Explicit Instruction of Reading Strategies That Enable EFL Learners to Achieve Comprehension in Reading: The Case of Third Year Lycée Learners

Dissertation Submitted to the Department of Foreign Languages in Partial Fulfillment of the Requirements for the Degree of MASTER (LMD) Sciences of Languages

Candidat: Chamseddine MAY
Encadreur: Dr. Larbi EL-KOLLI

Examineur: Prof. Hacene SAADI

2009/2010
Dedication

To my parents, my friends without exception and my relatives. To every one who has encouraged me and made me stronger.
Acknowledgements

I would like to thank my supervisor Doctor Larbi EL-KOLLI, who did his best to motivate me, and I am very grateful to him for his patience and his guidance.

I extend my thanks to the English Language lycée teachers and pupils of the 3rd year, who accepted to be part of my research.
Abstract

Reading is one of the most important skills to acquire knowledge in each discipline. In the information explosion times, a good English reading ability is indispensable. The present dissertation, aims at investigating the effects of explicit reading strategies instruction applied to 3rd year lycée pupils who study English as a Foreign Language.

We hypothesize, that if these learners truly understand some effective reading strategies, they will be able to use them more effectively and apply them appropriately for their meaningful reading comprehension.

In order to investigate this feature, we conduct an experimental design using a t-test as a statistical measure of the data. This test is a very helpful one, it helps to generate more reliable results which have been found to be highly significant. This means, that our hypothesis is a good one ie; explicit reading strategies instruction enable EFL learners to achieve reading comprehension.
LIST OF ABBREVIATIONS AND SYMBOLS

➢ **EFL**: English as a Foreign Language

➢ **ESL**: English as a Second Language

➢ **RS**: Reading Strategies

➢ **RSI**: Reading Strategies Instruction

➢ **N**: Number

➢ **Gr**: Group

➢ **MCQ**: Multiple-choice questions
LIST OF TABLES

Table 1: The Experimental Groups and The Control Groups’ Timing and Scores...27
Table 2: Means of the Control Group and The Experimental Group1’s Scores...29
Table 3: Means of the Control Group and The Experimental Group2’s Time...29
Table 4: Timing of the controle group and experimental group 1 in skimming Test...31
Table 5: Timing of the controle group and experimental group 1 in scanning Test...33
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>The Bottom-up and The Top-down Model Processing</td>
<td>10</td>
</tr>
<tr>
<td>Figure 2</td>
<td>The Interactive Model Processing</td>
<td>11</td>
</tr>
<tr>
<td>Figure 3</td>
<td>The Experimental Group 1 and The Control Group’s Scores in Skimming Test</td>
<td>28</td>
</tr>
<tr>
<td>Figure 4</td>
<td>The Experimental Group 2 and The Control Group’s Scores in Scanning Test</td>
<td>28</td>
</tr>
</tbody>
</table>
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>1</td>
</tr>
<tr>
<td>1. Statement of the problem</td>
<td>2</td>
</tr>
<tr>
<td>2. The aim of the study</td>
<td>2</td>
</tr>
<tr>
<td>3. Hypothesis</td>
<td>3</td>
</tr>
<tr>
<td>4. Tools of research</td>
<td>3</td>
</tr>
<tr>
<td>5. The structure of the study</td>
<td>3</td>
</tr>
<tr>
<td><strong>Chapter One: The Nature of Reading</strong></td>
<td>5</td>
</tr>
<tr>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>1. Definition of Reading</td>
<td>6</td>
</tr>
<tr>
<td>2. Reading comprehension</td>
<td>7</td>
</tr>
<tr>
<td>3. Models of Reading</td>
<td>7</td>
</tr>
<tr>
<td>3.1. The Bottom-up Model</td>
<td>8</td>
</tr>
<tr>
<td>3.2. The Top-down Model</td>
<td>8</td>
</tr>
<tr>
<td>3.2. The Interactive Model</td>
<td>9</td>
</tr>
<tr>
<td>4. Types of Reading</td>
<td>12</td>
</tr>
<tr>
<td>4.1. Intensive Reading</td>
<td>12</td>
</tr>
<tr>
<td>4.2. Extensive Reading</td>
<td>12</td>
</tr>
<tr>
<td>Conclusion</td>
<td>13</td>
</tr>
</tbody>
</table>
Chapter Two: Reading Strategies & Reading Strategies Instruction... 14

Introduction .............................................................................................................. 15
1. Definition of Reading Strategies ..................................................................... 15
2. The Importance of Reading Strategies .......................................................... 16
3. Some Reading Strategies ............................................................................... 16
   3.1. Predicting ..................................................................................................... 17
   3.2. Skimming ..................................................................................................... 17
   3.3. Scanning ....................................................................................................... 18
   3.4. Inferring ....................................................................................................... 18
   3.5. Guessing the meaning of unfamiliar words ............................................ 19
   3.6. Self Monitoring .......................................................................................... 19
4. Reading Strategies Instruction ....................................................................... 19
5. Explicit Strategy Instruction .......................................................................... 20
Conclusion .................................................................................................................. 20

Chapter Three: The Field Work ...................................................................... 21

Introduction .............................................................................................................. 22
1. Population .......................................................................................................... 22
2. The participants .................................................................................................. 23
3. The material ........................................................................................................ 24
4. The procedure ..................................................................................................... 24
Introduction

Reading is one of the primary skills students have to learn. Everyday, EFL students have many different texts to read, such as textbooks or other extracurricular reading materials. It is through reading that they acquire much of their knowledge and understanding of the different subject areas, and reading often forms the basis of follow-up work such as class discussions or homework tasks. It is for these reasons that it is essential for learners to have good English reading ability in order to understand what they have read. EFL learners may achieve the abovementioned characteristics successfully through the appropriate employment of effective reading strategies.

Cohen (1986) defined reading strategies as the mental process chosen by the reader consciously in order to achieve certain reading tasks. In addition to Cohen, Block (1986) believes that RS are a set of methods and techniques used by readers, so that they can achieve success in reading. However, McNamara (2007) sees that reading strategies refer to the different cognitive and behavioural actions readers use under the purpose of achieving comprehension in reading. Also, Gough (1985) claims that the bottom up processing involves a series of steps the reader has to go through i.e, a series that involve moving from a step to another one, departing from recognising the key features of every letter and then words, sentences until reaching the meaning of the text. On the other hand, other researchers focus on the top-down approach that is conceptually driven. This approach encourages students to use their background knowledge in order to make predictions about the texts they read Smith (1985).

A significant outcome of the use of reading strategies resides mainly in the capability to achieve meaningful reading. Reading strategies, such as prediction, skimming, scanning,
inferring, guessing the meaning of unfamiliar words and self monitoring are effective reading strategies, which enable EFL learners to achieve comprehension when reading successfully.

1. Statement of the problem

When comprehension breaks down, especially in a foreign or second language, students need to repair their comprehension. This is where the importance of reading strategies come in, so as to facilitate the reading process and give students a clear sense of what they are reading Sasson (2010).

The major problem we are coping with is that EFL learners when reading certain texts are unable to use certain effective reading strategies to access to the comprehension, and they show lack of understanding of these strategies. So, the question to be set is: does the lack of using appropriate and workable reading strategies lead to lack of understanding of texts ? or, does the true employment of appropriate reading strategies make EFL learners strategic readers who can read more effectively?

2. The aim of the study

The primary objective of this research is to raise the awareness of reading strategies in 3rd year lycée pupils.
3. **Hypothesis**

We hypothesize that if EFL learners truly understand some effective reading strategies, they will be able to use them more effectively, and apply them appropriately for their meaningful reading comprehension.

4. **Tools of research**

In our study, we opted for a reading comprehension test, in which participants encountered with an informative / expository text followed by three multiple-choice questions using two strategies, namely skimming and scanning. We aim at assessing the ability of participants in extracting meanings from texts. To confirm that, we have suggested to use t-test to compute the data obtained from the participants.

5. **The structure of the study**

The present study will be basically divided into three main chapters; chapter one and two will include the literature review, chapter three will be about the field work and results obtained from the reading comprehension test. The first chapter, will be devoted to the nature of reading as a study skill. It will comprise the nature of reading; definition of reading, its models, its types and definition of reading comprehension.

In the second chapter of the literature review, we will define what reading strategies mean, as well as reading strategies instruction and we will suggest some effective reading strategies, namely skimming, scanning, predicting, infering and guessing.
Finally, the last chapter of the research will be mainly an investigation of the effectiveness of some reading strategies applied to 3rd year lycée learners, and their effects on their achievement in reading comprehension.
Introduction

Reading is a very important skill. It helps people to learn, and acquire knowledge and experience everywhere and any time. Pang et al (2003) assumed that reading opens up new worlds and opportunities, as well as enables people to gain new knowledge, enjoy literature and do everyday things that are part of modern life, such as; reading the newspapers, job listing, instruction manuals, maps and so on. California (2005) states that reading is very essential to get success in our life, and that reading ability is highly valued and important for our personality, our social status, and being well economically. We start this chapter by showing some different views of some researchers and psychologists about reading and reading comprehension, and how every one of them defines it. Then, we follow by speaking about its models which are three main ones, the Bottom-up model, top-down model and interactive model. We conclude our chapter by speaking about types of reading followed by a conclusion.

1. Definition of Reading

Students have to be helped, in order to derive and extract meanings from a text. For this reason, teachers have to understand clearly the process of reading. Reading has long been investigated by many researchers and psychologists, who tried to give a conceptual view about the notion of reading. Generally speaking, we can say that reading refers to the active process of extracting and interpreting information and messages from different written materials.

Beck and Margaret (2005) described Reading as a complex process composed of a number of interacting sub-processes and abilities. Moreover, Pang et al (2003, p. 6) have defined reading as a “complex activity that involves both perception and thought”. Furthermore, reading is seen as a complex process of problem solving, which involves working to build up
a sense from a text, and not just a sense from the words and sentences written on the page, but it goes to ideas, memories and knowledge evoked by those words and sentences Schoenbach et al (1999).

2. Reading comprehension

Comprehension means building up meaning from words; it is the central both to academic and lifelong learning. According to (Snow, 2002, p. 7) reading comprehension is:

the process of simultaneously extracting and constructing meaning through interaction, and involvement with written language. It consists of three elements: the reader, the text and the activity or purpose for reading.

Comprehension is a process in which readers filter understanding through the lens of their motivation, knowledge, cognitive abilities and experiences. Effective readers have a purpose for reading, and use their background knowledge and experiences to relate to the text: readers don’t comprehend unless they draw connections between what they read and their background knowledge Tankersley (2003). Furthermore, Pang et al (2003) described reading comprehension as an active process a reader made to construct meaning from a text. This process which consists of using an interaction between a prior knowledge, and drawing inferences from the different words and expressions the writer uses, in order to comprehend information, ideas and viewpoints. Smith (1985) also believes that reading comprehension involves bringing a prior knowledge interacted with what s/he is reading, so that s/he can achieve comprehension.

3. Models of Reading

Reading models were mainly set to describe the way a reader uses to construct meaning from printed texts ie ; these models aim to find out how readers translate prints into meanings.
This issue has led to the raise of three main models of reading process: Bottom-up model, top-down model and Interactive model.

3.1. The Bottom-up Model

It is a view, which assumes that a reader first decodes graphic symbols into sounds in order to build up a meaning, and a sense of texts. Further more, this model refers to the view that reading is a process of building letters into words, words into sentences, phrases and then proceeds to the overall meaning.

Some researchers in psychology claim, that this model is described as being “data driven” and these data refer to letters and words, which are written on the page. Among those who stress on this model is Gough (1985) who claims, that the bottom up processing involves a series of steps the reader has to go through i.e., a series that involve moving from a step to another one, departing from recognising the key features of every letter and then words, sentences until reaching the meaning of the text. Dechant (1991) in his words sees that the bottom up models are those models which:

- operate on the principle that the written text is hierarchically organized (i.e., on the grapho-phonetic, phonematic, syllabic, morphemic, word and sentence levels) and that the reader first processes the smallest linguistic unit, gradually compiling the smaller units to decipher and comprehend the higher units (e.g., sentence syntax).

3.2. The Top-down Model

Unlike bottom-up model, the top-down model is a view, which assumes that a reader uses a prior knowledge and experience, as well as expectations in relation to the writer’s message during reading, in order to process information.
Top-down models are described to be “concept driven”. That is to say, ideas or concepts in the mind of a reader trigger information processing during reading. As in Smith’s words “The more you already know, the less you need to find out” (Smith, 1985, p. 15). In other words, the more readers know in advance about the topic and the text to be read, the less they need to use graphic information on the page. This kind of processing is used to interpret assumptions and draw inferences. Readers make conscious use of it when they try to see the overall purpose of the text, or get a rough idea of the pattern of the writer’s argument, in order to make a reasoned guess at the next step Nuttall (1982).

3.3. The Interactive Model

Interactive model, attempts to make the valid insights of bottom-up and top-down models work together. It seeks to account for both of bottom-up and top-down processing. This model suggests, that reading process is initiated by formulating hypotheses about meaning and by decoding letters and words.

According to Rumelhart (1977), reading is an interactive process, which includes both perceptual and cognitive process. In other words, this process consists of an interaction between a set of a variety of orthographic, syntactic lexical and semantic information, until the meaning is reached. In addition to that, Kamil and Pearson (1979) assert that readers during reading, result passive or active reading, depending on the strength of their hypotheses about the meaning of the reading texts, and topics ie ; if readers bring a great deal of knowledge to the text, their hypotheses will be strong, and that they will process the text actively. However, passive reading results when readers show a little experience and knowledge to the material. This occurs, because they depend much more on the print itself for information cues.
Figure 1: The Bottom-up and the Top-down Model Processing 
Figure 2: The Interactive Model Processing
4. Types of Reading

4.1. Intensive Reading

An early definition of intensive reading, states that its purpose is “to take a text, study it line by line, referring at every moment to our dictionary and our grammar, comparing, analyzing, translating, and retaining every expression that it contains” (Palmer, 1921, cited in Day and Bamford, 1998, p. 5). Most classroom instructors would define intensive reading more broadly, as did Aebersold and Field (1997). They assume that intensive reading is reading carefully, and thoroughly for maximum comprehension in which teachers provide direction and help before, sometimes, during and after reading followed by some exercises that require student to work on various types of texts.

4.2. Extensive Reading

Day (1993) defined extensive reading in very basic terms: “the teaching of reading through reading .. there is no overt focus on teaching reading. Rather, it is assumed that the best way for students to learn to read is by reading a great deal of comprehensible material” (p. 19). Palmer (1964) described extensive reading as “rapidly reading book after book.” Also, he contrasted it explicitly with intensive reading or “to take a text and study it line by line” (Palmer, 1964, p.111, cited in Day & Bamford, 1998, p. 5). These definitions focus on quantity of materials read. Another important aspect of the extensive reading definition, is connected to student choice and pleasure in reading. (West, 1931, cited in Day & Bamford 1998) saw that the purpose of extensive reading is to read in order to reach enjoyment. Finally, Aebersold & Field (1997) made a focus on reading for quantity and overall meaning with students’ choice and their role in raising the ability of improving their ability of reading.
Conclusion

From this chapter, we can say that reading is very important skill in which readers can extract and get several information through the written texts. Most of researchers agree on three models which are the bottom-up, the top-down and the interactive model, this latter which draws many intention toward it, because it is seen as the combination of the two previous models. Reading also, has two types readers use when reading, intensive and extensive reading. Furthermore, this chapter provides some views about reading comprehension, and how readers and what proficient readers do in order to achieve reading comprehension.
Chapter Two

Reading Strategies & Reading Strategies Instruction

Introduction ........................................................................................................... 15
1. Definition of Reading Strategies ................................................................... 15
2. The Importance of Reading Strategies ......................................................... 16
3. Some Reading Strategies ............................................................................. 16
   3.1. Predicting ............................................................................................ 17
   3.2. Skimming ............................................................................................. 17
   3.3. Scanning ............................................................................................... 18
   3.4. Inferring .............................................................................................. 18
   3.5. Guessing the meaning of unfamiliar words ........................................... 19
   3.6. Self Monitoring ................................................................................... 19
4. Reading Strategies Instruction ...................................................................... 19
5. Explicit Strategy Instruction ......................................................................... 20
Conclusion ......................................................................................................... 20
Introduction

EFL learners, have many goals to be achieved. Among these goals, Reading comprehension is one goal learners need to achieve successfully. Many researchers in the domain of reading comprehension, stressed the importance of reading strategies and their use in classes, in order to help learners to reach comprehension successfully when reading. This chapter will include some views about reading strategies and how the wide range of researchers have defined them with the stress on the importance of using them. Also, it includes some suggested strategies and their importance in reading comprehension. At the end of the chapter we devote to speak about reading strategies instruction and explicit reading strategies instruction.

1. Definition of Reading Strategies

Various views in the area of FL and L2 reading strategies have defined reading strategies depending on different perspectives. Some base their views of identifying reading strategies on what the various groups of readers are using of reading strategies whereas, others claim to identify them according to what they find and result through empirical and theoretical research ie.; what strategies are required to be used and applied depending on the learners’ needs.

In the context of reading comprehension, strategies can be defined as deliberate actions that readers take to establish and enhance their comprehension Jimenez et al (1996).

Cohen (1986) defined RS as a mental process chosen by the reader consciously, in order to achieve certain reading tasks. In addition to that, Block (1986) believes that RS are a set of methods and techniques used by readers, so that they can achieve success in reading.

According to (Mcnamara, 2007, p. 6), reading strategies refer to the different cognitive and behavioural actions readers use, under the purpose of achieving comprehension in reading.
Mcnamara explains this when he said:

A reading comprehension strategy is a cognitive or behavioural action that is enacted under particular contextual conditions, with the goal of improving some aspect of comprehension. Consider a very simple-minded strategy for purposes of illustration.

Researchers have suggested that EFL teachers have to be aware of the reading strategies and that they have to teach readers how to use different reading strategies Chamot et al (1999).

2. The Importance of Reading Strategies:

Most EFL/ESL learners often show some troubles and difficulties in reading certain texts. They always struggle with some texts, and find it problematic issue to achieve comprehension, and understand the content. Many psychologists and researchers, assume that those who always struggle with their reading, may lack the reading strategies that may help them to overcome their reading problems.

Many evidences has been shown the importance of reading strategies and their effective role in enhancing and developing reading comprehension. According to McNamara et al (2007), reading strategies instruction are indeed very effective for learners who show lack of knowledge in the domain of reading, as well as those with lower reading skill, and assume that they are strongly needed for these kinds of learners.

3. Some Reading Strategies:

Oxford (1990) has suggested six reading strategies from learning strategies. These strategies are very easy to be taught, very significant and useful ones, in order to make learners
familiar with each of them. The suggested strategies are as follows: predicting, skimming, scanning, inferring, guessing the meaning of unfamiliar words and self monitoring.

3.1. Predicting:

It is a technique, which most of researchers focused on, and considered it an essential one that must be used by readers to achieve comprehension when reading. Smith (1988) is one of those researchers who stressed the importance of predicting, and who claimed that it is the core of reading comprehension.

Prediction takes one common notion among researchers, as well as psychologists. They almost agree, that prediction refers to the use of prior knowledge about a topic, and combine it with the new material in the text ie: readers use what they know before, and relat it to the material at hand. In their words, Greenall and Swan (1986) assumed that before reading any passage, readers usually sub-consciously ask themselves what they know about the text, which makes it easier to see what information they already know about the time they read the text. Therefore, predicting is very effective technique to promote readers’ activation of their prior knowledge, which plays a very important role in reading process.

3.2. Skimming:

It is the most useful technique, used by readers to make a quick assessment. It is defined as glancing through written materials quickly, in order to get an overview of the content or, the intention of the writer or, how a material is organized Grellet (1981). For instance, one
doesn’t want to read the whole newspaper therefore, s/he makes a quick glance through the pages in order to get the main information.

3.3. Scanning:

Like skimming, scanning also requires a quick glance through a text. However, in this case the search is more focused. To scan, is to read quickly in order to look for a specific information or idea. In most cases, readers know what they are looking for therefore, they concentrate mainly on finding a particular idea or an answer that serve their needs. Scanning involves moving eyes quickly across the text, seeking a specific words and phrases. This mainly occurs in the words of (Grellet, 1996, p. 19) when he said:

when scanning, we only try to locate specific information and often we do not even follow the linearity of the passage to do so. We simply let our eyes wander over the text until we find what we are looking for, whether it be a name, a date, or a less specific piece of information.

3.4. Inferring

Knowing how to make inferences is very important, very valued and indispensable in reading. Inferencing requires actively interacting with the words in a sentence, and among sentences Kristin et al (2009). They suggested that inferencing includes such subskills as: (1) Pronoun reference (knowing what a pronoun in a sentence refers back to) (2) Forming hypotheses about what is coming next in the text (3) Guessing the meanings of unknown words or phrases (4) Forming impressions about character motives and behaviors across multiple locations in a text (5) Knowing the subtle connotations of words as they are used in particular contexts (6) Understanding cause–effect relationships of events mentioned at
different times in a text (7) Drawing upon background knowledge in order to fill in gaps within a text.

3.5. **Guessing the meaning of unfamiliar words**

Unknown words often create obstacles to EFL/ESL learners’ comprehension. They always try to find some solutions to deal with this problem.

Smith (1971) argued that the best way used to identify unfamiliar words in texts is to draw inferences from the rest of the text rather than looking it up in a dictionary. This view differentiates top-down processing from top-down processing in order to deal with unknown words, emphasizing the reader depends on the context to interpret words.

3.6. **Self Monitoring**

It refers to the awareness of using strategies when encountering with some written materials. Some psychologists, as well as researchers in EFL/ESL education, pointed out that EFL/ESL proficient readers showed more awareness of their use of strategies in reading English, than less proficient ones Kern (1988). In the reason that these proficient ones use metacognitive strategies which help them to use their background knowledge of the text.

4. **Reading Strategies Instruction**

Many studies conducted on reading instruction and reading strategies have stressed the effectiveness of RS and the role they play in promoting reading comprehension, and what
always led students to don’t comprehend texts and be poor readers is the reason that they
don’t posses knowledge about strategies. This is what Bereiter and Bird found in (1985).
Also, they indicated that RSI with a focus on comprehension monitoring, is very effective to
help poor readers to overcome their difficulties in reading. Furthermore, they used for strategy
instruction teacher modelling of strategies, followed by student practice in the form of group
work. Therefore, teachers have to be aware of specific RS. Readers will become effective
strategy users, through the appropriate application of explicit modeling in reading instruction
made by teachers. Readers will be good strategic users through explicit reading instruction,
and they will better understand how to use these strategies appropriately.

5. Explicit Strategy Instruction

It refers to the instruction of reading strategies in an explicit way. According to Beckman
(2002) every teacher is involved to describe to the learners the strategy and its purpose,
modeling its use and explain how to perform it, giving feedback, promoting the students’
ability to use the strategy and encouraging the continuity of using it in the different situations.

Conclusion

Without developing efficient reading strategies through explicit instruction to EFL
learners, they will find it even much more harder to grasp and learn new words and concepts
from written texts. It so important to know about how to use the different reading strategies
and how to apply them appropriately, because it allows EFL readers to widen their minds and
go deeply in the language through reading.
Chapter Three
The Field Work

Introduction ..................................................................................................................22
1. Population ...........................................................................................................22
2. The participants .................................................................................................23
3. The material .......................................................................................................24
4. The procedure ...................................................................................................24
5. The Treatment .................................................................................................25
6. Data analysis ....................................................................................................26
7. The Mean ..........................................................................................................29
8. The t-test ..........................................................................................................30
8.1. The Observed t Computation .....................................................................31
8.1.1. Skimming .................................................................................................31
8.1.2. Scanning ....................................................................................................33
9. Discussion of the observed t in skimming and scanning experiments ..........34
Conclusion ............................................................................................................35
Introduction

This chapter deals with the field work, in which it presents our study that aims to determine reading comprehension through explicit strategies instruction on the lycée pupils in Constantine, Algeria. In other words, we aim to see the effects of explicit strategies instruction on learners’ achievement in comprehending EFL written texts.

Our investigation, will be designed using an experiment that consists of; Group one, Group two and Group three. Group 1 participants, will be designed as the control group who receive no treatment, whereas Group 2 and 3 participants, will play the role of the experimental groups and receive further instruction and information from the part of the instructor about the text used in the experiment.

All the participants of the three groups are tested to investigate their reading comprehension, through using the Multiple-Choice Formats. In order to discuss the results obtained from the groups, we use the t.test for independent group design. This test is very useful and helpful one to conduct the obtained scores of the groups together, as well as to confirm if our hypothesis is true or false.

1. Population

To test if explicit reading strategies instruction would have a significant effect in increasing reading comprehension, an experimental study has been designed. The population involved in our study has been selected from 3rd year lycée pupils at “Saadi Tahar Harath” at Constantine. During the 2009-2010 academic year, a total of 272 pupil are enrolled as 3rd year learners. Most of the learners are 18 years old. At this level, pupils recieve English language as a module, they study every thing concerning this language ( grammar, vocabulary,
pronunciation...etc). Usually during the course, they are required to read certain texts from their English book followed by comprehension questions to be answered. Two hours per-week is the time devoted for this module except learners of “Languages” option who study English for five hours per-week. Most of the learners have studied EFL for seven years at least, “including 2009-2010 academic year”, four years at the elementary school and another three years at the lycée. We have chosen 3rd year lycée learners as our target population, because most of the time in the course they use reading comprehension tasks in the class in which the teacher asks them to read a text included in their English book, and then answering its questions. The second reason is that 3rd year lycée learners will have the “BAC” controls at the end of the year. Since English module control will include a text followed by some comprehension questions, it is for this reason that we have suggested to test their reading comprehension by applying some strategies before the BAC controls come.

2. The participants

This study, consists of 30 third year lycée learners chosen to be a sample. These participants are selected at random from different classes. The selected participants are divided into three main groups; Group 1, Group 2 and Group 3 with 10 learners in each group randomly assigned.

These participants were asked to read a text quickly and then answer some questions about the text using multiple-choice formats.
3. The material

We have selected a text from a web site specialized on reading strategies exercises. (See appendix 1) which is entitled “Pulp Friction”. It consists of three paragraphs. It is an informative/expository text, in which it reports some facts about how people destroy huge areas of forests to use the pulp of the trees in producing papers, which leads to make many kinds of animals, insects, as well as fish to be extinct. Also, this text reports some suggestions of some agriculturalists and environmentalists to use an alternative way to produce paper instead of using trees. All the groups are given the same text but, they encounter three different multiple-choice questions. All the groups’ exercises state “select the answer you think is correct” followed by three MCQs in which experimental group1 participants have to find quickly the main idea of each paragraph, and experimental group2 participants are required to select one answer from 4 suggested ones to answer the 3 questions. The control group participants are provided with one question selected from experimental group1’ exercise and two questions from experimental group2’ exercise.

4. The procedure

Our experiment has taken place in a lycée as it mentioned before. In this experiment, we will test the effect of skimming and scanning strategies on the 3rd year learners. Learners are given a text to read followed by comprehension questions namely, multiple-choice questions (appendix 1). We will apply skimming strategy on the experimental group1 and scanning strategy on experimental group2.

Each group is provided with 3 questions to answer, and they are asked to select the right answer in the three given questions choosing from 4 suggested statements in each question. All
the three groups work on the same text with different questions and we have set 5 points for every question i.e 15 points for all the questions.

We ask the experimental group1 to enter the class in which they are required to answer the questions as quickly as possible selecting from four options and we set the time they start working on the test and we adjust the time it took them to accomplish the test.

Concerning experimental group2 participants, we ask them to enter after experimental group1 gets out the class, and order them to answer the three questions as quick as possible choosing from 4 options, and adjust the time it took them to accomplish the test.

After experimental group2 gets out the class, we ask the control group to get on the class. Every participant has to answer the three questions always from 3 suggested statements, then we order them to start doing the test as quickly as possible with no treatment and no guidance from us.

5. The Treatment

We suggest skimming and scanning strategies as a treatment to be applied in our study. The first strategy “skimming”, will be applied on experimental group1 and “scanning” strategy, will be applied on experimental group2.

Members of experimental group1 are asked to read as quickly as possible the given text and then answer the 3 questions using skimming skill. This is done after they receive efficient information about this skill and the purpose of using it. The time we see that they have really understood everything about this skill, we ask them to start reading the text and answer the questions as quick as possible “the purpose of skimming”.


Skimming questions are marked on 15 points, 5 points for every question. We record the time every participant takes to complete the test.

After they receive efficient information about scanning skill and the purpose of using it, and after we see that they have really understood everything about this skill, experimental group2 is asked too to read as quick as possible the text “the purpose of scanning” and then answer the 3 questions using scanning skill. Like skimming, scanning questions are marked on 15 points i.e.; 5 points for every question. We record the time every participant takes to complete the test. The control group receives a text followed by 3 multiple-choice questions to be answered, selecting from 4 suggested statements. The first question is selected from experimental group1 questions i.e.; “skimming”, whereas the two other questions are selected from experimental group2 questions i.e.; “scanning”.

Participants in each group have to read one common text and answer the MCQs. Understanding the text will be reflected on what readers achieve of correct answers in a very short time because, the purpose to use skimming and scanning is to achieve reading comprehension in a very short time. So, participants’ reading speed is very important.

6. Data analysis

The following table includes the data of the three groups. These data are the scores marked on 15 points, and the recorded time every participant in each group has taken to finish the multiple choice questions.
<table>
<thead>
<tr>
<th>Control group scores</th>
<th>Timing per/ mnt</th>
<th>Exp group 1 Scores</th>
<th>Timing per/ mnt</th>
<th>Exp group 2 Scores</th>
<th>Timing per/ mnt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>4.05</td>
<td>1</td>
<td>10</td>
<td>3.20</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>4.18</td>
<td>2</td>
<td>5</td>
<td>3.25</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>4.29</td>
<td>3</td>
<td>15</td>
<td>3.40</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>4.49</td>
<td>4</td>
<td>10</td>
<td>3.55</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>4.56</td>
<td>5</td>
<td>15</td>
<td>4.01</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>5.18</td>
<td>6</td>
<td>15</td>
<td>4.05</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>5.29</td>
<td>7</td>
<td>5</td>
<td>4.12</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>6.03</td>
<td>8</td>
<td>15</td>
<td>4.20</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>6.45</td>
<td>9</td>
<td>10</td>
<td>4.49</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>7.13</td>
<td>10</td>
<td>15</td>
<td>5.06</td>
</tr>
</tbody>
</table>

Table 1: The Experimental Groups and The Control Groups’ Timing and Scores.

Table 1 presents participants’ scores and timing in the skimming and scanning test (see appendix 1). We aim to test readers’ comprehension through the multiple-choice questions given to every group. As it is mentioned in the above table.

The highest mark “score” achieved by the control group is 10/15, and the lowest one is 5/15. For both two experimental groups 1 and 2 the highest mark is 15/15, and the lowest mark is 5/15. Also, what concerns us, is that most participants of experimental group 1 and 2 answered more than two questions correctly in a less time rather than the control group, which most of its participants have achieved only one question in much more time. This indicates, that the two experimental groups when received more information about skimming “experimental group 1”, and scanning “experimental group 2” skills, they showed more ability to comprehend the written texts. To make our data more clear, the following graphs are designed to show the scores of the participants in each group:
Figure 3 : The Experimental Group 1 and The Control Group’ Scores in Skimming Test

Figure 4 : The Experimental Group 2 and The Control Group’ Scores in Scanning Test
In order to show the difference between the obtained scores of all the participants of the groups, calculating the mean of the groups’ scores will show to us more clearly the difference among the groups.

7. The Mean

To show the difference between the control group and the two experimental groups’ obtained scores, we have suggested to calculate the mean of every group, because it is seen as the easiest way to make that. The mean refers to the average obtained from the sum of a set of scores, divided by the number of these scores. All the groups have the same number of the scores i.e.; 10 scores. The following tables illustrate the means of the three groups, the control group and the two experimental groups:

<table>
<thead>
<tr>
<th></th>
<th>Control group</th>
<th>Exp group 1</th>
<th>Exp group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total of the scores</td>
<td>65</td>
<td>115</td>
<td>120</td>
</tr>
<tr>
<td>Mean of the groups</td>
<td>6.5</td>
<td>11.5</td>
<td>12</td>
</tr>
</tbody>
</table>

**Table 2 : Means of the Control Group and The Experimental Group1’s Scores.**

<table>
<thead>
<tr>
<th></th>
<th>Control group</th>
<th>Exp group 1</th>
<th>Exp group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total of the Time</td>
<td>51.56</td>
<td>39.33</td>
<td>24.92</td>
</tr>
<tr>
<td>Mean of the groups</td>
<td>5.15</td>
<td>3.93</td>
<td>2.49</td>
</tr>
</tbody>
</table>

**Table 3 : Means of the Control Group and The Experimental Group2’s Time.**
The above mentioned means indicate that the mean of experimental group 1 which is 11.5 and the mean of the experimental group 2 is 12 are higher than that of the control group which is 6.5 (table 2). Therefore, we can say that the scores of the experimental groups’ participants are much more higher than those of the controls.

A close inspection of the mean reaction time of the experimentals and the controls shows that the experimentals have performed much better the task at hand, than the controls. Mean reaction time of the controls is 5.15, whereas the experimental group 1’s mean is 3.93 and the experimental group 2’s mean is 2.49 (table 3). Thus, the obtained results are accepted in such way.

8. The t-test

To check whether our hypothesis stated at the beginning of this study is plausible in terms of statistical significance, we selected the t-test to be our statistical test because it is a powerful one. This test is used to draw statistical inferences from an experiment’s data. This test also gives us a formula for computing the value of the observed t. The formula of this test is as follows:

\[
t(n_1 + n_2 - 2) = \frac{(\bar{x}_1 - \bar{x}_2)\sqrt{(n_1 + n_2 - 2)n_1 n_2}}{\sqrt{(n_1 s_1^2 + n_2 s_2^2)(n_1 n_2)}}
\]

Whereas:

\(n_1\) means the number of the subjects in the control group; Gr1.

\(n_2\) means the number of subjects in the experimental group; Gr2&Gr3.

\(\bar{x}_1\) refers to the mean of the control group; Gr1.

\(\bar{x}_2\) refers to the mean of the experimental group; Gr2&Gr3.
$s_1^2$ refers to the variance of the control group; Gr1 scores.

$s_2^2$ refers to the variance of the experimental group; Gr2&Gr3 scores.

### 8.1. The Observed t Computation

Depending on control group and the two experimental groups’ obtained results of the “timing”, we suggest to use the t-test so that we confirm the significance or non-significance of our findings.

### 8.1.1 Skimming

<table>
<thead>
<tr>
<th>Control group</th>
<th>Timing / minute</th>
<th>Experimental group1</th>
<th>Timing / minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.05</td>
<td>1</td>
<td>3.20</td>
</tr>
<tr>
<td>2</td>
<td>4.18</td>
<td>2</td>
<td>3.25</td>
</tr>
<tr>
<td>3</td>
<td>4.29</td>
<td>3</td>
<td>3.40</td>
</tr>
<tr>
<td>4</td>
<td>4.49</td>
<td>4</td>
<td>3.55</td>
</tr>
<tr>
<td>5</td>
<td>4.56</td>
<td>5</td>
<td>4.01</td>
</tr>
<tr>
<td>6</td>
<td>5.18</td>
<td>6</td>
<td>4.05</td>
</tr>
<tr>
<td>7</td>
<td>5.29</td>
<td>7</td>
<td>4.12</td>
</tr>
<tr>
<td>8</td>
<td>6.03</td>
<td>8</td>
<td>4.20</td>
</tr>
<tr>
<td>9</td>
<td>6.45</td>
<td>9</td>
<td>4.49</td>
</tr>
<tr>
<td>10</td>
<td>7.13</td>
<td>10</td>
<td>5.06</td>
</tr>
</tbody>
</table>

Table 4: Timing of the controle group and experimental group 1 in skimming test
1. The two means of the control group and experimental group $x_1^-$ and $x_2^-$ are calculated using the following formula: $X^- = \frac{\sum x}{N}$

when we make the substitution, we find:

$x_1^- = 5.165$ and $x_2^- = 3.933$

2. $s_1^2$ and $s_2^2$ are calculated by using the formula: $s^2 = \frac{\sum x^2}{N} - \bar{x}^2$

If we substitute, we find:

$s_1^2 = 1.06$ and $s_2^2 = 0.34$

3. When we substitute the values of $x_1^-$, $x_2^-$, $s_1^2$, $s_2^2$, $n_1$, $n_2$ in the formula of the t-test we find:

$$t(n_1 + n_2 - 2) = \frac{(5.16 - 3.93)\sqrt{(10 + 10 - 2)10 \times 10}}{\sqrt{(10 \times 1.06 + 10 \times 0.34)(10 \times 10)}}$$

$t(n_1 + n_2 - 2) = 3.11$

4. Our critical value here, is 1.81 and the obtained value from the t-test is $t(n_1 + n_2) = 3.1$
In other words the t-test result is higher than the critical value.
8.1.2. Scanning

<table>
<thead>
<tr>
<th>Control group</th>
<th>Timing / minute</th>
<th>Experimental group1</th>
<th>Timing / minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.05</td>
<td>1</td>
<td>2.05</td>
</tr>
<tr>
<td>2</td>
<td>4.18</td>
<td>2</td>
<td>2.08</td>
</tr>
<tr>
<td>3</td>
<td>4.29</td>
<td>3</td>
<td>2.16</td>
</tr>
<tr>
<td>4</td>
<td>4.49</td>
<td>4</td>
<td>2.22</td>
</tr>
<tr>
<td>5</td>
<td>4.56</td>
<td>5</td>
<td>2.36</td>
</tr>
<tr>
<td>6</td>
<td>5.18</td>
<td>6</td>
<td>2.37</td>
</tr>
<tr>
<td>7</td>
<td>5.29</td>
<td>7</td>
<td>2.45</td>
</tr>
<tr>
<td>8</td>
<td>6.03</td>
<td>8</td>
<td>3.02</td>
</tr>
<tr>
<td>9</td>
<td>6.45</td>
<td>9</td>
<td>3.10</td>
</tr>
<tr>
<td>10</td>
<td>7.13</td>
<td>10</td>
<td>3.11</td>
</tr>
</tbody>
</table>

Table 5: Timing of the controle group and experimental group 1 in scanning test

1. Calculating the means of $x_1^-$ and $x_2^-$ using the following formula: $X^- = \frac{\sum}{N}$

Making the substitution, we find:

$x_1^- = 5.165$ and $x_2^- = 3.933$

2. Calculating $s_1^2$ and $s_2^2$ using the formula $s^2 = \frac{\sum x^2}{n} - \bar{x}^2$

If we substitute, we find:

$s_1^2 = 1.06$ and $s_2^2 = 0.65$
3. By making The substitution of the values of $x_1^-, x_2^-, s_1^2, s_2^2, n_1, n_2$ in the formula of the $t$-test we find:

$$t(n_1 + n_2 - 2) = \frac{(5.16 - 2.18)\sqrt{(10 + 10 - 2)10 \times 10}}{\sqrt{(10 \times 1.06 + 10 \times 0.65)(10 \times 10)}}$$

$t(n_1 + n_2 - 2) = 5.83$

4. Our critical value here, is 1.81 and the obtained value from the $t$-test is $t(18)=5.83$. In other words the $t$-test result is higher than the critical value.

9. Discussion of the observed $t$ in skimming and scanning experiments

The value yielded by skimming experiment is $t(n_1 + n_2)=3.11$ which indicates that it is quite significant, because it is higher than the critical value of 1.81, which means that the results are in the directions of our hypothesis. This means that learners who are accustomed to receiving further information explicitly, can deploy more efficient strategies to comprehend and understand concepts and words of the written texts.

Additionally, the value obtained during scanning experiment is $t(n_1 + n_2)=5.83$ which means that our hypothesis is very significant and that the more EFL learners receive explicit reading strategies instruction, the more they comprehend written texts.

The reaction time of the participants was found much quicker than the one of the controls. It is for this reason that, they comprehend better what we gave them of information and explanation about the two skills. So, this shows that they comprehend the purpose of both skills, i.e. to read quickly the text in order to find general idea “skimming”, and to look for a specific information “scanning”.


Finally, the observed t in both skimming and scanning test were found greater than the critical value. That is to say, the observed t 3.11>1.81 and 5.83>1.81. Thus, we can say that the predictions of the present research have been found to be true.

**Conclusion**

Reading Strategies Instruction has proved to be an effective and efficient method that helps EFL learners to develop their reading comprehension if they receive it explicitly.

EFL teachers, educators, course designers as well as researchers have to take into consideration the value of this method in improving EFL learners’ reading comprehension. They are asked to integrate this method in EFL setting with all learning levels so that EFL learners become able to achieve comprehension in reading texts at the early stages of learning English as a Foreign Language.
Appendix I

The Material

Pulp Friction

Every second, 1 hectare of the world's rainforest is destroyed. That's equivalent to two football fields. An area the size of New York City is lost every day. In a year, that adds up to 31 million hectares -- more than the land area of Poland. This alarming rate of destruction has serious consequences for the environment; scientists estimate, for example, that 137 species of plant, insect or animal become extinct every day due to logging. In British Columbia, where, since 1990, thirteen rainforest valleys have been clearcut, 142 species of salmon have already become extinct, and the habitats of grizzly bears, wolves and many other creatures are threatened. Logging, however, provides jobs, profits, taxes for the government and cheap products of all kinds for consumers, so the government is reluctant to restrict or control it.

Much of Canada's forestry production goes towards making pulp and paper. According to the Canadian Pulp and Paper Association, Canada supplies 34% of the world's wood pulp and 49% of its newsprint paper. If these paper products could be produced in some other way, Canadian forests could be preserved. Recently, a possible alternative way of producing paper has been suggested by agriculturalists and environmentalists: a plant called hemp.

Hemp has been cultivated by many cultures for thousands of years. It produces fibre which can be made into paper, fuel, oils, textiles, food, and rope. For centuries, it was essential to the economies of many countries because it was used to make the ropes and cables used on sailing ships; colonial expansion and the establishment of a world-wide trading network would not have been feasible without hemp. Nowadays, ships' cables are usually made from wire or synthetic fibres, but scientists are now suggesting that the cultivation of hemp should be revived for the production of paper and pulp. According to its proponents, four times as much paper can be produced from land using hemp rather than trees, and many environmentalists believe that the large-scale cultivation of hemp could reduce the pressure on Canada's forests.
The Reading Comprehension Test

1. Experimental Group 1

Select the answer you think is correct.

The main idea of paragraph one is:
- Scientists are worried about New York City
- Logging is destroying the rainforests
- Governments make money from logging
- Salmon are an endangered species

The main idea of paragraph two is:
- Canadian forests are especially under threat
- Hemp is a kind of plant
- Canada is a major supplier of paper and pulp
- Canada produces a lot of hemp

The main idea of paragraph three is:
- Paper could be made from hemp instead of trees
- Hemp is useful for fuel
- Hemp has been cultivated throughout history
- Hemp is essential for building large ships

2. Experimental Group 2

Select the answer you think is correct.

1. How many species of salmon have become extinct in BC?
   - 27
   - 31
   - 137
   - 142
2. How much of the world's newsprint paper is supplied by Canada?
   - 31%
   - 49%
   - 34%
   - 19%

3. What equipment on a ship was made from hemp?
   - Ropes
   - Waterproof cloth
   - Engine fuel
   - Life rafts

3. Control Group

1. The main idea of paragraph two is:
   - Canadian forests are especially under threat
   - Hemp is a kind of plant
   - Canada is a major supplier of paper and pulp
   - Canada produces a lot of hemp

2. How many species of salmon have become extinct in BC?
   - 27
   - 31
   - 137
   - 142

3. What equipment on a ship was made from hemp?
   - Ropes
   - Waterproof cloth
   - Engine fuel
   - Life rafts
References


The California State University. (2005). *Preparing Teachers to Teach Reading Effectively*.

Résumé

La lecture est l'une des compétences les plus importantes dans l'acquisition des connaissances. À l'époque de l'explosion de l'information, une bonne capacité à lire l'anglais est indispensable.

Le présent mémoire vise à étudier les effets de l'enseignement explicite des stratégies de lecture chez les lycéens de 3ème année (secondaire) qui étudient l'anglais comme langue étrangère.

Nous avonçons l'hypothèse qui stipule que si ces apprenants comprennent vraiment certaines stratégies efficaces en lecture, ils seront en mesure de les utiliser plus efficacement et de les appliquer de manière appropriée pour leur compréhension de la lecture.

Afin d'étudier cette fonction, nous effectuons un modèle expérimental qui utilise un t-test comme mesure statistique des données recueillies. Ce test est très utile car il permet de générer des résultats et significatifs. Cela signifie que notre hypothèse est bonne, à savoir l'enseignement explicite des stratégies de la lecture permet aux apprenants de l'anglais comme langue étrangère pour atteindre une bonne compréhension de la lecture.
ملخص

تعتبر القراءة واحد من أهم مهارات اكتساب المعرفة. ففي أوقات إنفجار المعلومات، حسن القدرة على قراءة الإنجليزية أمر لاغنى عنه.

يفيد هذا البحث إلى التحقيق في الأثار المترتبة عن الإستراتيجيات الواضحة لتعليم القراءة في طلاب السنة 3 ثانوي الذين يدرسون اللغة الإنجليزية كمادة وليس كتخصص.

نفترض أنه إذا فهم حقا هؤلاء الطلاب بعض إستراتيجيات القراءة الفعالة، فإنهم سوف يستخدمونها على نحو فعال، كما أنهم سوف يطبقونها على النحو المناسب من أجل فهمهم للمعنى عند القراءة.

من أجل التحقيق في هذه الميزة، قمنا بإجراء تصميم تجريبي يتكون من تجربة إحصائية. ويعتبر هذا الاختبار مفيدا جدا لأنه يمكننا من تجميع نتائج موثوقة والتي وجدت في الأخير معتبرة جدا. وهذا يعني أنه تمكنتنا جيدة أي أن التعليمات الواضحة لإستراتيجيات القراءة تمكن فعلا الدارسين للغة الإنجليزية كلغة أجنبية من تحقيق الفهم عند القراءة.