (Eskey, 2005); that is,

the ability to convert most written language into meaningful information so automatically that the reader does not have to think about the language and can concentrate on combining the information obtained with background knowledge to construct a meaning for the text. (ibid p. 568)

This, in fact, requires not only knowledge of lexis, grammar, and text structure, but reading in chunks as well (ibid). So, fluent decoding is both rapid and accurate (ibid).Nuttall (1996) argues that when the student is encouraged to read, his/her reading rate will increase, and the more he/she reads, the more he/she comprehends. And in this way, he/she can get into the ‘virtuous cycle of the good reader’. This is also related to the amount of vocabulary in that the reader who recognises so many words, he/she will read more rapidly than the one who acquires less vocabulary (Nation, 2001). AL and ESP learners, in our study, need to learn to read fluently, that is reading rapidly since they are exposed to long texts.

#### **1.3.1.9. Integrated Reading and Writing**

A number of researchers such as Grabe (2001; 2009) have called for skills integration for many decades especially in academic settings where the communicative approach is applied.

The motive behind this trend in language teaching is that teaching separate skills does not yield good result, whereas combining at least two skills for instance, reading and writing, will assist learners fulfill many learning outcomes. Reading in EAP settings is most of the time linked to writing (Flowerdew & Peacock, 2001).

According to Grabe and Stoller (2001), EAP curricula should be centered within an integrated skills framework. In other words, one of the objectives of academic reading is to accomplish further tasks related to both language and content in connection with writing activities. For example, the integration of EAP reading and writing can result in “summary writing, report writing, and outlining” (ibid p. 200). Other examples include writing comments, personal viewpoints and critiques and even creating graphic organizers (ibid).

#### **1.3.1.10. Extensive Reading**

Extensive reading can lead to greater comprehension. To this end, Grabe and Stoller (2001) argue that extensive reading which refers to the practice of reading large amounts of text for extended periods of time’ (p. 198) should be central in any course for the sake of fostering the students’ academic reading abilities (ibid). In actuality, becoming a good reader is through reading extensively (ibid). Nevertheless, students favour reading books of interest to them (ibid). That is why, teachers in academic settings should encourage extensive reading in and out class (ibid). As for the former, Day and Bamford (1998) point out that it requires at least a quarter of an hour. For the latter, outside the classroom, the authors recommend that students should be encouraged to take books home and read (ibid).

The subjects in our study, EAP students of ESP and AL, for example, have been given many resources that promote extensive reading such as articles, encyclopedias, papers, and books and in case the library misses some books, the teachers provide their students with those missing books.

#### **1.3.1.11. Reading Assessment**

After citing the different components of EAP reading, now it is time to have a look at how reading can be assessed. In fact, the traditional approach of testing reading comprehension took the form of providing students with a text followed by questions (Nuttall, 1982). The aim was to test rather than to teach (ibid). However, there was a shift towards developing other techniques that aimed at assisting students in developing their strategies for comprehending

texts (ibid). Any kind of assessment should be *valid* and *reliable*, viz. it has to measure or assess only what it intends to assess and to do this in a consistent way (Brindley, 2001).

Reading assessment aims at providing feedback on all that is related to reading abilities. Alderson (2000) argues that Reading assessment needs multiple methods and techniques. In fact, there are certain types of reading assessment such as standardized reading assessment, class-based assessment practices, assessment for learning practices, placement and diagnostic assessment, and research-based assessment practices (Grabe, 2009). The main objective of the standardized tests is to ‘reflect the construct of reading-comprehension abilities in one form or another’ (ibid p. 356) which means that these tests assess essential aspects of the component abilities of comprehension such as fluency and reading speed, syntactic knowledge, etc. Reading assessment tasks in these tests can take various forms such as gap-filling formats, dichotomous items (T/F/not stated, Y/N), sentence completion, multiple-choice, and the like.

## **Conclusion**

All in all, EAP reading requires all the components mentioned earlier such as vocabulary knowledge, grammar knowledge, discourse structure awareness, and the like so as to allow the L2/FL learners to comprehend EAP texts better. However, in case students fail at making sense of a text, they should use some plans to overcome miscomprehension problems, that is to say they should be equipped with a number of reading strategies. Actually, this is the main issue in the following chapter.

# **Chapter Two: Reading Comprehension Strategies and Strategic-Based Reading Instruction**

Introduction

2.1. Reading Strategies

2.1.1. Strategy Definition

2.1.2. Defining Reading Strategies

2.1.3. Classification of Reading Strategies

2.2. Reading Strategies that Support Comprehension

2.3. Strategic-Based Reading Instruction

2.3.1. Teaching Reading Strategies

2.3.1.1. Classroom Processes

2.4. Pre-, During-, and Post-Reading Strategies Framework

2.4.1. Pre-Reading Strategies

2.4.2. During-Reading Strategies

2.4.3. Post-Reading Strategies

Conclusion

## **Introduction**

Fluent reading involves all the component skills mentioned in chapter one such as the words identification during reading, the information drawn from syntactic parsing, and the like, which assists readers in generating main-idea comprehension (Grabe 2009). None the less, informational texts and academic learning expectations require the readers to use some reading strategies for main-idea comprehension (ibid). These are called reading comprehension strategies. In this chapter, there are two sections. The first one deals with reading strategies, their definition, and examples of some reading strategies that support comprehension. The second section introduces the strategic-based reading instruction which consists of teaching strategic reading and the pre-, during-, post-reading framework.

### **2.1. Reading Strategies**

Before defining '*reading strategies*', giving examples of them and classifying them, it is necessary to define the term '*strategy*', first.

#### **2.1.1. Strategy Definition**

Paris, Wasik and Turner (1991) refer to strategies (plural of strategy) as actions selected in a deliberate way to fulfill particular goals (cited in Koda, 2004). Likewise, Anderson (1991) describes strategies as intentional, cognitive steps used by learners to help them acquire, store, and retrieve information (ibid). Grabe (2009), in his turn, defines strategies as "processes that are consciously controlled by readers to solve reading problems" (p. 221). In this essence, strategies are methods or plans made by learners to overcome problems occurring while they are learning.

#### **2.1.2. Defining Reading strategies**

Davies (1995) defines a reading strategy as "a physical or mental action used consciously or unconsciously with the intention of facilitating text comprehension and / or learning" (p. 50). In the same vein, Kletzien (1991) refers to a reading strategy as "a deliberate means of constructing meaning from text when comprehension is interrupted" (cited in Davies, 1995 p. 50). So, from the above definitions, reading strategies are plans used for solving problems of text miscomprehension.

#### **2.1.3. Classification of Reading Strategies**

Chamot and O'Malley (1994) identified three interrelated, function -based strategies: cognitive, metacognitive, and social affective (cited in Koda, 2004). The first ones are used for accomplishing a certain cognitive task during reading, such as prediction, inference, etc (ibid). The second type, metacognitive strategies, is used to regulate cognitive processing, as in comprehension monitoring and repairs (ibid). Social and affective strategies are used in cooperative interaction with others during reading, as in looking for outside help (ibid). Paris et al. (1991) suggested another way of grouping strategies, based on time of use: before-, during-, and post- reading (ibid). These are to be dealt with in the following section. Pre-reading strategies help readers activate their prior knowledge relevant to the text to be read; during reading strategies assist readers in detecting the main idea through cross-referencing and inferences; and post-reading include thinking about the content carefully and reviewing (cited in Koda, 2004).

## **2.2. Reading Strategies that support Comprehension**

The reading strategies recognised in the literature and so often used are: identifying a purpose for reading, previewing, activating background knowledge, predicting, forming questions, skimming, scanning, recognising text organisation, repairing miscomprehension, inferencing and so on. Some of them are used in the three stages of reading, others are used at the first stage only, and some other ones during reading.

## **2.3. Strategic-Based Reading Instruction**

As it has been mentioned earlier, the use of strategies on the part of the readers is very crucial in building main idea comprehension. To this end, teachers are required to teach and model those strategies so as to enable their students to improve their performance on tests of comprehension and recall (Carrell, 1985; Carrell, Pharis, & Liberto, 1989; Pearson & Fielding, 1991 cited in Janzen 2002). This could be better achieved through a strategic-based reading instruction (Erlor & Finkbeiner, 2007 cited in Cohen & Macaro).

### **2.3.1. Teaching Reading Strategies**

Good readers are strategic readers, in that they know the goals of a reading task, apply a number of well-practised reading strategies at hand in efficient combinations, monitor comprehension appropriately, recognise miscomprehension, and repair miscomprehension problems effectively (Grabe & Stoller, 2001 cited in Celce-Murcia). As mentioned above, reading comprehension strategies should be implemented in the three stages of a reading



lesson, namely pre-, during-, and post-reading stages (Davies & Pearse, 2000). Each strategy plays an important role in text comprehension. Besides, these strategies should be taught and modelled by the teacher so as to enable the students to do the same. Moreover, Koda (2004) argues that modelling assists students in understanding what it means to comprehend a text and monitor comprehension. By thinking aloud, the teacher demonstrates how understanding 'materializes from the text' (Koda, 2004 p. 268).

### **2.3.1.1. Classroom Processes**

According to Janzen (2002), many classroom processes are involved in effective strategic reading instruction. Five of these are: general strategy discussion, teacher modelling, student reading, analysis of strategies used by the teacher or by students when thinking aloud, and explanation/discussion of individual strategies on a regular basis.

#### **a- General Strategy Discussion**

In this classroom process, the teacher defines reading strategies and strategic reading (ibid). Moreover, discussion takes place on the part of both the teacher and the students about the importance of learning and practising strategies (ibid). Janzen (2002) mentions three advantages of using strategies: (1) Strategies assist in improving both reading comprehension and reading efficiency; (2) Students will read like expert readers by using strategies; (3) Strategies assist students in engaging actively in the text, in monitoring their comprehension, and in relating parts of the print to their prior knowledge and to other parts of the text (ibid). Through this discussion, students will regulate their reading behaviour and will find out that they use strategies in their L1.

#### **b- Teacher Modelling**

Regular teacher modelling is a second important classroom process of strategy instruction (ibid). The teacher thinks aloud as s/he reads the text as in the following short excerpt applied to Janzen's class (Words in italics represent the actual text.):

Okay, um, the chapter, the title of the chapter is *Dreams and Screams*-um, well, what does that mean? Um. I know the book is about special effects, but what, why is the chapter called *Dreams and Screams*? I don't know. *Movies have always had the power to make people believe that what they are seeing on screen is really happening.* Okay, so is this what the author means by special effects? I don't know. Um, okay. *Special effects add to that power.* Oh, so the author means that movies without special effects make people believe they're seeing what's on the screen, but special effects make those movies more surprising, more amazing. (Someone says "um-hum".) *By using special effects, filmmakers make*

*“impossible” scenes seem real.* Okay, so movies seem real when we watch them, and special effects can make impossible things seem real. So may be the author will say next what impossible things can seem real....*Through special effects, filmmakers have shown actors parting the waters of the Red Sea, flying to distant planets, and chopping off heads on Friday the 13th.* Okay, so I was right. The author is giving examples of special effects, impossible things that can seem real. (Janzen, 2002 p. 290)

Janzen (2002) has used several strategies such as asking questions, making predictions, checking those predictions, and summarising or paraphrasing (ibid).

### **c- Student Reading**

The teacher encourages the students to do the same, that is to think aloud while reading though this process takes time (Janzen, 2002).

### **d- Analysis of Strategy Use**

A third important feature of strategy instruction is analysing the strategy use of the reader, after the teacher or the students have read a portion of the text, through full class discussion (ibid). The analysis can be in this way: What strategies the reader did, when he used them, etc (ibid). Students will benefit from the analysis of the teacher’s reading, which helps them to incorporate “effective strategy use into their own reading” (Janzen, ibid p.290). Discussing the student’s reading by the teacher consists of identification and analysis of strategy use intermixed with the teacher’s feedback on the reader’s behaviour (Janzen, 2002). The feedback can take a form of suggesting specific strategies to solve problems of miscomprehension (ibid).

### **e- Strategy Explanation and Discussion**

The process of strategy explanation can be straightforward by using graphic organizers as follows: The teacher, from the first session, asks the students to write down the strategies that s/he or other readers used and when they used them, after each part of reading is completed (ibid). Naming the strategy and discussing its value will be the next step (ibid). After some weeks, the class will be divided into small groups and will be asked to fill in tables such as the one (Table 2.1.) below, with three columns headed: What, When, and Why (ibid). These charts will be filled in each time and mounted on the chalkboard during class to be used as reference lists for strategies that may be used while reading (ibid). Table 2.1. comprises what strategies used, when and why. For instance, ‘*evaluating*’ is used while reading to judge the author’s ideas, and after reading to make own opinion.

Sample Strategies Taken From Students' Own Work		
What	When	Why
Connecting	While reading	To clarify Ideas
<ul style="list-style-type: none"> <li>• What I already know (to) what I'm reading</li> <li>• Previous part (to) what I'm reading</li> </ul>	After reading	To help paraphrase To evaluate content
Evaluating	While reading	To judge the author's Ideas
After reading	To make own opinion	
To develop knowledge		
Asking questions	While reading	To evaluate
Before reading	To check	
To have more interest		
Checking for answers to questions	While reading	To pay attention to what I'm reading
Translating	While reading	To get exact meaning

Table 2.1. *What, When, Why Strategies*(Janzen, 2002 p. 291)

## 2.4.Pre-, During-, and Post- Reading Strategies Framework

At this level of research, we introduce the investigated strategies in this study in the three stages of reading, namely pre-, during, and post-reading. This approach has been suggested by Paris et al. (1991) for the sake of assisting comprehension. In this context of study, these strategies are to be used by EAP learners to better read and to achieve their purposes from reading.

### 2.4.1.Pre-reading strategies: anticipating meaning

Before they begin to read, L2/FL readers come with a purpose in mind. The following step is previewing the text, activating background knowledge, forming questions, predicting, and skimming. By doing so, learners will be prepared for reading the text (Davies & Pearse, 2000).

#### a- Previewing

This strategy allows students to determine the general topic of the reading, relevant vocabulary (though not necessary for advanced learners), etc by examining distinguishing

features of the text such as the title, subheadings, drawings, and illustrations (Grabe&Stoller, 2001 cited in Celce-Murcia)

**b- Activating prior knowledge**

It facilitates recall of information among students (Grabe, 2009). Moreover, it is an aid to better comprehension of the text, especially if students are provided with specific reading guides for texts (ibid). However, less background knowledge does not necessarily lead to miscomprehension, in that students with a high level of proficiency in L2/FL and with a limited background knowledge can learn more from a text than less-skilled ones (ibid).

**c- Forming questions**

Grabe (2009) argues that question-forming strategy, most of the time, requires training students in how to generate appropriate questions that relate to a text. This strategy improves 'memory for text information, the identification of main ideas, and accuracy in answering questions (Rosenshine, Meister, & Chapman, 1996 cited in Grabe, 2009).

**d- Predicting**

After the background knowledge has been activated and questions have been formed, the reader, then, predicts the content of the text by forming hypotheses. This strategy is used even during reading to anticipate the next chunk of language.

**e- Skimming**

The reader uses this strategy to identify the main idea of the text by having a glance at the first and last paragraphs, and the topic sentences (Grabe&Stoller, 2001 cited in Celce-Murcia).

**f- Scanning**

Again, scanning is looking quickly through the text but for a specific piece of information (Aebersold& Field, 1997; Grellet, 1981).The reader starts reading and once s/he finds the needed information, s/he looks at the surrounding text. If s/he gets what he is looking for, s/he stops reading. If not, s/he continues scanning until s/he spots that information (Aebersold& Field, 1997).

**2.4.2.During-Reading Strategies: constructing meaning**

During reading, the L2/FL reader is engaged with the text by using both bottom-up and top-down strategies to comprehend the text. The bottom-up strategies help in building sentence-by-sentence comprehension. The top-down ones assist the reader in comprehending large pieces of text such as a paragraph. In short, efficient reading involves both types of strategies whereby the reader moves from one to the other as s/he reads (Aebersold & Field, 1997). Scanning can be also used as a post-reading strategy whereby students can have a glance at the text to look for a specific piece of information, with students having already read the text (ibid). Some of during-reading strategies are: inferencing and comprehension monitoring.

#### **a- Inferencing**

It is a very important and useful strategy to comprehension in that it permits the reader to retrieve the intended information by using what is mentioned in the text such as syntax, logical and cultural clues, etc (Grellet, 1981). Referencing depends on the student's prior knowledge, reading strategies, vocabulary knowledge, text-structure awareness and so on (Grabe, 2009).

#### **b- Comprehension Monitoring**

It is a major reading strategy that improves comprehension (Grabe, 2009). More than that, it is viewed as an important metacognitive process (ibid). This strategy implies many other strategies such as relating text to background knowledge, recognising text structure, etc (ibid).

#### **c- Predicting**

During reading, good readers anticipate the following paragraph and predict its main idea, before reading it, according to what is being said and dealt with in the present one.

#### **d- Using Text Structure Awareness**

It is a very useful and important strategy for making text comprehension and recall of information better. Grabe (2009) states that many studies dealing with expository prose have demonstrated that students who are aware of text structure and who utilise the resources of text structure in their summaries such as discourse-signaling systems which include, for instance, rhetorical patterns of organisation, improve their reading comprehension.

### **Other During-Reading Strategies**

There are other strategies used during reading such as checking predictions, forming questions about the text, finding answers to posed questions, taking notes, skipping words, distinguishing main ideas from supporting details, distinguishing fact from opinion,

connecting one part of the text to another, rereading, guessing the meaning of words from contexts, highlighting /underlining difficult parts of a text, and checking comprehension (Grabe, 2009; Grellet, 1981; Jordan, 1997).

### **2.4.3. Post-Reading Strategies: reviewing and evaluating**

After reading and understanding a text, proficient SL/FL readers are able to paraphrase, summarise it in a form of a paragraph or in graphic organizers, evaluate the author's point of view or make a personal response.

#### **a- Summarising**

According to Grabe (2009), though there is scant research on the effect of this strategy on L2 reading, summarising leads students to better comprehension. In studies conducted by some researchers like Trabasso and Bouchard (2000), it has been found that summarisation training has led students to better summarising of reading texts, which reflects better texts comprehension (ibid).

#### **b- Using Graphic Organizers**

The use of graphic organizers, in L2 contexts, such as Venn diagrams, KWL charts, matrices and the like assists readers in recognising text structure and focus on main points and ideas and their relations with supporting details (ibid).

## **Conclusion**

In sum, decoding words is not sufficient for comprehending texts. Many other factors should be gathered to achieve comprehension involving, besides recognition of vocabulary, grammar, and the remaining ones cited in chapter one, the use of a number of reading strategies in combination. Though AL and ESP students in the present study acquire grammar, vocabulary, they are unable to make sense of texts, for they lack using attentional processes, *viz.* reading strategies.

The practical part (Chapter Three) will be dealing with the data collection and discussion of the findings.

## **Chapter Three: Data Collection and Discussion of the Findings**

Introduction

3.1. Method

3.2. Subjects

3.3. Tools of Research

3.4. Data Analysis

3.4.1. Questionnaire

3.4.1.1. Questionnaire Analysis

3.4.1.2. Interpretation

3.4.2. Pre-Test

3.4.2.1. Pre-Test Analysis

3.4.2.2. Interpretation

3.4.3. Comparison of the Questionnaire and the Pre-Test's Results

3.4.4. Reading Sessions Description

3.4.4.1. Session One

3.4.4.2. Session Two

3.4.4.3. Session Three

3.4.5. Post-Test

3.4.5.1. Post-Test Analysis

3.4.5.2. Interpretation

3.4.6. Comparison of the Post-Test and the Pre-Test's Results

3.4.7. T-Test

3.4.8. Pedagogical Implications

Conclusion

## **Introduction**

The main goal of the present study is to investigate the impact of using reading strategies on comprehending EAP texts. The focus in this methodology is to assist students in engaging in interactive communicative activities that help them in comprehending texts using reading strategies in combination.

### **3.1.Method**

For the hypothesis investigation, we have selected a descriptive analytical method for the questionnaire, the pre-test, the three reading sessions, and the post-test.

### **3.2.Subjects**

Subjects in this study are 32 English-as-a-foreign-language students aged between 21 and 42 years old, out of 52 in first-year-Master class at the University of Ouargla. The sample is representative to some extent. They have been studying English for about nine years. They have been taught through different approaches mainly the *Communicative Approach*. There are 27 girls and 5 boys. The subjects are pursuing a two-year Master's degree (MA) in AL and ESP.

### **3.3.Tools of Research**

These students were exposed, first, to a questionnaire of 20 questions, a pre-test, three training sessions (4 hours and a half), and a post-test. This experiment focused mainly and only on the relationship between the use of reading strategies and EAP text comprehension.

Students had a questionnaire as a kind of assessment so as to get insights on how student engage in reading texts, and a pre-test and a post-test to compare their performance before and after the formal training in order to see the efficiency of the suggested approach. The pre-test session lasted one hour, before the beginning of the training. As for the post-test, it lasted one hour but was added a quarter of an hour due to the inclusion of other reading strategies (see Appendix D).



### 3.4. Data Analysis

#### 3.4.1. Questionnaire

The questionnaire is primarily chosen as a kind of data collection to gain insights from the subjects about their viewpoints on academic reading and their ways of reading. The questions were selected so as to reflect the present study. They were twenty close-ended questions. They varied between ‘yes-no’, ‘true-false’, ‘agree-disagree’, and scaled (never-sometimes-often-always) questions. The questionnaire lasted fifteen minutes and took place in the tutorial’s classroom.

##### 3.4.1.1. Questionnaire Analysis

Q<sub>01</sub>. Reading skill is very important to my academic studies.

	Number	Percentage
True	32	100%
False	0	0%
Total	32	100%

Table 3.1. The importance of the Reading Skill

All the respondents agree that the reading skill is very important to their academic studies. According to many researchers such as Grabe (1991; 2009) and Saville-Troike(2006), reading is the most needed skill in academic studies and it is by reading that they gain insights and knowledge and expand their thinking.

**Q02.** For my academic studies, I read

	Number	Percentage
Articles	17	53.12%
Chapters of books	26	81.25%
Books	19	59.37%
Papers	02	6.25%

Table 3.2. The Types of Academic Reading Materials

The majority of students (81.25%) read chapters of books and (53.12%) read articles, certainly for classroom purposes whereas (59.37%) read whole books. This result reflects the assignments given by the teachers in the classroom. Most of the time, teachers ask students to read chapters of books to be summarised or discussed. However, reading books is also favoured by so many students.

**Q03.** I generally read academic texts for the purpose of comprehending them.

	Number	Percentage
Agree	28	87.5%
Disagree	04	12.5%
Total	32	100%

Table 3.3. Reading EAP texts for Comprehension Purpose

The majority of the respondents (87.5%) read academic texts for the purpose of comprehending them. The major aim of academic reading is comprehending the messages of the texts at hand so as to use the extracted information to fulfill many goals and perform many tasks such as making comments, evaluating, summarising, and the like.

**Q04.** I generally make extra reading outside my teacher assignment.

	Number	Percentage
Yes	19	59.38%
No	13	40.62%
Total	32	100%

Table 3.4. Extra Reading

59.37% of the respondents make extra reading, which is reasonable and essential in academic settings. All that is given by the teachers is just a kind of guidance. That is why, students are given lists of references to investigate more in their areas of study.

**Q05.** Before reading a text, I look at any title, headings, graphs, drawings...

	Number	Percentage
Agree	32	100%
Disagree	0	0%
Total	32	100%

Table 3.5. Previewing strategy

All the respondents (100%) preview the text before reading it, which is an important pre-reading strategy. This pre-reading strategy is of a great importance in that it gives an idea about the text by looking at the title, any drawings, tables, etc.

**Q06.** These headings, graphs, etc activate my background knowledge (depending on the topic) and helps me predict the content of the text.

	Number	Percentage
Agree	32	100%
Disagree	0	0%
Total	32	100%

Table 3.6. Background activation and Prediction strategies

All the students agree that headings, graphs, etc activate their background knowledge and help them predict the content of the text. This allows the readers to anticipate the content of the text. This pre-reading strategy is of a great importance in that it facilitates the comprehension and prepares the readers to engage in reading.

**Q<sub>07</sub>.** Predictions challenge me to form questions on the topic and then motivate me to read the text.

	Number	Percentage
Yes	17	53.12%
No	15	46.88%
Total	32	100%

Table 3.7. Forming Questions strategy

53.12% of the respondents form questions on the topic after predicting the content of the text, which motivates them to read it. The results shows that nearly half of the respondents ignore the strategy of forming questions which is very important in questioning the text before reading it.

**Q<sub>08</sub>.** Those predictions will be either confirmed or revised during reading.

	Number	Percentage
Yes	29	90.62%
No	03	9.38%
Total	32	100%

Table 3.8. Predictions Confirmation and Revision

The majority of the respondents (90.62%) confirm or revise their predictions during reading and this is the characteristic of good readers. That is, during reading the text, the readers check whether their predictions made before reading the text are correct or not, so to be revised.

**Q<sub>09</sub>.** I read the text quickly to know its gist (main idea).

	Number	Percentage
Never	01	3.12%
Sometimes	21	65.62%
Often	03	9.38%
Always	07	21.88%
Total	32	100%

Table 3.9. Skimming for the Main Idea strategy

65.62% of the respondents ‘sometimes’ skim the text to know its gist. This result shows that the respondents are not aware of the importance of skimming for the main idea which is very important in academic reading. Besides, they are supposed to read a sizable number of materials which necessitates the skimming strategy.

**Q<sub>10</sub>.** For looking for specific information, I do not read the whole text.

	Number	Percentage
Yes	18	56.25%
No	14	43.75%
Total	32	100%

Table 3.10. Scanning strategy

56.25% of the respondents scan the text for specific information whereas (43.75%) do not, which reveals the lack of awareness of the importance of the scanning strategy on the part of the students. Moreover, most of the time, students are asked to look for specific information which involves reading just parts of the whole and gaining time.

**Q<sub>11</sub>.** For comprehending a text, the following is/are important.

	Number	Percentage
Grammar	14	43.75%
Vocabulary	15	46.87%
Cohesion	18	56.25%
Coherence	19	59.37%
Content of the text	28	87.5%

Table 3.11. The Important Components of Text Comprehension

87.5% of the respondents focus on the content of the text for comprehension and (59.37%) rely on coherence, which is logical and important. (56.25%) of them consider cohesion, (46.8%) of them on vocabulary and (43.75%) on grammar. All these results are reasonable in terms of priority. Academic reading entails as a first step comprehension of the content. The other components are also important.

Q<sub>12</sub>. For understanding a word, I use the following.

	Number	Percentage
Guess the meaning from the context	27	84.37%
Use dictionary	20	62.5%
Ask a colleague	06	18.75%

Table 3.12. Methods for Understanding Words

The majority of the respondents (84.37%) guess the meaning of words from the context. This result strengthens what has been investigated in the theoretical part. In other words, one characteristic of good readers is that they do attempt to comprehend difficult or unknown words from the context and they do not rely all the time on the dictionary.

Q<sub>13</sub>. The organisation of a text helps me comprehend it.

	Number	Percentage
Agree	32	100%
Disagree	0	0%
Total	32	100%

Table 3.13. Text organisation for Comprehension

All the respondents comprehend texts by recognising their organisations, which is an important factor in spotting the information. According to the literature, academic texts belong to the expository prose which includes patterns of organisation such as cause-effect, problem-solution, argument, etc which, once recognised by readers, will make information retrieval straightforward and so text comprehension.

**Q14.** Each paragraph in the text has got a purpose and carries a sub-idea.

	Number	Percentage
True	29	90.63%
False	03	9.37%
Total	32	100%

Table 3.14. Paragraph Purpose and Sub-idea

The majority of the respondents (90.62%) agree that each paragraph has got a purpose and carries a sub-idea. Taking into account that an EAP text is a collection of paragraphs means that each paragraph develops a sub-idea which coheres with other ones to form the main idea.

**Q15.** I reread the difficult parts of the text.

	Number	Percentage
Yes	31	96.87%
No	01	3.12%
Total	32	100%

Table 3.15. Rereading strategy

96.87% of the respondents use the rereading strategy for difficult parts of the text, which is essential when the interaction between the text and the reader breaks down. Readers, because of a variety of reasons, may need to reread difficult parts for better comprehension.

**Q16.** I underline/highlight words and phrases that occur frequently in the text.

	Number	Percentage
Never	0	0%
Sometimes	15	46.87%
Often	09	28.12%
Always	08	25%

Table 3.16. Underlining/Highlighting strategy

46.87% of the respondents 'sometimes' underline or highlight words and phrases that occur frequently in the text though this strategy is very important in identifying the topic and the content of the text. These words and phrases make the most important keywords that represent the topic of the text and facilitate its comprehension. This result shows that more than half of the students ignore this strategy.

**Q17.** I usually take notes.



	Number	Percentage
Yes	28	87.5%
No	04	12.5%
Total	32	100%

Table 3.17. Note-Taking strategy

The majority of the respondents (87.5%) usually take notes, which characterises academic reading. One of the strategies in assisting learners in comprehending EAP texts is note taking, for most of the time these texts are long and contain many ideas, which calls for splitting the text into parts so as to make text comprehension easier.

**Q18.** I can draw conclusions on (understand ) the unsaid in the text by using what is said by the author while reading.

	Number	Percentage
Yes	08	25%
No	24	75%
Total	32	100%

Table 3.18. Inferencing strategy

75% of the respondents are unable to infer the implicit meaning of the text despite the importance of inferencing strategy in academic reading comprehension. The readers read the lines and read between the lines so as to decipher the intention of the author and this is achieved by inferencing, which involves the use of the information used in the text.

**Q19.** After reading, I will be able to write a comment on the text by using those notes.

	Number	Percentage
Agree	26	81.25%
Disagree	06	18.75%
Total	32	100%

Table 3.19. Note- Making strategy

81.25% of the respondents have the ability to write comments on the text using the notes taken during reading, and this is referred to as reading to critique and evaluate. At this level of study, students are seen to be able to use the notes taken during reading either to comment on what has been said or evaluate and critique the author's viewpoint. This result is logical.

**Q<sub>20</sub>.** At this phase, I will be able to summarise the text in a paragraph or in a form of a graphic organizer (table, chart, etc).

	Number	Percentage
Yes	28	87.5%
No	04	12.5%
Total	32	100%

Table 3.20. Summarisation strategy

The majority of the students (87.5%) are able to summarise the text either in a paragraph or in a form of a graphic organizer as a way of showing comprehension of the text. These are the main post-reading strategies, especially if we consider that students are most of the time asked to read and summarise a variety of articles, chapters, and even whole books.

### **3.4.1.2. Interpretation**

The questionnaire was used just to have an idea about how students approach texts and attain comprehension. For this reason, it was advisable to investigate about the reading strategies used by learners in the three phases of reading. The respondents' answers varied and showed a lack of awareness of some important strategies such as skimming and inferencing. However, they were aware of some other strategies such as previewing, text organisation, rereading, note-taking, and summarising. Moreover, nearly half of the respondents form questions before reading, scan the text, and underline/highlight difficult parts. Besides, the majority of them agree that each paragraph has got a purpose and carries a sub-idea, take notes, write comments using those notes, reread, etc. In short, the subjects in the present study do not have a clear idea about how to read.

### 3.4.2. Pre-Test

The pre-test constructed for the present consisted of an authentic text (an article) followed by 5 items. The test was about a topic that interests everybody, cancer. The pre-test was administered to test students' use of reading strategies to comprehend texts before the treatment. The subjects had to finish the test within 60 minutes. The results of the pre-test are shown in Table 3.21. below.

Pre-test Items	Correct Answers	Incorrect Answers
1. What the title suggests	56.25%	43.75%
2.a-The gist of the article	43.75%	56.25%
b-The topic sentences	62.5%	37.5%
3.a-Scanning(T/F)	71.87%	28.12%
b-Text organisation	56.25%	43.75%
4.Synonyms/near synonyms	100%	0%
5.Article summary	40.62%	59.37%

Table 3.21. Pre-test Items with Correct and Incorrect Answers

#### 3.4.2.1. Pre-Test Analysis

Concerning the first item (see Table 3.21. above) about predicting the content of the article, 56.25% of the subjects could predict the topic of the text, which contradicts the result obtained in the questionnaire. Item 2 consists of extracting the main idea of the text and the topic sentences. 43.75% of the students succeeded in getting the gist of the article and 56.25% extracted the topic sentences. Item 3 dealt with (T/F) sentences (scanning) and text organisation. 71.87% of the subjects got the correct answer for the former and 56.25% for the latter. Concerning item 4 (synonyms/near synonyms), all the students got the correct answer. As for the last item (the article summary), only 40.62% of the subjects could summarise the article in a good manner.

#### 3.4.2.2. Interpretation

Subjects in the present study do not know how to predict. Moreover, they do not know how to skim for the main idea, how the article is organised, besides the inability to summarise the

article. These results show that students are not aware of the use of reading strategies that assist them in making sense of texts and that are important in their academic studies.

### 3.4.3. Comparison of the Questionnaire and the Pre-Test's Results

The data collected were quantitatively and qualitatively analysed. Comparing the results of both the questionnaire and the pre-test concerning the following reading strategies: predicting, skimming, scanning, recognising text organisation, selecting appropriate synonyms/near synonyms, and summarising the article reveals the following:

Investigated Reading Strategies	Questionnaire	Pre-Test
Skimming for the gist(main idea)	43.25%	43.75%
Predicting	100%	56.25%
Scanning	56.25%	71.87%
Text organisation	100%	56.25%
Finding synonyms	84.37%	100%
Summarising	87.5%	40.62%

Table 3.22. Comparison of the Questionnaire and the Pre-Test

Both the pre-test and questionnaire respectively show that more than half of the subjects do not know how to extract the main idea of the article (43.25% / 43.75%). Moreover, they fail, in practice, at predicting the content of the article (56.25%) as opposed to (100%) in the questionnaire. Scanning strategy, in its turn, is more achieved in practice, that is (71.87%) in the pre-test than in the questionnaire (56.25%). Text organisation is not well conceived of by the subjects according to the pre-test (56.25%), contrary to the questionnaire (100%). Finding synonyms has been successful in the pre-test (100%), which reflects to some extent the result of the questionnaire (84.37%). Summarising the article reveals a deficiency on the part of the subjects (40.62%), which contradicts the questionnaire's results (87.5%).

In short, the students are unaware of the importance of predicting, skimming, and how to extract the main idea of the text. Moreover, the inability to recognise the rhetorical (text)

organisation leads the students not to comprehend the text, not to spot the important ideas and not to know how the text will be developed, which makes the students unable to summarise it, which, in turn, calls for emergent treatment to overcome these problems.

#### **3.4.4. Reading Sessions Description**

ESP and AL students, mainly the subjects in this study, are required to read a great number of materials in their area of study, which involves them to be equipped with a variety of reading strategies if they are to comprehend texts and gain insights. Previewing, background activation, forming questions, prediction, skimming, scanning, and the like are very important strategies to aid text comprehension. To this end, teachers should teach and model these strategies. The framework selected for this tuition is pre-, during-, and post-reading strategies-based instruction, in that students will be exposed to three, at least, sessions of one hour and a half each.

The selected text (A world of water) is adapted from *New Headway Academic Skills*-Level 3. The topic is of a great importance to everyone since it deals with the problem of water shortage and its solution which is desalination. The aim is to select an academic text not necessarily from the students' area of study so as to assist students to be aware of the use of reading strategies if they are to comprehend EAP texts.

##### **3.4.4.1. Session One**

The teacher begins by asking the students about their academic studies and what is needed for achieving success, until they come to the point that reading is the most important skill in their studies. At this moment, the teacher asks them about their habits in reading and the effective ways that lead them to comprehension and task-doing. Students give a variety of answers, which leads the teacher to begin introducing the pre-reading strategies one after the other. The teacher chooses the title of the pre-test article as an example and follows the same steps of teaching and modelling the pre-reading strategies namely: previewing, background knowledge activation, forming questions, predicting, skimming and scanning, imitating the model suggested by Janzen (2002) as follows:

The title of the article is *Promising results from cancer study* (previewing), um, the article is about cancer. I know it's a fatal and killing disease and researches and studies have been conducted in an attempt to find cures for it. My friend has had cancer but fortunately she's alive at the expense of one of her breasts (background knowledge activation). So, have researchers found out a new treatment? For which kind of cancer? Where has this study taken place? Has it been applied to human-beings or

animals? Why 'promising' results and not 'good' results?(Forming questions). So, the article is about a new study that has given better results against cancer (predicting).

The teacher, in this way, shows the students how they think aloud when they read. She, then, asks them to do the same with the title of the text that she distributes and remind them not to read the text. The students' answers vary when the teacher asks them what they have done. One of the students may answer in this way:

The title of the text is *A world of water* (previewing), um, maybe the text is about the amount of water in the world because I know that water makes 75% of the earth and the majority of this water is salty (background knowledge activation). But what is the reason behind choosing this article? Is there a problem of water in the world? Is drinkable water sufficient for the whole world? What's the issue in this text? (forming questions). So, I guess that the text is about a problem of drinkable water (predicting).

The next step is the skimming for the main idea strategy. The teacher explains to students how they skim: 'read the first and the last paragraph and read the topic sentence of each paragraph'. By so doing, the students extract the main idea and discuss their answers. They agree, with their teacher, that the main idea of the text is about water shortages, which indicates that the students' prediction is confirmed.

The last pre-reading strategy is scanning. At this moment, the teacher explains it by mentioning that scanning is very essential and useful in academic reading in general and EAP reading in particular. In this strategy, the focus is on finding specific pieces of information which is accomplished by beginning reading until the students reach the needed information. For example, the teacher asks the students about the definition of 'desalination'. Here, they are supposed to locate the first occurrence of the word which is in paragraph two. The students continue looking for the other items.

In short, students were involved interactively in those activities and showed great interest in seeking for the best ways to read well. The strategies suggested in the first session helped them in paving the way to the content of the text. We noticed that students had no idea about skimming. Though very few student defined it, they did not know its steps. At the end of the session, the students were satisfied.

#### **3.4.4.2.Session Two**

At this stage, the students begin to read the text and monitor their comprehension by checking their predictions and answering the questions posed in the previous stage. The teacher uses the think-aloud method in the first paragraph and asks the students to do the same. Once they finish reading, she asks them about the main idea of the paragraph. A discussion takes place at this moment and leads to the following main idea of the text: *the problem of water shortage in the world*. All the students agree that paragraph one introduces the main topic of the whole text.

The teacher, then, asks the students to predict the main idea of the following paragraph. At this moment, students try to guess. Some of them suggest that there may be an attempt to find a solution to this problem of water shortage. In this case, the teacher asks the students to read paragraph two. When they finish, the teacher asks them whether their predictions were confirmed or not. All the students confirm that the second paragraph's main idea is about the solution to the problem of water shortages which is *desalination*.

The teacher distributes some comprehension questions and reading tasks to be answered and dealt with in parallel with silent reading. Students were given fourteen (14) comprehension questions as task one and a table to be filled in as task two. Once they finish, a discussion takes place between the teacher and students and between the students themselves.

In this phase, students are supposed to use a number of during-reading strategies. One of the strategies is inferencing in that students are asked to think of the message that is being transmitted to them as readers. The students at this moment try to extract the intended message and agreed that the writer wants to tell the readers that water is precious and that we should not waste it. At the end of this session, the teacher asks the students to read the text at home.

All in all, the second session put the students in a real interaction with the text through the fourteen questions. There were many discussions between the teacher and the students and mainly between the students themselves. Their awareness raised and they became more curious about using strategies that help them in comprehending the message of the text.

#### **3.4.4.3. Session Three**

In this session, the teacher and the students are going to evaluate the text and give their personal opinion about the problem raised. They are also asked to summarise it in a form of a graphic organizer then in a form of a paragraph. To do so, the teacher asks the students again about the main issue discussed in the text. Of course, the students's answer is: the water shortages in the world. The teacher, then, asks them about the rethorical pattern of organisation. Since the text is about a problem and its solutions, so the pattern of organisation is clear. She, afterwards, shows the students examples of graphic organizers. The students select the suitable one for the text which is the problem-solution one. Finally, the teacher asks them to summarise the text in a paragraph. She reminds to focus on the main idea of the text, that is 'water shortages in the world'. This means that the topic sentence concentrates on this issue and relates it to the title '*A world of water*'. The following topic sentence may be suggested: 'Despite the fact that water makes 70% of the surface of the earth, there is water shortage in the world'. After that, they give supporting details: the solution, its definition, its process, the countries that uses desalination, etc. The teacher listens to student's sentences and selects with their cooperation the suitable ones. Finally, one of the students write the summary on the board and the remaining students write it down.

This phase was of a great importance, in that it was an opportunity to get students involved in the process of summarisation. And since the subjects are asked from time to time to summarise articles, chapters and even books, they were curious and motivated. We noticed that only very few of them had an idea about what is to summarise, but at the end, they showed some understanding and enjoyed the session, in that they became autonomous and tried to comment on the selected answers by suggesting other ones. It was really an interactive activity.

### **3.4.5. Post-Test**

In order to prove the efficiency of the treatment, it was crucial to move to the following step which is testing the subjects again. For this reason, a post-test was designed and administered.

The text for the post-test is taken from *New Headway Academic Skills*-Level 3. The tasks in the post-test are the similar to the ones in the pre-test with an addition of inferencing, guessing meaning from contexts and the use of graphic organizer strategies. In fact, the latter strategies are of a great importance in EAP reading and since only 25% of the subjects, in the questionnaire, infer, it was crucial to integrate this strategy and the two other ones in the post-test. The latter took place in the subjects' classroom and lasted one hour and fifteen minutes.



### 3.4.5.1. Post-Test Analysis

After the correction, it has been noticed that the scores were higher than the ones of the pre-test (see Appendix E) in that the investigated strategies improved to a great extent taking into account the very short time of tuition. All the subjects could scan the text and recognise its pattern of organisation. More than 80% of them could predict the content of the text, find its main idea, infer, guess the meaning of words from context, and fill-in a graphic organizer. Moreover, more than 60% of the subjects could summarise the text, compared to 40.62% in the pre-test. The following table summarises the correct and incorrect answers:

Post-test Items	Correct Answers	Incorrect Answers
Predicting	82.60%	17.40%
Skimming for the gist	82.60%	17.40%
Scanning	100%	0%
Text Organisation	100%	0%
Inferencing	84.78%	15.22%
Guessing meaning from context	86.95%	13.05%
Graphic Organizer	86.95%	13.05%
Summarising	60.86%	39.14%

Table 3.23. Post-test items with the Correct and Incorrect Answers.

### 3.4.5.2. Interpretation

The data gathered showed a great improvement in the use of strategies. The results revealed that the subjects were not aware of most of the suggested strategies before the treatment. In fact, the training sessions have had a great effect on the subjects' performance. The interactive activities made the students more aware of their way of reading, which resulted in understanding the text.

### 3.4.6. Comparison of the Post-Test and the Pre-Test's Results

The table above reveals that the strategies investigated in the pre-test were better tackled in the post-test as shown in the table below:

<b>Investigated Reading Strategies</b>	<b>Pre-test</b>	<b>Post-test</b>
Predicting	56.25%	82.60%
Skimming for the gist	43.75%	82.60%
Scanning	71.87%	100%
Text Organisation	56.25%	100%
Summarising	40.62%	60.86%

Table 3.24. Comparison of the common strategies in the pre-test and the post-test.

The results show that all the strategies witnessed a remarkable improvement though without an equal percentage. The training sessions were efficient in that they assisted the subjects in being aware of the use of reading strategies for comprehending EAP texts. Figure 3.1 below shows the comparison of both tests in a form of a polygon.

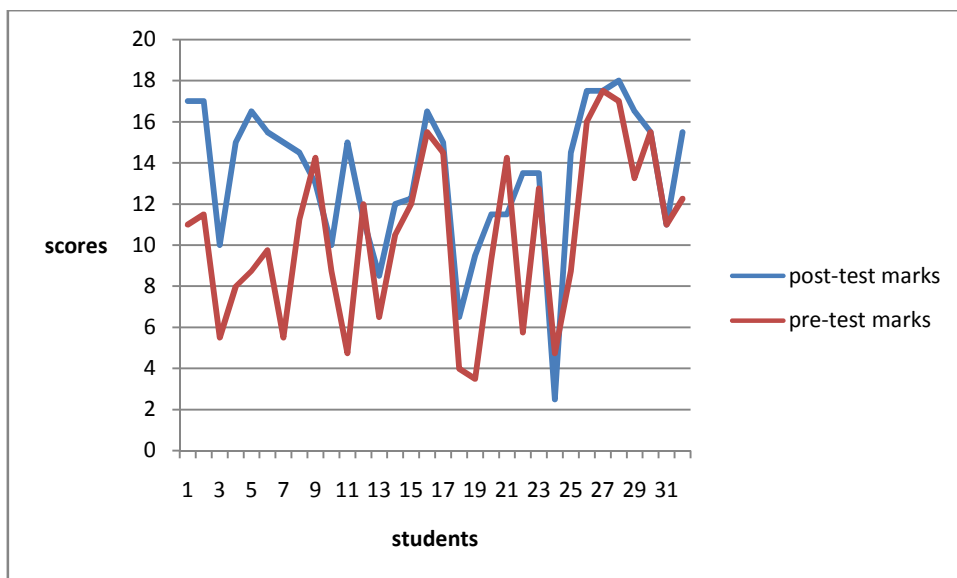


Figure 3.1.A Polygon for Pre-Test and Post-Test Scores Comparison

The other investigated strategies such as inferencing, guessing meaning from context, and using graphic organizers proved successful in that their percentages were high. All in all, this success is proved by the calculation of both means and standard deviations (SD) as follows:

	Total score	Number of scores	Mean	SD
Pre-test	335.5	32	10.48	3.95
Post-test	433.5	32	13.54	3.52

Table 3.25. Total Score, Number of scores, Mean, and Standard Deviation

As shown above, the mean of the post-test is higher than the one of the pre-test, which reflects the efficiency of the suggested strategic-based reading approach. As for the SD, it has been noticed that it has decreased in the post-test (3.52) rather than (3.95) in the pre-test, which strengthens our hypothesis set at the beginning of the thesis. For confirmation, we opt for a t-test.

### 3.4.7. The T-Test

The t-test is a statistical test that assists in drawing conclusions from the experiment's data. It provides us with a mathematical formula for computing the value of the observed  $t$ , that is it is used to confirm the significance or non-significance of the findings. Its computational formula is as follows:

$$t_{n-1} = \frac{d}{sd/\sqrt{N-1}}$$

$N$  refers to the number of subjects

$\bar{X}_1$  refers to the mean of the pre-test

$\bar{X}_2$  refers to the mean of the post-test

$SD_1$  refers to the standard deviation of the pre-test

$SD_2$  refers to the standard deviation of the post-test

$\Sigma X_1$  refers to the total score of the pre-test

$\Sigma x_2$  refers to the total score of the post-test

$\Sigma X_1^2$  refers to the sum of squared score of the pre-test

$\Sigma X_2^2$  refers to the sum of squared score of the post-test

$d$  refers to the mean difference between the pairs of scores ( $x_1 - x_2$ )

$\Sigma d$  refers to the sum of differences between the pairs of scores ( $x_1 - x_2$ )

Note: the critical value is 1.69 according to the table of David M Lane ([http://psych.csufresno.edu/psy144/Content/Statistics/t-tests\\_rev.html](http://psych.csufresno.edu/psy144/Content/Statistics/t-tests_rev.html)).

#### The computation of the observed $t$

I- The pre-test and the post-test means

$\bar{X}_1$  and  $\bar{X}_2$  are calculated using the following formula:

$$\bar{X} = \frac{\sum X}{N}$$

The results after the substitutions are as follows:

$$X_{\square 1} = 10.48 \text{ and } X_{\square 2} = 13.54$$

The computation of the standard deviations of the pre- and post-tests is done as follows:

$$SD_1 = \sqrt{\frac{\sum X^2}{N} - (\bar{X})^2}$$

We get, after the substitutions:

$$SD_1 = 3.95 \text{ and } SD_2 = 3.52$$

II- The calculation of the mean difference is as follows:

$$d = \frac{\sum d}{N}$$

After making the substitutions, we find:

$$d = -3.06$$

III- We calculate the standard deviation of the differences using the following formula:

$$Sd = \sqrt{\frac{\sum d^2}{N} - d^2}$$

We find the following result:

$$Sd = 3.16$$

IV- The observed t is calculated as follows:

$$t_{n-1} = \frac{d}{sd/\sqrt{N-1}}$$

After the substitutions, we find:

$$t_{n-1} = -5.46$$

The negative value of t is of no particular significance. It is treated as positive. So, we have the following data about the experiment.

-Observed value of T ( $t_0$ ) = 5.46

-Degree of freedom (df) = N-1 = 31

-5% level of significance

-One tailed

-Critical value of  $T(t_c) = 1.69$

$t_o = 5.46$      $t_o > t_c$      $5.46 > 1.69$

As seen above,  $t_o$  is greater than 1.69 which means that our results could not have arisen by chance. So, our hypothesis that the use of reading strategies will enhance text comprehension was correct. The probability that arose by chance is less than 5%, that is 95% sure.

### **3.4.8. Pedagogical Implications**

In this essence, the students at the department of English at Ouargla University should have a module of Reading Comprehension, along with Study Skills Module, where they encounter many types of texts and learn and model reading strategies. They should also be aware of the importance of using reading strategies in terms of efficiency and time saving.

The students need practice, *viz.* reading a variety of genres and text-types so as to have an idea about all the patterns of organisation and at the same time to be taught reading strategies through a pre-, during-, and post-reading framework. They, also, need to practise the think aloud method which helps them as readers in activating their prior knowledge before and during- reading the text. In addition, they should be encouraged to talk about and describe their ways of reading and the strategies they use in each text and at each step.

Students need to know how to spot information in a text, but before this they need to know how ideas are related. All this can be relevant when students are exposed to acceptable texts in terms of length, in that students will begin with short texts and bit by bit will deal with longer ones. A second issue is the use of authentic texts, which implies that the reading teacher tries to use extracts from real sources, for it will assist putting texts into their contexts. And by so doing s/he will enable students to better comprehend texts.

Students will encounter grammatical structures in their contexts, which allows a good mastery and use of grammar. Moreover, identifying and discriminating different functions of words will improve the students' text comprehension. Furthermore, students will be able to write good summaries and comments.

Another point of a crucial importance is the use of graphic organizers which permit a good representation of texts, mainly the main points. To this end, there exist a large number of them depending on the rhetorical patterns of organisation. Text-analysis activities which focus on how discourse is organised and how a text is structured, besides the ones that use

graphic organizers are: identifying the sentences that carry the main ideas of texts; examining headings and subheadings in a text and then deciding what each section is about; underlining transition phrases and, when they signal major sections of the text, describing what the next section covers; explaining what pronouns refer to in prior text; reorganising a disorganised paragraph and discussing textual clues used for decisions; creating headings for paragraphs in the text, labelling them, and discussing the function of each paragraph; and identifying clues that indicate major patterns of organisation (e.g., cause-effect, comparison-contrast, analysis).

As for vocabulary development, teachers can bring to the classroom texts with glosses of new words and phrases so as to avoid text miscomprehension. Moreover, reading activities which deal with term definitions make a good means of acquiring vocabulary besides extensive reading in the students' area of study.

Academic vocabulary can be taught by providing students with The Vocabulary Levels Test especially in case those students do not acquire a great number of vocabularies. Technical vocabulary which is directly related to the field or the topic of study should be taught and learnt via a list of definitions or through using specialised dictionaries such as The Longman Dictionary of Applied Linguistics, or by asking students to read the references that include glossaries. The latter assist learners in comprehending technical words and so in comprehending texts.

Since students read for academic purposes and learn information from difficult texts, the above activities will be beneficial to them.

## **Conclusion**

In conclusion, this chapter has focused on investigating the relationship between the use of reading strategies and text comprehension. The questionnaire was used as a tool for gaining insights on the students' habits in reading and how they attain comprehension. The pre-test was conducted to test the students' performance before the treatment. As for the reading sessions, they were designed to teach and model pre-, during-, and post-reading strategies. Finally, the post-test was designed to test the students' performance after the treatment. The results confirmed our hypothesis set at the beginning, in that the post-test scores were higher than the ones of the pre-test. That is there was an improvement in the reading strategies which resulted in comprehending the text on the part of the subjects. As an additional step, the t-test used after getting the results confirmed once again our hypothesis. In short, the strategic-

based approach within pre-, during-, and post-reading framework proved successful though applied in only three sessions.



## Conclusion

EAP reading involves not only language proficiency, that is linguistic knowledge which comprises syntax and morphology, and schematic knowledge which refers to general world, sociocultural, topic, and genre knowledge, but also an awareness of the use of reading strategies for making sense of texts. These strategies should be used in combination not individually as researchers such as Grabe (2009), Grabe and Stoller (2001), and Janzen (2002) claim.

This study revealed that students needed assistance in how to read EAP texts in terms of using reading strategies. It has been found out that the subjects were not aware of the benefits of using reading strategies. They ignored how to read, that is they failed at recognising the main idea of the pre-test article, for example, because they did not know about skimming and even if they knew its label, they did not know how to skim. The subjects had no clear idea about how texts are organised, which posed many questions. In the reading literature, the recognition of text organisation assists the reader in spotting the information very quickly and any failure in getting the needed information means that the reader ignores what it means text organisation.

Strategic-based approach within pre-, during-, and post-reading strategies framework proved very efficient in that the three training sessions had a strong impact on the post-test proficiency. That is, the scores of the post-test were higher than the ones of the pre-test (Appendix E). In fact, pre-reading strategies make readers question the text and make hypotheses before reading the text, which motivates them to read it. Moreover, readers will be prepared for linguistic difficulties. During-reading strategies make readers engage fully in reading the text by checking predictions and finding answers to previously posed questions, etc. Post-reading strategies make an opportunity for adult learners to evaluate the text at hand, make personal responses, summarise the text, etc. In short, there was a significant improvement in the investigated strategies. The results showed that the subjects in this study lacked an awareness of the importance of using reading strategies for comprehending EAP texts.

All in all, as it has been suggested in chapter two mainly, the use of reading strategies on the part of L2/FL readers facilitate their comprehension of texts but this would not be at the expense of other components of reading such as vocabulary, grammar, discourse structure and the like, for good readers master all of the aforementioned components besides being strategic

readers. As mentioned in Alderson (2000), there should be a language threshold on the part of L2 readers before they can use reading strategies. In other words, L2 learners, before they are able to use reading strategies, they should know about grammar, vocabulary, text organisation, etc.

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# Appendices



## **APPENDIX A: Students' Questionnaire**

**KasdiMerbah University Ouargla Name:.....**

**Faculty of Letters and Languages**

**Department of English**

**Class: Master 1 Applied Linguistics and ESP**

The purpose of this questionnaire is to shed light on how post graduate students read in their academic studies, and how they attain comprehension when reading texts, articles, and the like. You have been selected as the best source of information to contribute to this study. You are kindly invited to answer this questionnaire.

This questionnaire is divided into two parts and consists of three pages. It is designed to be answered within fifteen minutes. Please, answer all questions as accurately as you can. Instruction is provided for the way of answering. Thank you in advance.

### **Instructions :**

1- Put a **tick**(√) in each .

2- **Circle** the selected item in the remaining types of questions.

### **I. Academic Reading Comprehension**

1. For my academic studies, I read.

Articles

Chapters of books

Books

Papers

2. Reading skill is very important for my academic studies.

True

false



e-content of the text

12. For understanding a word,I use the following.

a-Guess the meaning from the context

b-Use a dictionary

c-Ask a colleague

13. The organisation of a text helps me comprehend it.

Agree

Disagree

14. Each paragraph in the text has got a purpose and carries a sub- idea.

True

False

15.I re-read the difficult parts of the text.

Yes

No

16. I underline words and phrases that occur frequently in the text.

Never

Sometimes

Often

Always

17.I usually take notes .

Yes

No

18. I can draw conclusions on (understand ) the unsaid in the text by using what is said by the author,while reading.

Yes

No

19. After reading,I will be able to write a comment on the text by using those notes.

Agree

Disagree

20. At this phase,I will be able to summarise the text in a paragraph or in a form of a graphic organizer.

Yes

No

## **APPENDIX B: The Pre-test**

### **1. What does the title of the following text suggest?**

- a-Cancer may be treated, based on a new experimental vaccine.
- b-A cancer study has given encouraging results.

### **Promising Results from Cancer Study<sup>1</sup>**

A new experimental vaccine has shown promising results in the fight against lung cancer. In a small Texas-based study, a vaccine developed by scientists at Baylor University Medical Centre in Dallas, USA cured lung cancer in some patients and slowed the progress of the disease in others.

Researchers have reported encouraging findings from this small study. Forty- three patients suffering from lung cancer were involved in these trials. Ten of these patients were in the early stages and thirty-three in the advanced stages of the disease. They were injected with the vaccine every two weeks for three months, and were carefully monitored for three years. In three of the patients in the advanced stages of cancer, the disease disappeared and in the others, it did not spread for five to twenty-four months. However, no great difference was seen in the patients in the early stages of the illness.

This new vaccine uses the patient's own immune system. It is made specifically for each patient and is injected into the arm or leg. It stimulates the body's immune system, which then recognizes that the cancer cells are harmful, and attacks and destroys them.

The vaccine could be effective against other forms of cancer. It offers great hope for the treatment of cancer in general, although further studies are needed before such treatment can be widely used.

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<sup>1</sup>Deakin, F.P. (2007). Promising results from cancer study. *New Medical Journal*, 32 Adapted from *New Headway Academic Skills*-Level 3

**2. Read quickly the article and**

**a-Pick out its gist (main idea).**

.....  
.....

**b-Extract from each paragraph the topic sentence.**

1. ....
2. ....
3. ....
4. ....

**3. Read the article again and answer the following questions.**

**a. Are the statements true(T) or false(F) ?**

- a-The investigation cured all of the participants in the trial.
- b-About forty people participated in the study.
- c-Patients in the early stages of the disease recovered more quickly.
- d-Every patient was given the same vaccine.
- e-The vaccine activates the immune system.
- f-This treatment may be useful for treating other cancers.

**b. What is the role of each paragraph in the article?**

- Paragraph one:**.....
- Paragraph two:**.....
- Paragraph three:** .....
- Paragraph four:** .....

**4 .Replace the underlined words with a suitable synonym or near synonym from the box**

<u>Testsscientistsencouragingillnesspreventive inoculation</u> <u>Researchrecoveredfindingsconducted</u>
---

- a. A group of USresearchers has carried outtrials on a new vaccine.
- b. Although the study was limited to fewer than fifty people, the results were very promising.
- c. Some of the patients at an advanced stage of the disease were cured.

**5. Now, summarise the article in no more than five(5)sentences.**

.....

.....

.....

.....

.....

## **APPENDIX C: The Reading Text**

### **A World of water**

Water is essential to life and we depend on it, yet many people take water for granted. As the population of the world increases, and with it the demand for water, there is growing concern that our water supplies will not prove adequate. In areas near the coast, an obvious solution to this problem is to find ways of utilizing the abundant supply of water from the sea.

Water covers 70% of the surface of the earth, but 98% of this is undrinkable salt water. However, for centuries man has experimented with different methods of converting salt water into fresh water in a process called desalination, whereby salt and contaminants are removed from the water. The challenge, nowadays, is to do this on a much larger scale.

One place which has used desalination for many years is the United Arab Emirates. It installed the first desalination plants in 1972, and nowadays most of the drinking water in the country is supplied by this process. New filtration systems have been developed to replace the traditional methods, which used a heating process. Another example is Saudi Arabia, whose desalination plants produce almost 25% of the world's desalinated water. One of the largest plants in the world has been constructed there, producing 300 billion litres annually.

China, with its rapid industrial growth, has also experienced an increased demand for water as well as energy. To overcome the shortage of both, China built a combined power and desalination plants in Zhejiang Province in the 1970s. Since then, salt water has been taken from the East China Sea and converted into fresh water. Some of this fresh water is then sold to industry, some is used in the production of energy, and the remainder is sold as drinking water.

Unfortunately, desalination is an expensive process using large amounts of energy, but research is currently being carried out into the development of more efficient technology using a combination of different methods. To supply water to 25% of the world's population living within 25 Kilometres of the sea, more desalination plants are expected to be built in the future. The hope is that the technology currently being developed will lower the costs and help solve the problem of water shortages in many parts of the world.

1. Read the title of the text. What is the topic of the text?
2. Skim the text. Was your prediction correct?
3. Form questions on the topic?
4. Read the first paragraph, then predict what will the following be about.
5. Scan the text and: **What do the numbers in the box refer to?**

70%	98%	1972	300 billion	25%
-----	-----	------	-------------	-----

**-Read again. What is the most mentioned word? How many times?**

**-Write “true” or “false”.**

-Water covers 98% of the earth. ....

-Desalination involves removing contaminants and salt from water. ....

-All of the water in the UAE is supplied by desalination. ....

-Desalination makes one way of utilizing the large amount of water. ....

**Comprehension questions:**

**A.** Read the text and answer the following questions.

1. What is the problem raised in the text?
2. What is the solution, then?
3. What is desalination?
4. What is removed during desalination?
5. Which two methods are used in desalination?
6. Name three countries which use desalination.
7. When was desalination first used in the UAE?



8. What have the Chinese done to overcome the shortage of energy and water?
9. Why is desalination an expensive process?
10. Extract from the text two sentences of **fact** and two of **opinion**.
11. According to you, why are UAE, Saudi Arabia, and China in an increased need for water?
12. Are there desalination plants in your country, city, etc?
13. In your opinion, how can the problems of water shortage be solved?
14. What is the implied message in your opinion?

**B. Read paragraph 3, and fill in the table below.**

<b>Traditional Method</b>	<b>New Method</b>

**Grammar**

A. What is the voice mostly used in the text? Why? Give two examples.

B. Rewrite the following sentences:

-Most of the drinking water in the country is supplied by this process.

-New filtration systems have been developed to replace the traditional ones.

D. What does the use of the present perfect in the text show?

E. Fill in the table below.

<b>Adjective</b>	<b>Noun</b>
	Desalination
	Increase
	Combination

**Vocabulary**

A. What do the following words mean? Choose **a, b, or c**.

1. Plants are:

a-living things that grow in the earth, with stems, leaves and roots

b-factory

c-machinery used in an industrial process

2. abundant:

a-enough

b-more than enough

c-not enough

3. shortage means:

a-availability

b-lack

c-sufficiency

B. Add to the list.

Water					
-------	--	--	--	--	--

## Writing

1. Fill in the following graphic organizer.

Problem	Solution

2. Now, summarise the text in no more than five sentences.

.....

.....

.....

.....

## APPENDIX D: Post-test

Name :.....

1. What does the title of the text(Sabratha) refer to ?

.....



2. Skim the text and extract the main idea(gist).

.....

.....

### Sabratha

The majestic ruins of the ancient city of Sabratha lie about 80km west of Tripoli, the capital of Libya. They are the high point of any visit to that country.

It is thought that the original settlement started in the 4th century BCE. However, by the second century BCE, Sabratha was a thriving city. Its success was based on trade north across the Mediterranean and south into Africa for animals and ivory.

In the first century CE, there was a violent earthquake. In the 200 years which followed, the city expanded steadily and became increasingly wealthy. However, when it suffered another earthquake in 365 CE, the buildings simply collapsed.

This time the city never really recovered. It was occupied by various armies until it was abandoned in the 8th century CE. It was rediscovered until the early 20th century CE by

archaeologists. Since then, some of the major buildings such as the theatre have been reconstructed and many pieces of artwork have been rediscovered. These can be seen nearby the museum.

**3. Scan the text and answer the following questions**

a-What is the famous place in Sabratha ?.....

b-What kind of trade existed in Sabratha in the second century BCE?.....

.....

c-What happened when Sabratha received the second earthquake ?

.....

d-Read paragraph four(4) and extract one of the ruins in Sabratha.

.....

**4. Read the following and choose the suitable equivalent:a or b.**

**A.**The majestic ruins are the high point of any visit to Libya.

a-They make the most important place to be visited in Libya.

b-They are the tallest buildings in Libya.

**B.**This time the city never really recovered.

a-The city was completely demolished.

b-The city was not in its normal state.

**C.**The purpose of the text is for :

a-telling about one of the historical monuments

b-asking people to conserve the ruins of Sabratha

**D.**The ruins of Sabratha were built by :

a-the Romans

b-the Greeks

**5. What is the pattern of organisation of the text?**

**A)** a-descriptive

b-chronological order

c-descriptive and chronological order

**B) Give two examples**

.....  
.....

**6. What do the underlined words (taken from the text) mean?**

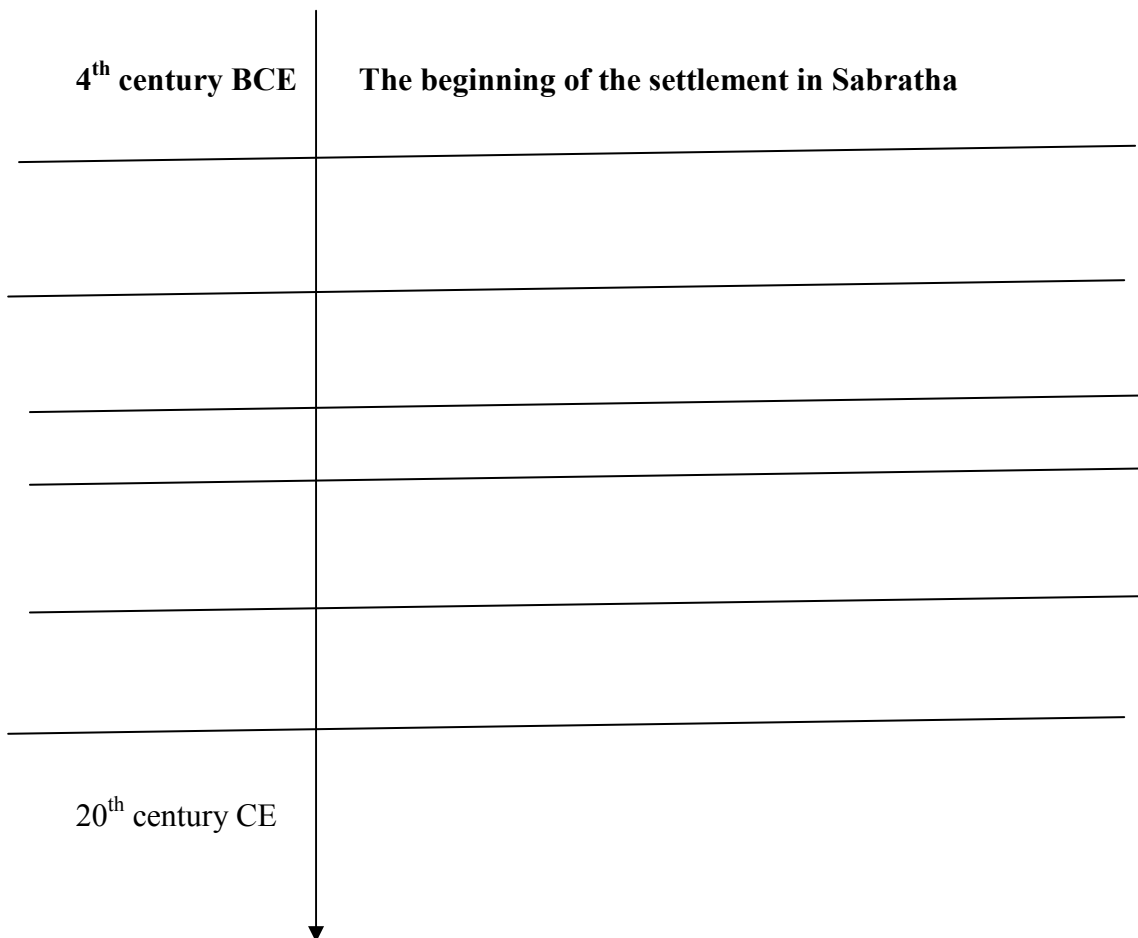
a- The majestic ruins of...(paragraph 1)

b-Sabratha was a thriving city.(paragraph 2)

c-...there was a violent earthquake.(paragraph 3)

d-...the buildings simply collapsed.( paragraph 3)

**7-Complete the following graphic organizer**



**08. Now, summarise the text in no more than five (5) sentences .**

.....

.....

.....

.....

.....

**APPENDIX E: Students' Sores of Pre-test and Post-test, Number of Scores,  
Means, and Standard Deviations**

Testees	Pre-testscores	Post-test scores
1	11	17
2	11.5	17
3	5,5	10
4	8	15
5	8.75	16,5
6	9,75	15,5
7	5,5	15
8	11,25	14,5
9	14,25	13
10	8.75	10
11	4.75	15
12	12	11,25
13	6,5	8,5
14	10,5	12
15	12	12,25
16	15,5	16,5
17	14,5	15
18	4	6,5
19	3,5	9,5
20	9.25	11,5
21	14,25	16,5
22	5,75	13,5
23	12.75	13,5
24	4.75	2.5
25	8.75	14,5
26	16	17,5
27	17,5	17,5
28	17	18
29	13.25	16,5
30	15,5	15,5
31	11	11
32	12.25	15,5
	Number 32	Number 32
	Total score <b>335.5</b>	Total score <b>433,5</b>
	Mean <b>10,48</b>	Mean <b>13,54</b>
	SD1 <b>3.95</b>	SD2 <b>3.52</b>

## Abstract

The present study sets as aim the study of the relationship between the use of reading strategies and the comprehension of EAP texts by suggesting a strategic-based approach within a pre-, during, and post-reading framework. The subjects in this study, ESP and AL students at the department of English at KasdiMerbah University of Ouargla, lack the awareness of the importance of using reading strategies to comprehend texts in their area of study, which results in their frustration towards reading, and consequently to the lack of access to content. The method used in the present study was descriptive analytical. We approached this issue by conducting a questionnaire, a pre-test, three training sessions, and a post-test. Findings show that the scores of the post-test are higher than the ones of the pre-test, that is the reading strategies improved to a great extent though without equal percentages. These results reflect the efficiency of the suggested approach despite the short period of tuition. To be sure of those results, we conducted a T-Test which confirmed the hypothesis that the use of reading strategies enhances EAP text comprehension.

**Keywords:** reading, reading strategies, EAP texts, comprehension

## ملخص

تهدف هذه الدراسة الوصفية التحليلية إلى إبراز تأثير استعمال استراتيجيات القراءة في فهم النصوص الأكاديمية الإنجليزية لطلبة السنة الأولى ماستر إنجليزية تخصص لسانيات تطبيقية و إنجليزية الاختصاص في جامعة قاصدي مرباح ورقلة . اقترحنا منهجا يركز أساسا على تدريس و تدريب الطلبة على كيفية استعمال إستراتيجيات القراءة في فهم النصوص الأكاديمية الإنجليزية قبل و أثناء و بعد الانتهاء من قراءة النص. اعتمدنا على أدوات البحث التالية: استبيان للطلبة، اختبار دراسة نص أولي، ثلاثة حصص للقراءة الموجهة، ثم اختبار دراسة نص ثاني. أفضت نتائج البحث إلى صحة الفرضية المقترحة وذلك من خلال نسب استراتيجيات القراءة التي تحسنت بنسب متفاوتة و العلامات التي تحصل عليها الطلبة. فقد فاق المتوسط الحسابي الثاني المتوسط الحسابي الأول. هذا يدل على أن المنهج المقترح كان ناجعا رغم المدة القصيرة للتطبيقات. فقد أكد الاختبار الإحصائي النتائج المتحصل عليها.

**الكلمات المفتاحية:** القراءة، استراتيجيات القراءة، النصوص الأكاديمية الإنجليزية، الفهم