

**AKDENİZ UNIVERSITY**  
**THE INSTITUTE OF EDUCATIONAL SCIENCES**  
**THE DEPARTMENT OF FOREIGN LANGUAGE TEACHING**  
**ENGLISH LANGUAGE TEACHING MASTER’S DEGREE WITH**  
**THESIS**

**A QUANTITATIVE STUDY OF ELL AND ELT STUDENTS’**  
**POST-READING STRATEGIES**

MASTER OF ARTS THESIS

Tuba TAN

Antalya, August, 2016

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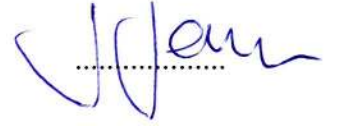


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**YÜKSEK LİSANS TEZİNİN ADI: İDE ve İDÖ Öğrencilerinin Okuma Sonrası Stratejileri Üzerine Nicel Bir Çalışma**

**ONAY:** Bu tez, Enstitü Yönetim Kurulunca belirlenen yukarıdaki jüri üyeleri tarafından uygun görülmüş ve Enstitü Yönetim Kurulunun ..... tarihli ve ..... sayılı kararıyla kabul edilmiştir.

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## ÖZET

### İDE VE İDÖ ÖĞRENCİLERİNİN OKUMA STRATEJİLERİ ÜZERİNE NİCEL BİR ÇALIŞMA

Tan, Tuba  
Yüksek Lisans, İngilizce Öğretmenliği Bölümü  
Tez Yöneticisi: Yrd. Doç. Dr. Hatice Sezgi Saraç  
Ağustos 2016, 98 sayfa

Bu çalışmanın amacı İngiliz Dili ve Edebiyatı (İDE) ve İngilizce Öğretmenliği öğrencilerinin (İDÖ) çalışma alanlarıyla ilgili akademik metinler okuduktan sonra kullandığı bilişsel okuma sonrası stratejilerini belirlemektir. Alan yazında okuma sonrası stratejilerini ölçen bir ölçme aracı bulunmadığından çalışmayı yürütmek için bir anket geliştirildi.

Anketi geliştirmek için, yabancı dil ve ikinci dil olarak İngilizce alanında alan yazın ve mevcut okuma stratejileri anketleri incelendi ve okuma sonrası stratejileri listelendi. Daha sonra anket üç uzman tarafından incelendi. Uzmanların yorum ve değerlendirmelerine göre anket maddelerinin ifadeleri düzenlendi ve biliş üstü stratejiler elendi. Son olarak ankete pilot uygulama yapıldı. Pilot uygulama sonuçlarına bazı maddeler düzenlendi.

Anket üç bölümden oluşmaktadır. Birinci bölüm katılımcılarla ilgili bilgi toplamaktadır. İkinci bölüm okuma sonrası stratejilerinin kullanımıyla ilgili bilgi toplamaktadır. Bu bölüm iki alt faktörden oluşmaktadır: *metne geri dönmeden* ve *metne göre dönerek*. Üçüncü bölümde öğrencilere kullandıkları başka oturma sonrası stratejilerin olup olmadığını soran açık uçlu bir madde bulunmaktadır. Açımlayıcı faktör analizi, doğrulayıcı faktör analizi ve Cronbach alfa analizi sonuçları anketin güvenilir ve geçerli bir araç olduğunu doğrulamıştır.

Akdeniz Üniversitesindeki birinci ve ikinci sınıf 226 İDE ve İDÖ öğrencisi çalışmaya katılmıştır. Bulgular öğrencilerin bilişsel okuma sonrası stratejilerini orta düzeyde kullandığını göstermiştir. Ayrıca öğrencilerin strateji kullanımında sınıf, bölüm, cinsiyet veya hazırlık eğitimi alıp almama bakımından farklılaşmadığı bulunmuştur.

**Anahtar kelimeler:** İkinci Dil, Yabancı Dil Olarak İngilizce, Okuma, Okuma Stratejileri, Okuma Sonrası

## ABSTRACT

### A QUANTITATIVE STUDY OF ELL AND ELT STUDENTS' POST-READING STRATEGIES

Tan, Tuba

Master of Arts, English Language Teaching

Supervisor: Asst. Prof. Dr. Hatice Sezgi Saraç

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The purpose of this study was to explore the cognitive post-reading strategies used by English Language and Literature (ELL) and English Language Teaching (ELT) students after they read an academic text in their area of study. Since there was not a post-reading strategy instrument in the literature, a questionnaire was developed to carry out the study.

In order to develop the questionnaire, second and foreign language reading strategy literature and previous reading strategy questionnaires were examined and post-reading strategies were listed. Then, three experts reviewed the questionnaire. The items were phrased and metacognitive strategies were eliminated according to their comments and evaluation. Finally, the questionnaire was piloted. According to piloting statistics results, several items were edited.

The questionnaire consists of three parts. The first part collects background information of the participants. The second part collects information on the use of post-reading strategies. This part consists of two subscales: *without referring back to the text* and *referring back to the text*. In the third part, there is an open-ended item which asks students to include any other post-reading strategies they use. Explanatory factor analysis, confirmatory factor analysis, and Cronbach's alpha analysis confirmed the questionnaire is a valid and reliable instrument.

226 freshmen and sophomores at ELT and ELL departments at Akdeniz University participated in the study. The findings showed that the students had a moderate use of cognitive post-reading strategies. It was also found that the students did not differ in strategy use in terms of grade, department, sex, or prep school education.

**Keywords:** L2, EFL, reading, reading strategies, post-reading

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## LIST OF ABBREVIATIONS

|       |                                         |
|-------|-----------------------------------------|
| AGFI  | Adjusted Goodness of Fit Index          |
| ANOVA | Analysis of Variance                    |
| CFA   | Confirmatory Factor Analysis            |
| CFI   | Comparative Fit Index                   |
| EAP   | English for Academic Purposes           |
| EFL   | English as a Foreign Language           |
| EFA   | Exploratory Factor Analysis             |
| ELL   | English Language and Literature         |
| ELT   | English Language Teaching               |
| ESL   | English as a Second Language            |
| GFI   | Goodness of Fit Index                   |
| KMO   | Kaiser-Meyer-Olkin                      |
| L1    | First Language                          |
| L2    | Second or Foreign Language              |
| NNFI  | Non-normed Fit Index                    |
| PCA   | Principal Component Analysis            |
| RMSEA | Root Mean Square Error of Approximation |
| SMRM  | Standardized Root Mean Square Residual  |

## **CHAPTER I. INTRODUCTION**

English has become the international language of travel, science, business, and socializing. For this reason, teaching of English has become an important profession and an important field of study around the world. Besides social functions, English is an essential qualification for most high-paid jobs. Therefore, students need English in their academic studies both for their future jobs and to be able to read resources in English in their academic fields. Reading enriches language learners' knowledge of vocabulary, form, and foreign language culture, and it improves their world knowledge. Reading texts are full of second language input that improves learners' language skills (Carrell, 1998). Carrell and Eisterhold (1983) state that reading teachers' primary goal in English as a Second Language (ESL) or English as a Foreign Language (EFL) is "to minimize reading difficulties and to maximize comprehension" (p. 566). Teaching reading strategies is a way achieving this. While students perform the complex task of reading, they manage cognitive, metacognitive, and motivational processes (Tercanlıoğlu & Demiröz, 2015), so they use cognitive and metacognitive reading strategies, because they help language learners and readers overcome comprehension problems, make use of a text more efficiently, and become better readers eventually. Strategies enable readers to elaborate, organize, and evaluate the information in the text (Carrell, 1998). The research has shown that the use of reading strategies make better readers (Auerbach & Paxton, 1997; Jiménez, 1997; Kern, 1989). Therefore, reading strategies are important to Second or Foreign Language (L2) reading.

### **1.1. Statement of the Problem**

Reading is an effective means of improving our command of language, so it is very important in foreign language classrooms (Nuttall, 2005). Reading strategies are crucial to reading instruction and to foreign language learners. However, most of the reading strategy questionnaires focus on while-reading stage (Sheorey & Mokhtari, 2001; Sarıçoban, 2002; Tsai, Ernst & Talley, 2010). For this reason, this questionnaire was developed in order to investigate the use of cognitive post-reading strategy use of EFL/ ESL learners.

### **1.2. Research Questions**

This study seeks answers to the following questions:

1. To what extent do English Language Teaching (ELT) and English Language and Literature (ELL) students at Akdeniz University use cognitive post-reading strategies?
2. Is there a significant difference in terms of post-reading strategy use between ELT and ELL students?
3. Is there a significant difference in terms of post-reading strategy use between male and female students?
4. Is there a significant difference in terms of post-reading strategy use between freshmen and sophomores?
5. Is there a significant difference in terms of post-reading strategy use between the students who received English instruction at the Department of Basic English and the students who did not?
6. Do the students use any post-reading strategies other than the ones listed in the questionnaire?

### **1.3. Significance of the Study**

Oxford (1990) states that assessing students' learning strategies is important, because the results enlighten teachers on how to design their strategy training so that they can improve the necessary strategies. She adds that teachers should share the results with students by giving them interpretive feedback during training. Reading strategy research is important, because it reveals how readers interact with texts and how the use of strategies influences comprehension (Cohen & Upton, 2007). With the help of the studies on reading strategies, we have information about what readers do or think before, while, and after they read and how they succeed or fail (Auerbach & Paxton, 1997; Khaokaew, 2012; Özek & Civelek 2006; Uzunçakmak, 2005). Post-reading stage is important in terms of what readers do with what they have read and how much they retain. There has not been a questionnaire or a scale specifically on post-reading in ELT research history. This questionnaire aims to meet this deficiency in the field.

### **1.4. Presumptions**

The presumptions in this study are as follows:

1. The students who participated in the study are presumed to have given sincere answers to the questionnaire.
2. The sample group is presumed to represent the universe.

### **1.5. Limitations**

This study is limited to freshmen and sophomores at ELL and ELT departments (N= 226) at Akdeniz University in 2015-2016 academic year. It is also limited to EFL students, so the native students who took the questionnaire were not included in the

analyses. As for the instrument, it consists of cognitive reading strategies students apply at post-reading stage. This study focuses on students' use of strategies subsequent to reading a text, specifically an academic text. It seeks to discover the strategies they use to interact with the text mentally and physically as Chamot and O'Malley (1987) describe. Therefore, the questionnaire of this study is aimed at cognitive strategies only. Finally, the study is limited to what the participants reported.

### **1.6. Definitions of Terms**

Reading: Decoding, comprehending, and interpreting a written text (Ögeyik, 2012).

Reading strategies: Processes learners use to improve their comprehension and to overcome comprehension breakdowns (Singhal, 2001).

Post-reading: The stage after a reader finishes reading a text.

Cognitive strategies: Mental processes which are associated with acquiring, storing, retrieving or using information (Williams & Burden, 1997 as cited in Özek & Civelek, 2006).

## **CHAPTER II. LITERATURE REVIEW**

In this chapter, the relevant literature on the reading strategies will be reviewed. First, definition of reading and reading strategies will be given, and reading skills and strategies will be compared. Second, types of reading, models of reading and classification of strategies will be covered. Third, characteristics of good and poor readers will be examined and reading strategies instruction will be discussed. Finally, related studies on reading strategies and reading strategy questionnaires will be presented.

### **2.1. Definition of Reading**

To Nuttall (2005), reading is a transfer of meaning from mind to mind, in other words the transfer of a message from the writer to the reader. Therefore, she states that the main purpose of reading is getting the message from the text. Reading requires several skills which help readers make meaning. To Ögeyik (2012), reading is comprised of decoding, comprehending, and interpreting processes. Decoding is recognizing the printed symbols that make up the word, but it is not enough to achieve reading, so it also requires understanding and interpreting the message (Ögeyik, 2012). According to schema theory, which emerged in the 1970s, readers also need their background information to make meaning of written language. Readers combine the syntactic and semantic information in the text with their background knowledge and construct their meaning. Reading for comprehension means that readers make meaning from the words in a text and achieve this consecutively at a reasonable speed without feeling the need to vocalize the text (Rivers, 1981). The thoughts that run through the readers' minds, their search and

struggle for meaning, the reflections and associations they make are at the core of the reading comprehension (Block, 1986).

Rivers (1981) describes the comprehension process as follows:

If they had a purely aural-oral introduction to the language, they must now learn to recognize the sound patterns represented by the graphic symbols and identify their combinations as language units already encountered. They must be able to recognize structural clues; the indicators of word classes ..., of persons and tenses of the verb; the words that introduce phrases and clauses and the particular modifications of meaning these indicate; the adverbs and adverbial expressions ...; and the indicators of interrogation and negation. They must be able quickly to distinguish word groupings and their relations with other word groupings (p. 266).

Furthermore, she adds that readers must operate these skills automatically in order to focus on the message in the text. Goodman (1967) states that readers use graphic, syntactic and semantic information while reading, and then, they predict and anticipate what is next in the text based on this information. In order to understand fluent reading process, six component skills and knowledge areas are identified by Grabe (1991):

1. Automatic recognition skills
2. Vocabulary and structural knowledge
3. Formal discourse structure knowledge
4. Content/ World background knowledge
5. Synthesis and evaluation skills/ strategies
6. Metacognitive knowledge and skills monitoring (p. 379).

Palincsar and Brown (1984) state that reading comprehension is the result of three elements in addition to decoding skills: well-written texts, the compatibility of text content and the reader's prior knowledge, and the strategies employed by the reader for comprehension, retention, and fixing comprehension failures.

In the 1960s, reading was regarded as a means to reinforce spoken language, and reading instruction focused on working on the grammar and vocabulary in the text or to study pronunciation (Silberstein, 1987 as cited in Grabe, 1991). Towards to the end of the 1960s, an increasing number of ESL students enrolled in the institutions in the United States and the United Kingdom, so the institutions needed to instruct them academic skills necessary for higher education. Therefore, in the 1970s, ESL teaching approaches started to change and give more importance to academic reading and writing (Grabe, 1991).

At the beginning, reading was perceived as a process of identification of letters and the language. When Goodman (1967) argued that reading was a psychological guessing game and it involved an interaction between the reader's mind and the language, this notion started to change. However, later more of the research on reading as a psychological guessing game theory has demonstrated that the theory is false (Grabe, 2009). In the 1970s, with the rise of the cognitive theories of reading, reading started to be accepted as a cognitive process (Hauptman, 1979). Schema theory gained importance, and top-down and bottom-up processes were also proposed in the 1970s. In addition, reading strategy research started in the late 1970s when several reading strategies were identified (Grabe, 2009). Hosenfeld (1977) carried out the first study of identifying the strategies applied by successful readers, and she explored several differences between good and poor readers.

In the 1980s, research focused on which strategies were more essential for reading comprehension and improved comprehension more (Pressley et al., 1989 as cited in Grabe, 2009). In addition, approaches to teaching reading such as direct instruction and reciprocal teaching were suggested in this decade. Researchers also started to study metacognitive strategies, training students on them, and their relationship with comprehension.

In the 1990s, Pressley et al. (1992) proposed transactional instruction of comprehension strategies. In transactional instruction teachers and students work as a group determining activities, when to use certain strategies, and constructing meaning together (Pressley et al, 1992). In this decade, the number of studies comparing First Language (L1) and L2 reading and strategy use started to increase. With the advances in the technology, the 2000s have brought a new aspect of strategy research which includes technology. For example, learners' strategy use on online reading, teaching reading, and teaching reading strategies using technology, such as computer programmes or the Internet, have been studied. Researchers also continue to investigate strategy use of different groups of learners.

## **2.2. Reading Strategies**

As defined by several researchers, reading strategies are/ a reading strategy is

- “the mental operations involved when readers approach a text effectively and make sense of what they read” (Barnett, 1988, p. 150)
- “plans readers use flexibly and adaptively, depending upon the situation” (Duffy & Roehler, 1987, p. 415)

- “processes used by the learner to enhance reading comprehension and overcome comprehension failures” (Singhal, 2001, p. 1).
- “a deliberate action that readers take voluntarily to develop an understanding of what they read” (Pritchard, 1990, p. 275)
- “a systematic plan consciously adapted and monitored, to improve one’s performance in learning” (Harris & Hodges, 1995 as cited in Afflerbach et al., 2008, p. 365)

Sheorey and Mokhtari (2001) highlight that strategies are deliberate and conscious. The use of reading strategies requires both the knowledge of the strategies and the motivation to use them (Carrell, 1998). To sum up, reading strategies are cognitive or metacognitive actions that help to comprehend a text.

The research suggests that students who use more reading strategies and use them more often comprehend better than those who do not (Kern, 1989; Khaokaew, 2012; Wong, 2010). For this reason, reading strategies are essential for L2 reading.

Sheorey and Mokhtari (2001) assert that the most important factors which affect strategy use are non-nativeness and reading ability. When students read texts in L2, they usually face several problems (Cotterall, 1990). First, foreign language learners do not identify the symbols of the words of which they have already heard the spoken form as learning to read in L1 (Rivers, 1981). In addition, EFL readers usually have less vocabulary and grammar knowledge than L1 readers (Grabe & Stoller, 2001). They might also lack cultural information in the texts and might not be familiar with text organisation (Grabe & Stoller, 2001). EFL learners can be misled by their native culture while interpreting EFL texts (Rivers, 1981). Reading for academic purposes is even more demanding, because readers try to both

understand and learn what they read. Reading strategies help learners overcome these problems.

Carrell (1998) states its importance by saying “strategic reading is woven into the very fabric of reading for meaning and the development of this cognitive ability” (p. 1). Reading research has shown that even low-level students can improve their reading through strategies and compensate for their lack of proficiency (Auerbach & Paxton, 1997; Carrell, Pharis & Liberto, 1989). When there is a comprehension failure during reading, readers must take their time, and they must apply strategies to fix it (Palincsar & Brown, 1984). Strategies can help readers with guessing the meaning of words and automatizing lower level (surface level) processing skills (Kern, 1989). Learners use reading strategies to facilitate learning or to facilitate comprehension (Singhal, 2001). In other words, application of reading strategies improves comprehension and foster learning.

Strategy use is also important while reading school-related texts especially for studying to help their comprehension and retention. Studying also requires planning strategies to learn and evaluating whether they work or not (Palincsar & Brown, 1984). Training students to be strategic and responsive readers also improves their academic reading, which leads to academic success (Sheorey & Mokhtari, 2002). Reading strategies show how readers interact with reading texts and how reading comprehension is affected by the use of strategies, so they attract researchers to study on them (Carrell, 1989). In conclusion, reading strategies are important for both EFL and English for Academic Purposes (EAP) reading.

### 2.3. Reading Skills vs Reading Strategies

The terms *skills* and *strategies* are sometimes confused, or they are used interchangeably. Differentiating skills from strategies is important to understand how learners deal with comprehension problems, how they acquire a skill and how to teach reading (Afflerbach et al., 2008).

Although one of the goals of reading instruction is automaticity and accuracy in skills, strategies precede skills (Afflerbach et al., 2008). Duffy and Roehler (1987) define skills as “procedures readers overlearn through repetition so that speed and accuracy are assured every time the response is called for” (p. 415). Reading skills are automatic and habitual, so readers do not control reading skills while they are using them nor they are aware that they are actually using them (Afflerbach et al., 2008; Carrell, 1998). Reading skills are applied to a text unconsciously for many reasons including expertise, repeated practice, luck, naive use, and compliance with directions (Carrell, 1998). On the other hand, reading strategies are processes readers use consciously to solve reading problems (Grabe, 2009). Strategies require active participation by the reader and they are selected deliberately to achieve particular goals (Carrell, 1998). An emerging skill can become a strategy when it is used deliberately and under control (Afflerbach et al., 2008; Carrell, 1998). Likewise, a strategy can go underground and become a skill (Paris, Wasik & Turner, 1991 as cited in Carrell, 1998). Grabe (2009) suggests that there is not a clear difference between two concepts. He gives an example saying some processes which are usually categorized as strategies, such as word analysis strategies, are sometimes used unconsciously by readers. When a strategy becomes a skill for a reader, it may

be impossible to observe, or the reader may fail to report it in a questionnaire because skills are automatic (Phakiti, 2003).

A study by Duffy et al. (1985) showed that when teachers explained how to use skills, students perceived skills as strategies to overcome comprehension problems, so it can be concluded that skills can be taught as strategies (Duffy & Roehler, 1987). When a text includes many unknown words, complicated syntax, unfamiliar topic or the following task is too difficult, students' reading skills may not be enough for comprehension (Afflerbach et al., 2008). In this case strategies help readers to overcome these difficulties. Successful reading requires employment of both skills and strategies. Therefore, strategy instruction must be a part of reading classes and learners must be able to combine skills and strategies.

## **2.4. Classification of Strategies**

There are numerous strategies proposed by researchers (Block, 1986; Sheorey & Mokhtari, 2002; Oxford et al., 2004; Padron & Waxman, 1988) and even though their points of views are similar, they are not the same (Barnett, 1989), which makes it difficult to come to a decent and concluding list of strategies.

### **2.4.1. Text-level and Word-level Strategies**

Barnett (1988) classifies reading strategies into two categories: text-level and word-level. Text-level strategies are applied when approaching the whole of a text (Uzunçakmak, 2005). Using background knowledge, predicting, using titles and pictures for understanding, reading with a purpose, scanning, and skimming are included in this category of strategies (Barnett, 1988). Word-level strategies are connected to word processing (Kantarıcı, 2006). Guessing meaning from context,

identifying the grammatical category of words, understanding reference words are examples of word-level strategies (Barnett, 1988).

#### **2.4.2. General Comprehension and Local Linguistic Strategies**

There are two levels of strategies as categorized by Block (1986): general comprehension and local linguistic strategies. General strategies involve comprehension-gathering and comprehension-monitoring strategies. The skills included in general strategies are anticipating content, recognizing structure, integrating information, questioning information in texts, interpreting texts, using general knowledge and associations, commenting on behaviour or process, monitoring comprehension, correcting behaviour, and reacting to texts. Local strategies are related to trying to understand linguistic units, and they involve paraphrasing, rereading, questioning meaning of clauses or sentences, questioning meanings of words, and solving vocabulary problems (Block, 1986).

#### **2.4.3. Local and Global Strategies**

Carrell (1989) describes global strategies as generalized, intentional reading strategies that set the stage for the reading, and she states that they are related to background knowledge, text gist, and textual organization. Examples to them are having a purpose in mind and previewing the text (Sheorey & Mokhtari, 2002). Carrell (1989) defines local strategies as bottom-up type or decoding strategies, and she adds that they are related to sound-letter, word-meaning, sentence syntax, and text details. An example to them is focusing on grammatical structures (Carrell, 1989).

#### **2.4.4. Cognitive and Metacognitive Strategies**

Grabe (2009) describes cognitive strategies as “strategies that a reader is trained to use” (p. 223). Williams and Burden (1997 as cited in Özek & Civelek, 2006) define them as mental processes which are associated with acquiring, storing, retrieving or using information. Students use cognitive strategies to transform or manipulate the language (Singhal, 2001). Learners interact with texts by working with them mentally, such as relating new information to previous one, and physically, such as making a summary of important information, while using cognitive strategies (Chamot & O'Malley, 1987). Cognitive strategies also involve techniques applied to a learning task (Chamot & Kupper, 1989). Cognitive strategies also help select important parts of a text and transfer this information to working memory to retain it (Weinstein & Mayer, 1983). Note taking, summarizing, paraphrasing, analysing, using contextual cues, predicting, guessing meaning, using prior knowledge, questioning, taking notes, rereading, inferencing, and translating are examples of cognitive strategies (Chamot & O'Malley, 1987; Chamot & Kupper, 1989; Singhal, 2001; Yaylı, 2010). Cognitive strategies are text-specific, so readers use different cognitive strategies for different texts.

Wong (2010) defines metacognition as “the knowledge and control people have of their own cognitive processes; the ability to reflect on their own thinking and use strategies to overcome learning difficulties” (p. 10). Flavell (1978 as cited in Carrell, 1989) recognised two dimensions of metacognitive ability as knowledge of cognition and regulation of cognition. Knowledge of cognition refers to readers’ awareness of their cognitive resources and readers’ compatibility with the text (Carrell, 1989), and regulation of cognition refers to the control of learning (Schraw, 1998). According to Sheorey and Mokhtari’s (2001) definition, metacognitive reading strategies are

intentional and carefully planned techniques that are used to monitor and manage reading. Metacognitive strategies involve processes in planning learning, monitoring comprehension and production, and evaluating the achievement of a learning objective (Chamot & O'Malley, 1987). Metacognitive strategies are also used to monitor or regulate cognitive strategies (Özek & Civelek, 2006). In other words, they have executive function over cognitive strategies, but metacognitive and cognitive strategies do not function independently of each other (Phakiti, 2003). Self-monitoring, error correction (Singhal, 2001), being aware of the cohesive ties, forming a hypothesis, ignoring and reading on (Yaylı, 2010) are examples of metacognitive strategies.

Metacognition is important, because instructed strategies do not work and learners cannot use them strategically if they do not realize their comprehension is breaking down (Carrell, 1998). In other words, it helps learners in managing their cognitive skills and realizing their weaknesses (Schraw, 1998). Strategy instruction aims to develop metacognition in students as well as cognition so that they can make meaning out of the text on their own and become autonomous learners (Hardin, 2001). While cognitive strategies are meant for a specific subject area, metacognitive strategies cover a variety of subject areas (Schraw, 1998). In other words, metacognitive strategies are related to readers' general reading behaviours or attitudes.

## **2.5. Good and Poor Readers**

Since Hosenfeld's (1977) study on successful and unsuccessful readers, there have been several studies to determine what strategies good readers use. Research data have revealed that good readers use strategies more efficiently than poor readers

(Sarıçoban, 2002; Tsai, Ernst & Talley, 2010; Yaylı, 2010; Yiğiter et al., 2005). Studying the difference between the reading habits of good and poor readers is important, because it helps us understand what strategies are necessary for successful reading and decide what to instruct in order to make poor readers good.

There are several characteristics of good readers which were identified by researchers. Hosenfeld (1977) discovered several strategies of a successful reader: keeping the meaning of the text in mind while reading, reading and translating in broad phrases, having positive self-concept, skipping words unimportant to general meaning, and using other words and context to decode unknown words. She also found out that trying to guess the meaning of unknown words is successful reader's last and a nonsuccessful reader's first choice to deal with unknown words.

Carrell's (1989) study revealed that the better reading performers said when they do not understand something in the text, they do not give up reading. This suggests that good readers are determined and motivated. Besides, Tercanlıoğlu (2002) found that successful readers have higher self-efficacy, which is readers' opinion of their ability to read effectively, and it helps readers deal with difficult texts and tasks calmly. They also use their background knowledge about the topic, the text type, and the author's and their own purposes to predict what to expect in the text in pre-reading stage (Duffy & Roehler, 1987).

Block (1986) also identified several characteristics of successful readers. The more successful group of students integrated information, recognized text structure, monitored comprehension, and searched for clues when they did not understand. As for poor readers, they have different reading habits from good readers. Carrell (1998) found that poor readers handle texts mostly at word level, have difficulty adapting to

different text, and rarely refer back to texts to monitor their comprehension. In addition, they usually complain that they lack concentration, get bored easily, and have difficulty with recalling what they have just read (Yiğiter et al., 2005).

There are also differences in the strategy use of between good and poor readers. Grabe and Stoller (2001, p. 195) states that “strategic readers understand the goals of a reading activity, have a range of well-practiced reading strategies at their disposal, apply them in efficient combinations, monitor comprehension appropriately, recognize miscomprehension, and repair comprehension problems effectively”. They add that strategic readers use strategies in combination rather than separately. Besides, good readers can create images that reflect their personal understanding of a text, summarize a text in their own interpretation, ask questions about information in text, and stop to figure out when they do not understand a part of text (Pressley et al., 1992). As stated in a study by Cohen and Hosenfeld (1981 as cited in Tercanlioğlu, 2002), good readers use both top-down and bottom-up strategies while poor readers may operate only at the word level. In addition, they try to guess meaning from context or look them up in a source book, try to figure out the writer’s point, summarize the text, comment on it, and reflect (Yiğiter et al., 2005). They can also use metacognitive strategies as well as cognitive ones to monitor and evaluate their comprehension during reading (Wong, 2010). According to the study by Padron & Waxman (1988), there were also strategies that affected reading achievement in a negative way. These strategies were writing down every word, reading as fast as you can, looking up words in the dictionary, skipping the parts you do not understand, saying every word over and over, thinking about something else while reading, and saying the main idea over and over again. Auerbach and Paxton (1997) also assert that when L2 readers think knowing all the words in a text is a must to understand it,

they use dictionaries a lot, they cannot transfer strategies from L1, they try to translate sentence by sentence, and they think they are poor readers because of their lack of proficiency. In another research by Anderson (1991), all readers reported using similar strategies when answering the questions; however, stronger readers used more strategies and tended to comprehend better and manage interactions with written text. He concluded that readers must know not only what strategy to use but also how to apply them. Strategy use could also be related to vocabulary and background knowledge; thus, beginner language learners may not be able to apply a strategy even if they know what strategy to use because of their lack of vocabulary and background knowledge (Anderson, 1991).

To conclude, good readers are more strategic. They can choose appropriate strategies for the situation and know how to apply that strategy. However, knowing the list of strategies will most probably not be enough for students to be successful readers. They should also realize whether a specific strategy works for them or not and they should be able to switch the ineffective strategy for another one. This requires the ability to pick the right strategy that suits their reading process. Being a skilled reader requires reading regularly over a long time, reading many different texts, a lot of practice of strategy application, monitoring reading process, and evaluating the effectiveness of strategies (Carrell, 1998). As it can be understood, it takes time and effort to be a strategic and good reader.

## **2.6. Reading Strategies Instruction**

The reader's comprehension of a text is influenced by his/ her practice of reading strategies as well as his/ her schemata, L1 reading skills, L2 proficiency, and his/ her interest, expectations, and aim (Barnett, 1989). Students can become successful

learners if they are helped to get aware of “(1) basic strategies for reading and remembering, (2) simple rules of text construction, (3) differing demands of a variety of texts to which their information may be put, and (4) the importance of activating any background knowledge” (Brown et al., 1981, p.20).

The goals of the reading instruction for teachers are to teach learners how to approach texts effectively; to arouse their conceptual readiness through pre-reading activities; to equip them with strategies to cope with difficult vocabulary, syntax and text organisation (Grabe, 1991); and to increase students’ ability of conscious reasoning about comprehension problems every of which might require a different action (Duffy & Roehler, 1987). Strategy training also aims to make readers consciously aware of the strategies they subconsciously apply in L1 reading so that they can employ them in L2 reading, too (Kern, 1989). The long-term goal for reading instruction is to help students become independent readers who can also read outside the class, learn from what they read (Carrell & Eisterhold, 1983), enjoy reading, and understand authentic texts without assistance (Nuttall, 2005).

In most reading classes, reading is studied through intensive reading activities where teachers help students understand texts and students answer comprehension questions after reading, but this kind of instruction does not teach students how to read (Macalister, 2011). Teaching reading and practising reading are different, so teaching student show to read requires developing their skills and use of strategies (Macalister, 2011). While planning reading instruction, teachers must analyse the sort of students, their foreign language levels, their reason to read, and a possible ideal programme for them (Nuttall, 2005). After these analyses, they should plan their teaching accordingly.

The success of strategy instruction depends to a large degree on three important criteria: the commitment teachers make to arm themselves with a set of strategies that have shown promise with all readers, particularly with struggling ones; how well instructors can model their own strategic thinking while reading; and how well they can convince their students that such strategies are useful in improving reading comprehension (Chiborowski, 1999, p. 46 as cited in Sheorey & Mokhtari, 2002). Teachers must be willing to devote an amount of time to strategy instruction, and instruction must be spread over a year since a single lesson or month would not be sufficient (Singhal, 2001).

#### **2.6.1. Guidelines for Strategy Instruction**

There are many issues to take into consideration when training readers to be strategic. In general, strategy training should be practical and useful for learners rather than theoretical and abstract (Oxford, 1990). In addition, teachers must model, explain, and guide, which lead to students' independent use of strategies and fluency (Afflerbach et al., 2008).

Strategies should be taught in isolation and directly, and then, students need to learn to combine them while reading (Barnett, 1989). In direct teaching, only a few strategies are introduced each time, and new strategies are added over the process. First, teachers model how to use the strategies using think-aloud technique (Block, 1986; Palincsar & Brown, 1984; Pressley et al., 1992; Scharlach, 2008). In this way, learners can model successful readers to understand and remember texts better (Palincsar & Brown, 1984). Through think-aloud, teachers can show learners what they think during reading, the questions they ask, how they make inferences, and what they do when they have a comprehension problem (Kern, 1989). They must

also explain why the strategies are helpful and when to use them, and they must constantly give feedback to the class or individuals while students apply the strategies (Pressley et al., 1992). Besides, they should revise the strategies from time to time (Grabe & Stoller, 2001).

As for what strategies to teach, particular skills and strategies should be given priority depending on student needs, educational context, and course objectives (Grabe, 1991). For example, some strategies are more useful in classroom work and some in independent work depending on activities, learners, and texts (Barnett, 1989). Research has shown that reading instruction is more effective when strategies are used in combination, key strategies are practised consistently, and strategies are instructed during reading and discussing the text (Grabe, 2009).

Teachers must know what students will probably find difficult in the text in order to help them deal with the text (Nuttall, 2005). It is important to teach a strategy when a problem that strategy can solve emerges, so students can appreciate the benefits of strategies (Nuttall, 2005). They must also determine the best task type in which a particular strategy can be applied, and they must observe students while they read in order to find out their strengths and weaknesses in strategy use (Singhal, 2001). In this way, teachers will be able to shape strategy instruction based on student needs.

Additionally, teachers should present strategies in different content areas so that students learn to apply them in different situations (Singhal, 2001). After teachers instruct the use of a strategy, they should provide their students with several different reading situations in which they can practice and reinforce the use of that strategy. Scaffolding expands students' metacognitive ability to transfer the strategies to their independent reading (Scharlach, 2008). When a strategy is learned and becomes a

skill, teachers should introduce more strategies (Afflerbach et al., 2008). Acquiring strategies might seem demanding to students and can take time, so teachers must plan motivating activities for students (Chamot & Kupper, 1989).

In order to be able to use strategies, students need to understand a certain amount of a text. For example, they cannot use guessing word meaning strategies unless they understand other words and syntax around the word. As Clarke (1980, p. 206) asserts, low language proficiency can “short circuit” comprehension of good readers and can cause them to employ poor reader strategies. Reading should be accompanied by clarification of grammar and vocabulary when necessary (Barnett, 1989) since difficult syntax can hinder comprehension (Nuttall, 2005). However, teachers must be careful about not turning their reading classes into grammar classes. Instead of explaining every unknown word and structure in texts, teachers should encourage students to deal with them without being discouraged by language difficulties (Yiğiter et al., 2005), because the meaning is central in a reading lesson (Nuttall, 2005). Teachers should teach grammar if it is necessary for text comprehension and the form occurs several times in the text (Grabe, 2009).

Carrell (1989) asserts that when second language students are often instructed only in reading skills and strategies, they do not become good at applying them, because they do not know why the strategies are important or understand where and when to use them. Thus, she suggests that students should also be instructed in awareness so that strategy instruction can yield more effective results. It is also stated by Brown (et al., 1981) that training both strategy and control, that is employing, monitoring, checking and evaluating the strategies, improves student performance more than strategy-only training and helps students to transfer their skills to similar learning

situations. Besides, teachers must also persuade students that strategy use will result in successful reading (Afflerbach et al., 2008).

To conclude, language learners have been found to benefit from direct strategy instruction and improve their reading. For example, one student in Auerbach and Paxton's (1997) study reported:

I can see a big change in myself as a reader from the beginning of the semester, because I find myself a goal for the reading, and I feel my reading skill just like reborn again. ... I don't feel lost in the reading anymore. Anyway I feel I am start to love to read the English, too. (p. 254)

#### **2.6.2. Post-reading**

Post-reading instruction extends ideas and information from the text and makes sure that ideas and information in the text are understood (Grabe & Stoller, 2001). Students give their opinions of the text and they reflect in post-reading. For example, they decide whether they agree or disagree with the writer's point. In post-reading, learners relate the text to outside world, respond to it personally, distinguish facts from opinions, discuss cause and effect relationships, compare and contrast the text with other texts, and evaluate characters, incidents, arguments and ideas in texts (Nuttall, 2005). In addition, students perform speaking and writing tasks by writing and speaking about the text (Gürses, 2002). The aims of the post-reading stage in EFL classroom practice are to help learners use the new knowledge in the text in similar contexts, to use all of the four skills to interpret and reflect on the text, to become familiar with the target culture, and to understand the main idea (Sarıçoban, 2002).

Post-reading activities include answering comprehension questions, vocabulary study, discussing author's purpose and line of reasoning, grammar study, and follow-up writing (Brown, 2001). Comprehension questions usually ask about details in the text, and students can usually answer them copying from the text without actually comprehending, so comprehension questions should be prepared depending on what a native speaker would gain and infer from the text (Barnett, 1989). In addition, question-answer exercises can be dull, so teachers should use various activities such as discussion (Barnett, 1989). Teachers can also use transfer activities instead of comprehension questions in this stage (Palmer, 1982 as cited in Macalister, 2011). In transfer activities students transform the information in the text into a different form (Macalister, 2011). For example, they can complete a chart or a table based on text information or compare their personal ideas and the writer's (Grabe & Stoller, 2001).

### **2.7. Related Studies on Reading Strategies**

Block (1986) investigated the comprehension strategies used by native and non-native college-level students while reading textbooks in English and the amount of information understood and remembered. 6 ESL and 3 native nonproficient readers participated in the study. Think-aloud was used to gather data. The relationship between strategy use and the information remembered was explored through student retellings. Multiple choice questions were used to measure comprehension. The readers were grouped into two according to the results: "Integrators" and "Nonintegrators" according to think-aloud results. Integrators developed their reading skills more while Nonintegrators were less successful (p. 482). The results suggested that ESL readers used the same strategies or patterns of strategies as native readers and there was a connection between strategy use and learning ability. Three

items in particular were found to help readers comprehend and remember academic prose: use of the extensive mode, use of integration, and a particular type of use of personal knowledge.

Auerbach and Paxton (1997) aimed to apply the results of the studies on reading strategies in the classroom and to guide students to inquire about their reading. In their study, the students were trained through a semester to use research tools and were involved in the data analysis so that they could explore their L1 and L2 strategies, see if new strategies work for them, and improve their decision-making and monitoring skills. The data showed that the students thought lack of proficiency was the biggest problem in L2 reading and it caused them to feel uncertain as they read. The students started developing strategies and combining them during the study. At the end of the term, the students assessed their reading and improvement by looking at their strategy logs, their journals, the initial exercises they did, and the feedback from the teacher's interviews. Final test results showed that the students developed awareness of strategies and improved their comprehension, self-confidence, and metacognition.

Sheorey and Mokhtari (2001) investigated the differences between reading strategy use of ESL and native speakers in academic reading. 150 native US and 152 ESL college students participated in the study. They found that the order of importance of reading strategy categories was the same for native and non-native speakers: cognitive, metacognitive, and support strategies. Another finding was that ESL readers reported using support strategies significantly more often than native readers. In fact, non-native readers were found to use more strategies of all categories despite not significantly. Native and non-native high-ability readers reported using strategies

more often than low-ability readers. Lastly, among native readers females were more aware of reading strategies while there was no gender difference among native readers.

Sarıçoban (2002) conducted a study on upper-intermediate level preparatory ELT students at Hacettepe University in Turkey in 2000- 2001 academic year in order to investigate the differences between successful and less successful readers' use of reading strategies in pre-reading, while-reading and post-reading stages. The results of the reading strategy inventory revealed that successful and less successful readers did not differ significantly in their use of pre-reading strategies, but they used some different strategies in while-reading and post-reading stages. Analysing strategies were found to be the most used strategies by successful readers in while-reading stage (Sarıçoban, 2002). In post-reading stage, two groups of readers differed in the use of two strategies: evaluating and commenting, which were preferred more by successful readers.

Phakiti (2003) studied the relationship between use of cognitive and metacognitive strategies and reading test performance. 384 students at a Thai university were given a multiple-choice reading comprehension achievement test. Their use of reading strategies was explored through a questionnaire. Finally, 4 unsuccessful and 4 highly successful students were interviewed. The results revealed that use of cognitive and metacognitive strategies and reading test performance were positively related. Besides, successful students reported using more metacognitive strategies.

Oxford et al. (2004) examined effects of a language task in strategy assessment and the relationship between strategy use and task difficulty. There were 36 college-level ESL participants. A revised version of the Reading Strategy Questionnaire employed

by Ikeda and Takeuchi (2000) was used to investigate strategy use in no task, easy task, and difficult task conditions. Low-proficiency group used more strategies in the difficult task than in the easy task and no task, whereas high-proficiency group used more strategies in no task than in the easy and the difficult task. No significant difference was found in terms of the overall strategy use across three task conditions or two proficiency levels.

Uzunçakmak (2005) investigated students' generic reading strategy use and the difference between successful and unsuccessful students' reading strategy use. The participants were 11 upper-intermediate level students of Department of Basic English at a university in Turkey. Two questionnaires and two stimulated recall tasks were used to collect data. The first questionnaire investigated generic strategy use. The second one investigated recall of strategy instruction of 17 successful and 17 unsuccessful students. The results showed that the students used 12 reading strategies frequently, but there was not a significant difference between successful and unsuccessful students in terms of use of reading strategies and recall of strategy instruction. However, successful readers were found to use more strategies in the stimulated recall of reading task performance.

Yiğiter, Sarıçoban and Gürses (2005) investigated the strategies used by good readers in pre-reading, while-reading, and post-reading stages in classroom learning. The subjects were ELT students in preparatory classes at Atatürk University in 2001-2002 academic year. The questionnaire by Sarıçoban (2002) was used to collect data. The data revealed that good and poor readers employed different strategies in pre-reading, while-reading, and post-reading. Good and poor readers differed significantly in three stages in pre-reading, six strategies in during reading, and three

strategies in post-reading stages. Good readers reported using these strategies more frequently.

Kantarıcı (2006) examined university students' repertoires of reading strategies, effect of top-down strategy instruction on their strategy performances, the strategies employed by students in reading processes, and the relationship between the students' reported frequency of strategy use and the employment of strategies in their reading practice. The study was carried out with 20 intermediate level preparatory students at Erciyes University in the spring semester of 2006. After the Reading Strategy Questionnaire was administered, the students were instructed top-down reading strategies. The instruction was followed by the second administration of the questionnaire, think aloud protocols, and interviews. Quantitative data revealed a significant increase in the use of top-down strategies and a decrease in the use of bottom-up strategies. However, the data from think aloud protocols and interviews showed that the students used bottom-up strategies more than top-down strategies.

Özek and Civelek (2006) conducted a study to determine the reading strategies generally used in pre-reading, while-reading, and post-reading stages by 1<sup>st</sup> and 4<sup>th</sup> year ELT students at Dicle University and to determine which strategies require to be improved. A self-report questionnaire and think-aloud protocol were used to collect data. The results show that the students used only one strategy in pre-reading stage: "relating the title to the text context" (Özek & Civelek, 2006, p. 1). The strategies they used the most in while-reading stage were: "using the dictionary parsimoniously, guessing the meaning of a word from the context, skipping some unknown words, thinking-aloud during reading, and assimilating the text with the background knowledge" (Özek & Civelek, 2006, p. 1). In the think-aloud protocols,

the students were found to use none of the strategies in post-reading stage although they reported using them in the questionnaire. In addition, preferences of cognitive reading strategies differed in terms of reading proficiency, age, gender, years of studying English, and school source.

Ho (2007) carried out a study to explore the EFL reading strategies used by vocational high school students in Taiwan, their attitudes toward EFL reading, and the differences in strategy use of proficient and less proficient students. 152 eleventh grade vocational high school students participated in the study. The data were collected through a questionnaire of EFL reading strategies and an interview guide. The results revealed that the compensation strategies category and translating strategy were used most frequently. Additionally, more proficient students and female students were found to use strategies more often.

Pritchard and O'Hara (2008) conducted a study to identify and compare the reading strategies bilingual readers use to make connections and comprehend texts in English and Spanish. Twenty bilingual students from 11<sup>th</sup> grade who were native in Spanish but proficient readers of both languages participated in the study. As they read the same text in both languages, their responses were tape-recorded and then transcribed. The researchers analysed their responses and labelled them as a strategy. After the identification of resultant strategies, four categories of strategies were determined: monitoring comprehension, establishing intrasentential ties, establishing intersentential ties, and establishing intertextual ties. The quantitative analysis results showed that the students used the same 12 strategies in both languages. In addition, when they were reading both texts, they used establishing intersentential ties and establishing intertextual more than two other categories. However, they used

the strategies in establishing intrasentential ties category more in the English text and the strategies in establishing intersentential ties more in the Spanish text.

Shang (2010) conducted a study in order to find out Taiwanese EFL learners' use of cognitive, metacognitive, compensation strategies, their perceived effect on self-efficacy, and the relationships between their reading strategy use and perceived self-efficacy on reading comprehension. The participants were 53 English-major freshmen from I-Shou University. Interviews and a questionnaire were used to collect data. Metacognitive strategies were found to be the most frequently-used type, followed by compensation strategies and cognitive strategies. A significant positive relationship between reading strategy use and self-efficacy was also found. Nevertheless, reading strategies and reading achievement were found to be unrelated.

Tsai, Ernst and Talley (2010) investigated the relationship between L1 and L2 reading strategy use in L2 reading comprehension in relation to preferred strategies, L2 proficiency and L1 reading ability. The subjects of the study were 222 undergraduate Chinese-speaking EFL students in Taiwan. The results indicated that skilled and less-skilled readers do not differ in strategy use in L1 reading. However, skilled readers employ more strategies in L2 reading than less-skilled readers, and they transfer strategies from L1 quite well. Less-skilled readers' use of strategies is different in L1 and L2. It was also found that L1 reading comprehension does not have a significant effect on L2 reading comprehension, which could mean that the participants employ L1 transfer mostly on a word level rather than text level as Tsai, Ernst and Talley (2010) suggested.

Yaylı (2010) investigated cognitive and metacognitive reading strategies employed by ELT students, using the think-aloud and retrospective protocols. 6 proficient and

6 less proficient ELT students in Turkey participated in the study. The findings showed that the proficient readers employed both cognitive and metacognitive strategies more often than less proficient readers. However, both group of readers used the same strategy types: 10 cognitive, 5 metacognitive strategy types.

Khaokaew (2012) explored the reading strategies Thai undergraduate English major students use and whether they can improve their reading skills and strategy use when they are taught reading skills explicitly. In their reading classes, experimental group was instructed for twelve weeks while control group was not. Experimental group reported using more strategies than control group after the instruction.

Naidu, Briewin and Embi (2013) carried out a study to investigate advanced level EFL students' preferences of reading strategies at a private university in Malaysia. According to the results of the needs questionnaire, the most-preferred strategies by students are as follows: skimming; making predictions about what will happen next; planning how to read the text, monitoring their work, and checking their understanding; reading several times until understanding; and paying attention to the text organisation.

To sum up, questionnaires and think-aloud technique are the most common ways to collect data on reading strategy use. As the results of these studies indicate, better readers use strategies more often, which suggests that success at reading and strategy use are positively connected. It can also be seen that reading strategy instruction increases the awareness and use of strategies.

## **2.8. Related Studies on Reading Strategy Instruments**

In L2 reading research, several questionnaires have been developed to see what strategies are employed by language learners, to what extent these strategies are employed, and whether a group of strategies are used more often or not. Developing a questionnaire by adapting an already existing one is also common. However, questionnaires have a disadvantage. They are self-report instruments, so results may not reflect actual use of strategies.

Barnet (1988) developed a questionnaire on perceived strategy use which consists of 17 text-level and word-level strategies recommended by specialists. There are four or five alternatives for each item, and they consist of effective and less effective strategies. The students are supposed to choose one strategy they use for each situation. The effective strategies are considered as correct answers. The instrument was piloted and edited before administration. The reliability and validity values are not stated. A negative point of this instrument is that students have to choose among the restricted number of alternatives even if their actual reading habits are different.

Padron and Waxman (1988) developed the Reading Strategy Questionnaire by adapting from Hahn (1984) and Paris and Myers (1981). It includes 14 items on cognitive reading strategies. It is a three-point Likert type scale. Students choose from always, sometimes, and never.

Carrell (1989) developed a questionnaire to measure metacognitive awareness about silent reading strategies both in first and second language. It is a 1-5 Likert scale and has 36 items. In the beginning, the participants are required to answer several demographic questions. There are four parts in the questionnaire. The first part has six statements related to learners' perceived ability and confidence to read in that

language. The second part has five statements about their use of repair strategies. In the third part, there are seventeen statements related to strategies they use to read effectively. The last part includes eight statements pertaining to aspects of reading that cause them to have difficulty while reading.

Ikeda and Takeuchi (2000) developed an EFL reading questionnaire. Its reliability is .86 Cronbach's alpha. There are 33 items in the questionnaire, and it is a five-point scale. The students are asked how often and what strategies they use in the questionnaire. The questionnaire is applied for three times: without a text, with an easy text and finally with a more difficult text. Oxford et al. (2004) adapted this questionnaire by rewording and reordering the items. Oxford et al.'s (2004) version is a rationale for task-based strategy assessment. Its reliability is .78. The questionnaire is Likert-type and has 35 items. There is only one post-reading and three pre-reading strategies in it, so it focuses on while-reading stage. The questionnaire is administered first with no task, then after an easy task, and finally after a difficult task as in Ikeda and Takeuchi (2000). Oxford et al (2004) suggest that these differences show task-based questionnaire are more purposeful, and we can get more detailed and contextualised image of students' strategy use.

Sheorey and Mokhtari (2002) designed an instrument in order to measure metacognitive awareness and perceived use of reading strategies of adolescent and adult ESL learners while they read academic texts. Survey of Reading Strategies was adapted from Metacognitive Awareness of Reading Strategies Inventory, which was for adolescent and adult readers but not specifically for L2 learners. Overall reliability of the inventory was .93. Survey of Reading Strategies has been field-tested, and it has proved to be reliable and valid. It aims to help students become

aware of the strategies they use and help teachers to assess students' awareness. The survey employs five-point Likert Scale and has three strategy categories: global strategies, problem solving strategies, and support strategies.

Sarıçoban (2002) designed an inventory to determine the reading strategies employed by language students at pre-, while-, and post-reading stages. The strategies at the inventory were adopted from Varaprasad (1997). There are six items for pre-reading, twenty-eight items for while-reading under the categories of annotating and analysing, and five items for post-reading stage. Participants respond by writing yes or no in the blanks next to each item.

Phakiti (2003) developed a questionnaire to determine cognitive and metacognitive reading strategies. The items were drawn from the literature in reading, learning, and test taking strategies. The questionnaire items are similar to Purpura's (1999 as cited in Phakiti, 2003), but they were adjusted to be suitable for a reading test. The questionnaire uses a 5-point Likert scale from never to always and has 35 items. It was piloted and analysed for reliability. Besides, two experts in metacognition evaluated the categories the items belonged. The reliability estimate of the strategies was acceptable.

A recent reading strategy questionnaire was designed by Ho (2007). The questionnaire was developed based on Cohen and Chi (2002) and Oxford (1990) by taking the items related to reading. The instrument investigates the frequency of reading strategies learners use. Learners choose from a scale of 1 (never use) to 5 (always use). There are 32 items under five categories: memory, cognitive, compensation, metacognitive, and social. The instrument was piloted prior to

administration and was revised by three professors who taught reading in EFL. It has .9159 internal consistency reliability.

Tsai, Ernst and Talley (2010) developed a reading strategies questionnaire by adapting the questionnaires by Block (1986), Taillefer and Pugh (1998), and Taraban, Rynearson and Kerr (2000). There are 36 items under five categories: textual context, reader response, concrete techniques, task perception, and local problem-solving techniques. The questionnaire is aimed to find out learners' knowledge and use of comprehension strategies in L2 reading. It is a five point Likert scale.

Khaokaew (2012) designed an instrument to collect data on reading strategies students employ. The instrument has four parts. The first part asks for student background information. The second part investigates reading strategies. There are 29 items with 6 point Likert scale (0= never, 5= always). The items are under pre-reading, while-reading and post-reading categories. The third part consists of seven open-ended questions that ask students' opinions about the reading strategies they use. The last part includes one open-ended question that asks if students have anything to add about their problems or strategies. In order to check validity, the instrument was evaluated by 5 PhD students in language and linguistics in UK. Then, it was checked by three experts at the Centre for Research in English Language Learning and Assessment. Finally, it was piloted before administration.

Naidu, Briewin and Embi (2013) adapted from Cohen et al. (2002) a needs questionnaire to investigate the reading strategies that EFL students prefer. The aim of the questionnaire was to help learners identify their preferred strategies. The questionnaire included 11 items and it used a four-point Likert scale. The options for

the items were as follow: this strategy doesn't fit for me, I have tried this strategy and would use it again, I use this strategy and like it, and I've never used this strategy but am interested in it.

## **CHAPTER III. METHOD**

This chapter covers the methodology of the study. First, research design and participants will be described. Then, developing process, piloting, validity, and reliability of the instrument will be explained. Finally, data collection and data analysis procedures will be covered.

### **3.1. Research Design**

This study seeks to find out to what extent ELT and ELL students at Akdeniz University use cognitive post-reading strategies, and whether there is a significant difference in terms of post-reading strategy use between ELT and ELL students, male and female students, freshmen and sophomores, and the students who studied at the Department of Basic English and the students who did not. In quantitative research, samples and populations are studied, and this research type depends on numerical data and statistical analysis (Gall et al., 2005). For this reason, quantitative research method was used in order to study cognitive post-reading strategies employed by ELL and ELT students. The questionnaire was developed by the researcher and administered to freshmen and sophomores at ELL and ELT departments (N=226) at Akdeniz University in 2015-2016 education year. The results were evaluated through SPSS version 20.0. In social sciences, triangulation is the process of validating the data collected with one data collection method by using other methods (Gall et al., 2005). Therefore, in order to achieve triangulation, qualitative data was also collected through the open-ended question in the last part of the questionnaire.

### **3.2. Participants**

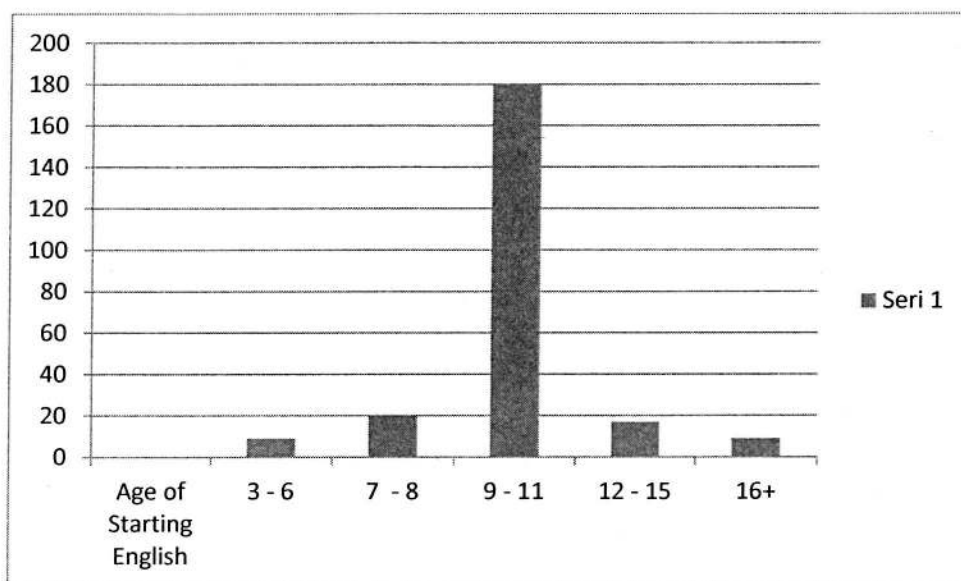
The participants in the study were freshmen and sophomores at ELT and ELL departments at Akdeniz University in Turkey. The reason why the study was carried out with ELL and ELT students was to discover post-reading strategy use applied by the learners whose study field is the foreign language. In addition, the study was carried out with freshmen and sophomores since the number of the possible participants was higher and the numbers of ELL and ELT students were closer in first and second grades. Three native speakers who took the questionnaire were not included in the analysis as the context of the study was EFL learners.

Table 3.2 on the next page shows the background information of the participants. The total number of participants studying ELT was 112 (freshmen: N=53 and sophomores: N=59) and the total number for ELL was 114 (freshmen: N=53 and sophomores: N=59). The participants' ages ranged between 18 and 40. There were both female (N=147) and male (N=79) students who participated in the data collection procedure of this study. 83 (34%) students received English instruction the Department of Basic English at university and 75 (95%) of them completed their instruction successfully. 143 (66%) of them passed the proficiency test at the beginning of the year and did not study at the Department of Basic English compulsory for ELT and ELL students.

**Table 3.2*****Background Information of the Participants***

|        | Department |    | Sex |    | Age |    | Study at the Department of Basic English |    | Success at the Department of Basic English |    |
|--------|------------|----|-----|----|-----|----|------------------------------------------|----|--------------------------------------------|----|
|        | f          | %  | f   | %  | f   | %  | f                                        | %  | f                                          | %  |
| ELT    | 112        | 50 |     |    |     |    |                                          |    |                                            |    |
| ELL    | 114        | 50 |     |    |     |    |                                          |    |                                            |    |
| Female |            |    | 147 | 65 |     |    |                                          |    |                                            |    |
| Male   |            |    | 79  | 35 |     |    |                                          |    |                                            |    |
| 18-21  |            |    |     |    | 171 | 76 |                                          |    |                                            |    |
| 22-25  |            |    |     |    | 44  | 20 |                                          |    |                                            |    |
| 26+    |            |    |     |    | 9   | 4  |                                          |    |                                            |    |
| yes    |            |    |     |    |     |    | 83                                       | 34 |                                            |    |
| no     |            |    |     |    |     |    | 143                                      | 66 |                                            |    |
| pass   |            |    |     |    |     |    |                                          |    | 75                                         | 95 |
| fail   |            |    |     |    |     |    |                                          |    | 4                                          | 5  |

Graph 3.2 on the next page displays the participants' ages of starting to learn English. Their ages of starting to learn English ranged from 3 to 20. In Turkey, students get primary education between the ages of 7 and 14. They usually study at high school between the ages of 15 and 18. As we can see in the table, the majority of the students (N=180) started to learn English at the age of 10 or 11, because English education start at 4<sup>th</sup> grade in government schools.



*Graph 3.2 The Participants' Ages of Starting to Learn English*

### 3.3. Setting

The majority of the participants (80%) started getting English instruction at the 4<sup>th</sup> grade. English instruction in Turkey starts at 4<sup>th</sup> grade at government schools, and students study English through primary school, secondary school, high school, and university. In order to study at ELT and ELL departments, students have to take the university entrance exam after high school and pass it. Before they start their education at their departments, they have to study at the Department of Basic English or pass the proficiency exam. The proficiency exam at Akdeniz University consists of 5 parts: language use, listening, reading, writing, and speaking. The students who study at the Department of Basic English at Akdeniz University take 725 hours of English class. The goal of the Department of Basic English is to develop students' grammar, vocabulary and four skills, and it educates them accordingly. Students are assessed in all of these areas via tests through and at the end of the year. ELL and ELT are four-year undergraduate programs in Turkey. ELL and ELT students have a

similar curriculum in their first year. Both group of students mainly study skills classes then. After their first year, ELT students take methodology classes such as Teaching English to Children, Approaches to English Language Teaching, and Teaching Foreign Language Skills. ELL students start taking literature classes such as the History of English Literature, Mythology, and British Novel.

### **3.4. Instrument**

A post-reading strategy questionnaire was designed in order to gather data to explore the cognitive strategies employed by ELT and ELL students after they read school-related materials in English in and outside the classroom. The design process began with reading the related on EFL/ ESL reading strategies. During the study of several previous reading strategy questionnaires, it was realized that there was a gap in post-reading stage in ELT studies. Most items in the questionnaires were related to while-reading stage and a post-reading questionnaire did not exist. Only five questionnaires were found to include a post-reading part: Khaokaew (2012), Auerbach & Paxton (1997), Oxford et al. (2004), Bezci (1998 as cited in Özek & Civelek, 2006), and Sarıçoban (2002). Those parts were not comprehensive since they had a limited number of items. Sarıçoban (2002) had five post-reading strategy items, Oxford et al. (2004) had one, Bezci (1998 as cited in Özek & Civelek, 2006) had five, and Khaokaew (2012) had three. As a first step, previous reading strategy questionnaires and reading strategy literature were studied. The questionnaires from which some of the items were taken are given in the Appendices (see Appendices 2, 3, 4, 5, 6, 7, 8, and 9). Several other strategies were drawn from the body of the articles. The strategies selected after the research are as follows:

- “revisiting pre-reading expectations; reviewing notes, glosses, text marking; making an outline, chart, map or diagram of the organisation of the text; retelling what you think the author is telling; relating the text to your own experience; responding to the text or critiquing it” (Auerbach & Paxton, 1997, p. 259).
- “I paraphrase (restate ideas in my own words) to better understand what I read, I critically analyse and evaluate the information presented in the text” (Sheorey & Mokhtari, 2002, p. 10).
- “I summarize it on my own words” (Oxford et al., 2004, p. 42).
- interpreting the text, questioning the information in the text (Block, 1986, p. 472).
- “I evaluate the text and the writers’ point” (Uzunçakmak, 2005, p. 118).
- “I monitor the comprehension results” (Ho, 2007, p. 86).
- “relate to personal experience, speculate beyond information presented in the text” (Pritchard & O’Hara, 2008, p. 632).
- “translate the text from English, reread the text once or more if I do not understand it, make notes on the main points as I remember them, evaluate my plans and goals for reading” (Khaokaew, 2012, p. 273).
- “summarizing, evaluating, synthesizing, commenting, reflecting” (Sarıçoban, 2002, p. 15).
- “summarizing, paraphrasing, analysing” (Singhal, 2001, p. 1).
- “classifying words according to their meanings, classifying words according to their grammatical category, summarizing the main ideas, re-reading the text to remedy comprehension failures, re-reading the text to remember important information” (Bezci, 1998 as cited in Özek & Civelek, 2006, p. 21).

- “I translated the reading texts and tasks into Thai; I read the texts and questions several times to better understand them” (Phakiti, 2003, p. 55).
- “paraphrasing, summarising, creating analogies, question answering, outlining a passage” (Weinstein & Mayer, 1983, p. 4).
- “explaining ideas to others” (Shang, 2010, p. 22).

Secondly, the strategies related to post-reading stage were selected out. The selected strategies were studied, and the identical strategies were combined as one item. Besides, since some of the strategies might refer to while-reading stage as well, they were rephrased and adapted for post-reading stage. Then, the strategies that refer to metacognitive stage were eliminated from the questionnaire. Three experts in the field were asked for their opinions of the strategies on the list. Then, the strategies that were regarded as substantially metacognitive were excluded according to their views and literature.

As the next step, the questionnaire was reviewed in terms of wording and appropriateness of the strategies by three experts at Akdeniz University EFL and ELL departments. The questionnaire was edited based on their comments and evaluation. One might consider some of the strategies in the questionnaire to be metacognitive as well. It should be kept in mind that metacognitive strategies are used to plan, monitor, and evaluate learning and comprehension. The way and why a reader uses a strategy can determine in some cases whether a strategy is metacognitive or cognitive. To give an example, paraphrasing is listed as a cognitive strategy by Singhal (2001). However, Mokhtari and Reichard (2002) list it as metacognitive in their questionnaire stating that paraphrasing is for the purpose of better understanding the text in their context. Additionally, it is possible for a reader

to use some of the strategies in the questionnaire such as item 4 also in while-reading stage. However, this questionnaire aims to find out whether they use it as a reading strategy after they read a text.

The questionnaire consists of three parts (see Appendix 1). The first part collects background information on the participants. This part asks about students' department, sex, year of birth, age of starting to learn English, education at the Department of Basic English and grade. The second part contains 15 post-reading strategy items. The items use 5-point Likert scale which ranges from 0 (never) to 4 (always). Likert type scale was chosen as participants can degree their use of strategies, which will enable data on popular and less popular strategies among them. Students read the statements and circle the number which describes their post-reading habits.

The second part is divided into two subscales. It investigates the strategies students use after they complete reading the text in the first subscale: check if my expectations and guesses before reading the text are correct or not; comment on what the author states in the text; relate the content or characters' experiences in the text to my own experiences in life by identifying similarities or differences; evaluate the writer's view point presented in the text; criticize the ideas stated in the text; read other texts written by the same author or by other authors to learn more on the same topic; discuss the content of the text with other people. The second subscale investigates the strategies they use when they go back to the text after reading: reread the important points which I think to be important; reread to fix my comprehension failures; translate either the whole text or some parts that I selected from the text; paraphrase some of the sentences or paragraphs from the text; summarize the whole text or some parts of the text; make an outline, chart, map or diagram by using the

content of the text; review my notes, underlined statements and text markings on the text; study the new vocabulary in the text.

In the third part, there is an open-ended item which asks students to include any other post-reading strategies they use which are not included as an item in the questionnaire. The aim of the third part is to discover possible new post-reading strategies and whether students use different strategies other than the ones listed in the questionnaire.

#### **3.4.1. Piloting**

The questionnaire was piloted in order to estimate validity and reliability. It was piloted at Akdeniz University School of Foreign Languages on the students of ELL and ELT (N= 67).

An explanatory factor analysis was carried out to determine the main factors of the scale items. The items were exposed to Analysis of Variance (ANOVA) with Tukey's Test for Nonadditivity and the results showed that the items possessed additivity ( $p < .001$ ). In addition, Hotelling's T-Squared Test validated that the scale items possessed homogeneity. Finally, Intraclass Correlation Coefficient criterion was tested and both the internal consistency for items ( $p < .001$ ) and the average measure ( $p < .001$ ) screened reliable results.

Construct validity of the scale was determined via exploratory factor analysis using Principal Component Analysis (PCA). Prior to PCA, the factorability of the scale was measured through the tests; Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity respectively. The KMO result was .80, which was acceptable. The Bartlett's test of Sphericity had a significant test value ( $p < .05$ ), which necessitated an explanatory factor analysis. Then, a factor analysis via PCA was carried out to

measure the construct validity of the scale. Four factors with eigenvalues greater than one were detected. The factors accounted for the total variance with a value of 63.241 % cumulatively. Each factor accounted for the total variance with the percentages of 21.195 %, 17.108 %, 15.446 %, and 9.492 % respectively.

The factor analysis was repeated with the fixed number of factor extraction. As a result of the repeated factor analysis, all the factors taking part in the Component Matrix were over .50 and the explained percentage of variance was 35.036. This was slightly over the acceptability criterion 30%. Consistent with these results, two items were supposed to be either reclaimed or discarded from the scale. Since the study was a psychometric one, the scale items were reclaimed instead of being discarded. Another two items were moved from the first part to the second part of the questionnaire, because they were found to be more valid in the second part. In this way, the validity of the scale was preserved.

#### **3.4.2. Validity of the instrument**

Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed in order to validate the questionnaire, to identify potential factors, and to identify the items that need refining or excluding.

Face validity was obtained through the evaluation of three experts at Akdeniz University from ELL and ELT departments. They reviewed the items to evaluate if the strategies in the questionnaire are cognitive, if they belong to post-reading stage, and if their wordings are appropriate. The items were edited according to their recommendations. The questionnaire was also presented in a language workshop at Akdeniz University (Tan, 2016), and it was reviewed by the participants from ELT and ELL departments.

### 3.4.2.1. Exploratory Factor Analysis

A questionnaire needs to meet the conditions for analysis before it is analysed. The number of participants needs to be 5 times more than the number of items in the questionnaire. Since the number of participants was 226, this condition has been met. In addition, the data need to have normal distribution. The collected data in the research have showed normal distribution ( $D_{(226)} = .874, p > .05$ ).

In order to test whether the data are appropriate for the analysis, Kaiser-Mayer-Olkin (KMO) coefficient and Barlet Test were performed. KMO coefficient value was .81, and Barlet Test value was 864.916 ( $p < .000$ ), which indicated altogether that EFA could be applied on the data.

In the literature, there is a common view that factor loading of an item must be higher than 0.32 (Çokluk et al, 2010). For this reason, .32 was set as the cut-off point. In order to determine factor loadings of the items, varimax rotation was used.

Table 3.4.2.1a on the next page displays item coefficients according to EFA results. As it can be seen, the items 1-8 belong to Factor 1, and the items 9-16 belong to Factor 2. However, there was one item that was ambiguous and had factor value lower than .32 (item 2). Therefore, this item was eliminated from the questionnaire, so the construct explained 42.37% of the total variance. The contents of the items that loaded under each factor were taken into consideration while naming the factors. The items in factor 1 (items 1-7) were found to be related to the strategies applied without referring back to the text after reading a text. Therefore, they evaluate students' use of strategies after they complete reading without referring back to the text. The factor loadings of the 7 items in factor 1 range from .73 to .36. The items in factor 2 (items 8-15) were found to be related to the strategies applied when referring

to the text after reading it. Therefore, they evaluate students' use of strategies when they go back to the text after they read. The factor loadings of the 8 items in factor 2 range from .77 to .44.

**Table 3.4.2.1a**

***Rotated Component Matrix (Item Coefficients)***

| Items   | Factor 1 | Factor 2 |
|---------|----------|----------|
| Item 1  | .361     |          |
| Item 3  | .654     |          |
| Item 4  | .719     |          |
| Item 5  | .737     |          |
| Item 6  | .715     |          |
| Item 7  | .501     |          |
| Item 8  | .404     |          |
| Item 9  |          | .664     |
| Item 10 |          | .520     |
| Item 11 |          | .526     |
| Item 12 |          | .723     |
| Item 13 |          | .770     |
| Item 14 |          | .695     |
| Item 15 |          | .698     |
| Item 16 |          | .446     |

*Notes:* Factor 1: without referring back to the text. Factor 2: referring back to the text

Table 3.4.2.1b below shows the factor variances. As the table indicates, factor 1 and factor 2 have higher variances (1.835 and 4.521). The eigenvalues are higher than 1, and the variances are higher than 5%.

**Table 3.4.2.1b**

***Factor Variances***

| Factors | Total | Variances % | Cumulative Variance % |
|---------|-------|-------------|-----------------------|
| 1       | 1.835 | 12.233      | 42.373                |
| 2       | 4.521 | 30.140      | 30.140                |
| 3       | 1.137 | 7.583       | 49.956                |
| 4       | .981  | 6.538       | 56.494                |
| 5       | .884  | 5.890       | 62.384                |

Figure 3.4.2.1 below demonstrates the scree plot results. The scree plot shows the eigenvalues as a graph. Both the analyses of factor variances and the scree plot have approved that the questionnaire has two factors.

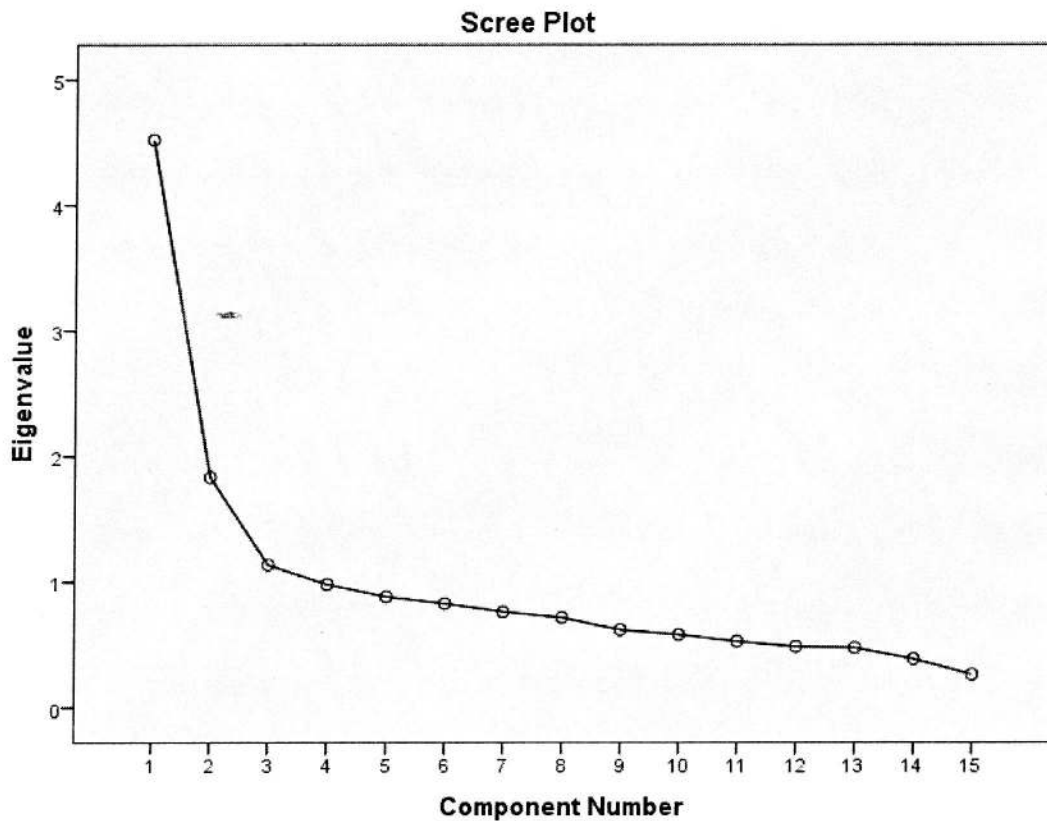


Figure 3.4.2.1 Scree Plot of the questionnaire

### 3.4.2.2. Confirmatory Factor Analysis

CFA was also performed to confirm the model of the questionnaire. CFA is used to test the hypothesis that there is a relationship between the observed variables and their underlying latent constructs (Suhr & Shay, 2009).

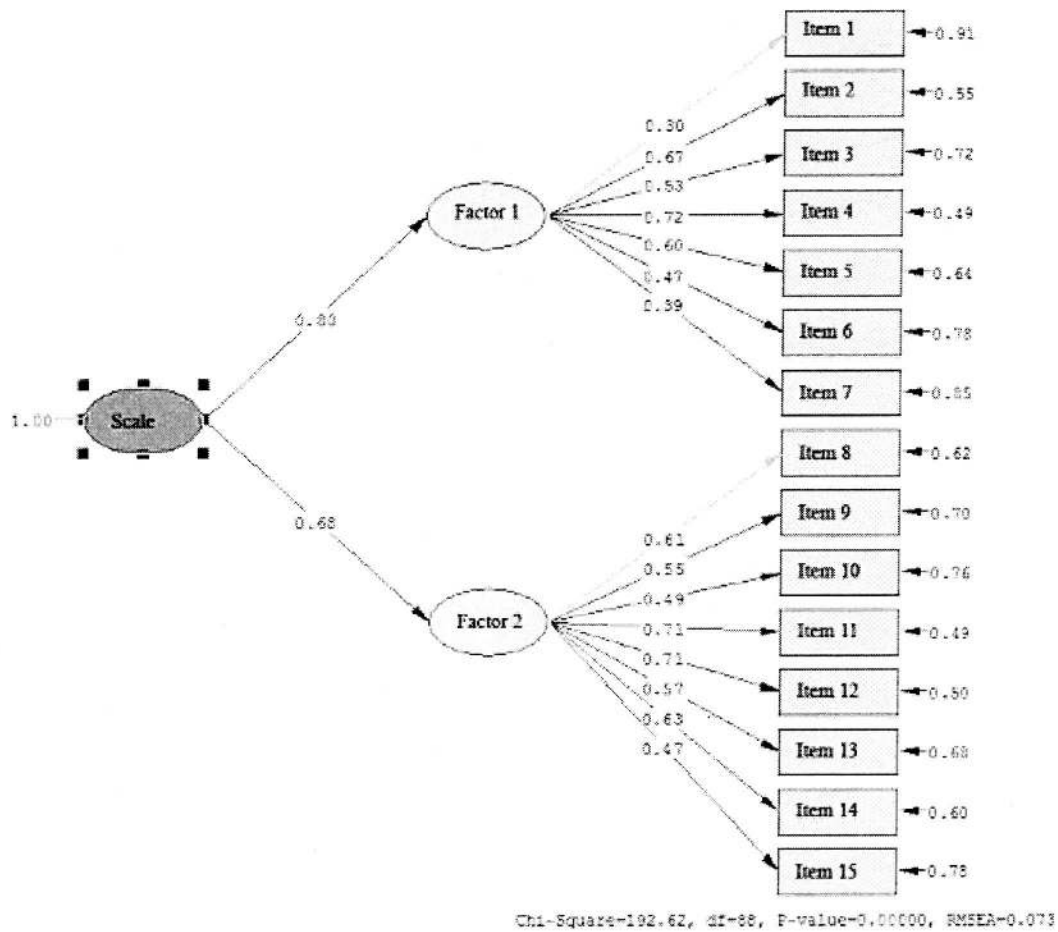


Figure 3.4.2.2 The Diagram of Confirmatory Factor Analysis Results

Figure 3.4.2.2 above shows the results of the CFA. The diagram demonstrates the correlation between the factors and the items, and the scale and the factors. As it is seen in the diagram, Factor 1 and Factor 2 are related to the scale with values of .80 and .68. In addition, the items are also consistent with their factors with values higher than .30.

P, which is the significance level, gives information on the significance of the difference between the expected covariance matrix and the observed covariance matrix. P value is expected to be significant in CFA (Çokluk et al, 2010). P value in the relevant study is  $p = .000$ ;  $p < .05$ , which indicates the difference between the

expected covariance matrix and the observed covariance matrix is significant. Fit indexes related to the model are shown in Table 3.4.2.2 below.

**Table 3.4.2.2**

***Fit Indexes Related to the Model***

| Index       | Perfect fit criterion           | Acceptable fit criterion       | Research finding | Result      |
|-------------|---------------------------------|--------------------------------|------------------|-------------|
| $\chi^2/sd$ | 0-3                             | 3-5                            | 2.18             | perfect fit |
| RMSEA       | $.00 \leq RMSEA \leq .05$       | $.05 \leq RMSEA \leq .10$      | .073             | good fit    |
| CFI         | $.95 \leq CFI \leq 1.00$        | $.90 \leq CFI \leq .95$        | .91              | good fit    |
| NNFI        | $.95 \leq NNFI (TLI) \leq 1.00$ | $.90 \leq NNFI (TLI) \leq .95$ | .91              | good fit    |
| NFI         | $.95 \leq NFI \leq 1.00$        | $.90 \leq NFI \leq .95$        | .90              | good fit    |
| SRMR        | $.00 \leq SRMR \leq .05$        | $.05 \leq SRMR \leq .08$       | .07              | good fit    |
| GFI         | $.95 \leq GFI \leq 1.00$        | $.90 \leq GFI \leq .95$        | .90              | good fit    |
| AGFI        | $.90 \leq AGFI \leq 1.00$       | $.85 \leq AGFI \leq .90$       | .92              | good fit    |

(Schumacker & Lomax, 1996)

In CFA, first Chi-squared ( $X^2$ ) goodness of fit test is performed. The ratio of chi square to its degrees of freedom below 3 indicates perfect fit and below 5 indicates good fit. (Kline, 2005) This ratio has been found 2.18, which shows the model has perfect fit.

Root Mean Square Error of Approximation (RMSEA) is the square root of the mean of the square of all of the error. It tells that the model has perfect fit when it is less

than .05, and the model has good fit when it is less than .10 (Steiger, 1990). RMSEA value has found to be .073, which shows the model has good fit.

Comparative Fit Index (CFI) is a fit index which compares the estimated covariance matrix and covariance matrix of the null model (Hooper et al, 2008). CFI values ranges from 0 to 1. A model with a CFI model between .95 and 1 indicates a good fit, and a value between .90 and .95 indicates an acceptable fit (Hu & Bentler, 1999). The questionnaire has a .91 CFI value and a good fit. CFI is the most commonly used fit index among structural equation models (Fan et al, 1999).

Normed Fit Index (NFI) was developed by Bentler & Bonett (1980) as an alternative to CFI. It analyses the fit between the hypothesized model and the null model. NFI value of the questionnaire is .90, and the Non-normed Fit Index (NNFI) value is .91, which also indicates a good model fit (Şehribanoğlu, 2005).

Goodness of Fit Index (GFI) measures the goodness of fit between the model and the data. It shows the general covariance between the observed variables calculated by the hypothesized model. GFI value ranges from 0 to 1. GFI value higher than .90 indicates a good model fit. It means enough covariance has been calculated between the observed variables. (Schumacker & Lomax, 1996). GFI value has been found to be .90 in the relevant study, which indicates a good model fit. Adjusted Goodness of Fit Index (AGFI) for the study is .92, which also confirms the good model fit.

Standardized Root Mean Square Residual (SRMR) value less than .05 indicates a good fit, and the value between .05 and .08 indicates acceptable fit (Hu & Bentler, 1999). The questionnaire in the study has .07 SRMR value indicating an acceptable fit.

When the results of CFA are considered, it can be asserted that the model is confirmed and the questionnaire serves its purpose. The results of the confirmed model prove the validity of the instrument.

### **3.4.3. Reliability of the Instrument**

Cronbach's alpha is a widely-used measure of homogeneity, and it is very useful to find out the reliability of attitude scales (Ary et al., 2010). For this reason, Cronbach's alpha coefficient was used to estimate the internal consistency coefficient of the instrument. The internal coefficient for the total sample is .83. The internal coefficient is .72 for factor 1 (without referring back to the text), and it is .81 for factor 2 (referring back to the text). According to the results of the analysis, the questionnaire is a reliable measure of cognitive post-reading strategies.

### **3.5. Data Collection**

In order to collect data, ELT (N= 112) and ELL (N= 114) students were given the post-reading questionnaire. After the necessary permissions were obtained from the authorities (Appendix 10 and 11), the questionnaire was administered in the Faculty of Education and the Faculty of Letters on the 24<sup>th</sup> and 25<sup>th</sup> of May 2016. The questionnaire was administered only in English since it is the medium of instruction in the participants' context and their field of study. The students were given the questionnaire in one of their classes. The questionnaire took around ten to fifteen minutes to complete. The researcher was present during the administrations.

### **3.6. Data Analysis**

The findings of this study include quantitative data. SPSS 20.0 was used to enter and analyse the quantitative data obtained via the questionnaire. T-tests were performed in order to examine students' reported use of post-reading strategies and whether significant differences existed in relation to background variables. There were few missing data, so they were ignored in the analysis.

The qualitative data were also obtained via the open-ended question in the questionnaire. The students were asked to write any other post-reading strategies apart from the ones in the questionnaire. 21 students replied to this part. Several of the strategies written by students were already in the questionnaire and several of them were not a post-reading strategy or a reading strategy. Therefore, 11 strategies reported by 9 students were found appropriate to be included in the results as new post-reading strategies. These students' answers were rephrased with elimination of irrelevant parts, and theme analysis was applied. Their replies were included in the results chapter.

## CHAPTER IV. RESULTS

This study was carried out at the end of the second term to investigate the perceived use of cognitive post-reading strategies after reading academic or school-related texts by ELL and ELT students at Akdeniz University. Besides, several analyses were performed to see whether students differ in strategy use according to their field of study, sex, and grade. This chapter presents the results of the data collected through the post-reading strategy questionnaire.

### 4.1. ELT and ELL Students' Use of Post-reading Strategies

Table 4.1a on the next page shows the mean scores of cognitive post-reading strategy use of the participants. According to the findings, the mean of the participants' use of the strategies range from 1.6027 to 2.9912.

The items in the questionnaire are as follows:

#### Factor 1: Without Going Back to the Text

1. check if my expectations and guesses before reading the text are correct or not
2. comment on what the author states in the text
3. relate the content or characters' experiences in the text to my own experiences in life by identifying similarities or differences
4. evaluate the writer's view point presented in the text
5. criticize the ideas stated in the text
6. read other texts written by the same author or by other authors to learn more on the same topic
7. discuss the content of the text with other people

#### Factor 2: Going Back to the Text

8. reread the important points which I think to be important
9. reread to fix my comprehension failures
10. translate either the whole text or some parts that I selected from the text
11. paraphrase some of the sentences or paragraphs from the text
12. summarize the whole text or some parts of the text
13. make an outline, chart, map or diagram by using the content of the text
14. review my notes, underlined statements and text markings on the text
15. study the new vocabulary in the text.

**Table 4.1a**

***T-test Results of the Participants' Use of Post-reading Strategies***

| Items   | N   | Mean   | Standard Deviation |
|---------|-----|--------|--------------------|
| Item 1  | 226 | 2.2035 | 1.00363            |
| Item 2  | 225 | 2.3733 | 1.07869            |
| Item 3  | 226 | 2.5088 | 1.09642            |
| Item 4  | 226 | 2.4513 | 1.02408            |
| Item 5  | 225 | 2.5733 | .98887             |
| Item 6  | 224 | 1.7723 | 1.18547            |
| Item 7  | 224 | 2.2813 | 1.09479            |
| Item 8  | 226 | 2.9912 | 1.00661            |
| Item 9  | 226 | 2.6770 | 1.00093            |
| Item 10 | 224 | 2.2143 | 1.27711            |
| Item 11 | 226 | 1.9381 | 1.17593            |
| Item 12 | 225 | 2.1511 | 1.13559            |
| Item 13 | 224 | 1.6027 | 1.12779            |
| Item 14 | 226 | 2.7522 | 1.08346            |
| Item 15 | 225 | 2.7422 | 1.12013            |

*Note:* Mean scores: 0 - 0.9 = low use, 1.0-1.9 = mild use, 2.0-2.9 = moderate use, 3.0-4.0 = high use (Adapted from Oxford et al., 2004)

As it can be seen in the table, ELL and ELT students reported using item 8 (rereading the important points) the most frequently (mean score= 2.9), and item 13 (making an outline, chart, map or diagram by using the content of the text) is their least preferred strategy (mean score= 1.6). Other most frequently used strategies are reviewing notes, underlined statements and text markings on the text (item 14); studying the new vocabulary in the text (item 15); rereading to fix comprehension failures (item 9); criticizing the ideas stated in the text (item 5); and relating the content or characters' experiences in the text to own experiences in life by identifying similarities or differences (item 3). The mean scores of these strategies are more than 2.5. Two more strategies were also found to be used less frequently than sometimes. These strategies are reading other texts written by the same author or by other authors to learn more on the same topic (item 6) with a mean score of 1.7 and paraphrasing some of the sentences or paragraphs from the text (item 11) with a mean score of 1.9.

**Table 4.1b**

***T-test Results of the Participants' Use of Post-reading Strategies in Each Factor***

| Factors  | N   | Mean    | SD      | t      | p    |
|----------|-----|---------|---------|--------|------|
| Factor 1 | 226 | 16.1062 | 4.58085 | -7.776 | .000 |
| Factor 2 | 226 | 19.0133 | 5.81682 |        |      |

Table 4.1b above shows the mean scores of post-reading strategy use of the participants in each factor. P value shows the significance level, and it gives information on the significance of the difference between two variables or groups. P value less than .05 indicates a significant difference. The findings show that there is a significant difference ( $p < .05$ ) between the participants' use of the strategies in

Factor 2 (referring back to the text) and Factor 1 (without referring back to the text). They reported using the strategies in Factor 2 more often with a mean score of 16.1. Standard deviation is 4.58085 for Factor 1 and 5.81682. T-value is -7.776.

#### **4.2. The Differences between ELT and ELL Students' Use of Post-reading Strategies in Terms of Department**

Table 4.2a below shows the differences of cognitive post-reading strategy use between ELT and ELL students. The results show there is no significant difference between ELT and ELL students in any of the items ( $p > .05$ ). The biggest difference is in item 7 (discuss the content of the text with other people) with a p value of .09, which is preferred more by ELL students yet the difference is insignificant ( $p > .05$ ). The smallest difference is in item 9 (reread to fix my comprehension failures), which is preferred by both group of students with very close degrees ( $p = .87$ ).

**Table 4.2a**

##### ***T-test Results of the Comparison of ELL and ELT Students' Use of Post-reading Strategies***

| Items  | Group | N   | Mean   | SD      | T      | p    |
|--------|-------|-----|--------|---------|--------|------|
| Item 1 | ELT   | 112 | 2.1786 | .97919  | -.370  | .712 |
|        | ELL   | 114 | 2.2281 | 1.03081 |        |      |
| Item 2 | ELT   | 111 | 2.2883 | 1.06504 | -1.168 | .244 |
|        | ELL   | 114 | 2.4561 | 1.09010 |        |      |
| Item 3 | ELT   | 112 | 2.5357 | 1.13842 | .364   | .716 |
|        | ELL   | 114 | 2.4825 | 1.05790 |        |      |
| Item 4 | ELT   | 112 | 2.4732 | 1.00413 | .318   | .751 |
|        | ELL   | 114 | 2.4298 | 1.04728 |        |      |
| Item 5 | ELT   | 111 | 2.5586 | .96939  | -.221  | .826 |
|        | ELL   | 114 | 2.5877 | 1.01154 |        |      |
| Item 6 | ELT   | 111 | 1.6667 | 1.20856 | -1.324 | .187 |
|        | ELL   | 113 | 1.8761 | 1.15830 |        |      |

| Items   | Group | N   | Mean   | SD      | T      | p    |
|---------|-------|-----|--------|---------|--------|------|
| Item 7  | ELT   | 112 | 2.1607 | 1.10326 | -1.654 | .099 |
|         | ELL   | 112 | 2.4018 | 1.07770 |        |      |
| Item 8  | ELT   | 112 | 2.9375 | .99803  | - .794 | .428 |
|         | ELL   | 114 | 3.0439 | 1.01659 |        |      |
| Item 9  | ELT   | 112 | 2.6875 | 1.01370 | .156   | .876 |
|         | ELL   | 114 | 2.6667 | .99260  |        |      |
| Item 10 | ELT   | 110 | 2.0909 | 1.26741 | -1.424 | .156 |
|         | ELL   | 114 | 2.3333 | 1.28067 |        |      |
| Item 11 | ELT   | 112 | 1.9107 | 1.13545 | - .346 | .730 |
|         | ELL   | 114 | 1.9649 | 1.21880 |        |      |
| Item 12 | ELT   | 112 | 2.0804 | 1.07501 | - .930 | .353 |
|         | ELL   | 113 | 2.2212 | 1.19324 |        |      |
| Item 13 | ELT   | 112 | 1.4821 | 1.13091 | -1.605 | .110 |
|         | ELL   | 112 | 1.7232 | 1.11670 |        |      |
| Item 14 | ELT   | 112 | 2.5982 | 1.06931 | -2.135 | .430 |
|         | ELL   | 114 | 2.9035 | 1.08055 |        |      |
| Item 15 | ELT   | 112 | 2.7946 | 1.09164 | .698   | .486 |
|         | ELL   | 113 | 2.6903 | 1.15015 |        |      |

Table 4.2b below displays the mean scores of all items in the questionnaire as reported by ELT (N= 112) and ELL (N= 114) students. While the mean score of post-reading strategy use by ELT students is 34.34, it is 35.87 for ELL students. The findings indicate that there is no significant difference in cognitive post-reading strategy use between ELT and ELL students ( $p = .19$ ;  $p > .05$ ).

**Table 4.2b**

***T-test Results of Mean Scores of All Items Reported by ELT and ELL Students***

| Groups | N   | $\bar{X}$ | SD   | T      | p    |
|--------|-----|-----------|------|--------|------|
| ELT    | 112 | 34.34     | 8.61 | -1.303 | .194 |
| ELL    | 114 | 35.87     | 9.01 |        |      |

#### 4.3. The Differences between ELT and ELL Students' Use of Post-reading Strategies in Terms of Sex

Table 4.3 below shows the mean scores of cognitive post-reading strategy use by female (N= 138) and male (N= 88) students of ELT and ELL. The mean score of post-reading strategy use is 35.94 for female students and 33.81 for male students. The findings indicate that female students use the strategies slightly more often than male students ( $p = .077$ ). However, the difference is not significant ( $p > .05$ ). Standard deviation is 8.91 for female students and 8.60 for male students. T-value of the groups is 1.777.

**Table 4.3**

*T-test Results of the Comparison of Female and Male Students' Use of Post-reading Strategies*

| Groups | N   | $\bar{X}$ | SD   | T     | p    |
|--------|-----|-----------|------|-------|------|
| Female | 138 | 35.94     | 8.91 | 1.777 | .077 |
| Male   | 88  | 33.81     | 8.60 |       |      |

#### 4.4. The Differences between ELT and ELL Students' Use of Post-reading Strategies in Terms of Grade

Table 4.4 on the next page demonstrates T-test results of freshmen's (N= 110) and sophomores' (N= 116) use of cognitive post-reading strategies. While freshmen students at ELL and ELT departments use the strategies with a mean score of 35.03, sophomores use the strategies with a mean score of 35.19. The findings show that there is no significant difference between freshmen' and sophomores' use of post-reading strategies ( $p = .89$ ;  $p > .05$ ). While standard deviation is 9.20 for freshmen, it is 8.51 for sophomores. T-value is -0.137.

**Table 4.4*****T-test Results of the Comparison of Freshmen and Sophomores' Use of Post-reading Strategies***

| Groups     | N   | $\bar{X}$ | SD   | T     | p    |
|------------|-----|-----------|------|-------|------|
| freshmen   | 110 | 35.03     | 9.20 | -.137 | .891 |
| sophomores | 116 | 35.19     | 8.51 |       |      |

**4.5. The Differences between ELT and ELL Students' Use of Post-reading Strategies in Terms of Receiving Instruction at the Department of Basic English**

Table 4.5 below shows T-test results of post-reading strategy use by ELL and ELL students who studied (N= 76) and did not study (N= 150) at the Department of Basic English at the university. The mean score of post-reading strategy use is 35.43 for the students who studied at the Department of Basic English and 34.96 for the students who did not study. The results indicate that there is no significant difference between the students who studied at the Department of Basic English and the students who did not study ( $p = .70$ ;  $p > .05$ ). Standard deviation is 10.28 for the students who studied at the Department of Basic English and it is 8.03 for the students who did not study. T-value between the groups is -.137.

**Table 4.5*****T-test Results of the Comparison of the Students Who Studied and Did Not Study at the Department of Basic English***

| Groups                         | N   | $\bar{X}$ | SD    | T    | p    |
|--------------------------------|-----|-----------|-------|------|------|
| The students who studied       | 76  | 35.43     | 10.28 | .380 | .704 |
| The students who did not study | 150 | 34.96     | 8.03  |      |      |

#### **4.6. Post-reading Strategies the Students Use Other Than the Ones Listed in the Questionnaire**

The open-ended item in the questionnaire asked the participants to include any other post-reading strategies they use other than the ones in the questionnaire. The strategies were categorized into two themes. The first significant theme is *doing research after reading*, and the other theme is *rereading the text*. Two of the strategies did not fit into either of the themes. The strategies reported by the participants are as follows:

First theme: doing research after reading

- I research points and ideas from the text and write down everything which I think is important.
- I check current discussions about the subject on the Internet.
- I research about the writer's opinions if it's an essay or literary piece to have information about his/her perspective to the ideas he presents.
- I read the critics and comments.
- I search on the Internet for different opinions.

Second theme: rereading the text

- First, I read fast but I read slowly in my second reading.
- I reread the important points and record my voice to listen to the important points again later.
- If the text is relevant to my interests, I reread it several times.
- I reread the text loudly to check my comprehension.

Other strategies

- After I finish reading, I check new words and structures once more.
- I create mnemonics in order to remember the information easily.

## CHAPTER V. CONCLUSION

The purpose of this study is to find out the extent ELT and ELL students of EFL in the first and second grades apply cognitive strategies after they read academic or school-related texts and if there is a significant difference between students according to their field of study, sex, and grade. In order to investigate cognitive post reading strategies, a post-reading strategy questionnaire has been developed. This questionnaire is preliminary to assess perceived use of post-reading strategies in a comprehensive way.

### 5.1. Discussion of the Findings

This study was aimed to find out the extent ELT and ELL students of EFL in the first and second grades apply cognitive strategies after they read academic or school-related texts. The findings of the study have shown that ELL and ELT students have a moderate use of post-reading strategies. None of the strategies in the questionnaire is always or often used by the participating students and three post-reading strategies were reported as low use.

The findings indicated that the most-commonly used strategy by the participants was *rereading the important points* (item 8). Since this strategy serves for the retention of the information, it can be asserted that they use it as they need it the most or it works with them to remember information better than other strategies. Other strategies used more frequently are *reviewing notes, underlined statements and text markings* (item 14); and *studying the new vocabulary in the text* (item 15). *Reviewing notes, underlined statements and text markings* help the retention of information like *rereading the important points* strategy, and students need these strategies while

studying for their exams. This might be the reason for the high use of these strategies.

The least frequently used strategies are *making an outline, chart, map or diagram by using the content of the text* (item 13); *reading other texts written by the same author or by other authors to learn more on the same topic* (item 6); and *paraphrasing some of the sentences or paragraphs* (item 11). The students prefer summarizing rather than organising the information using outline, chart, map or diagram. Besides, as it has just been mentioned, the students do not read different texts to get more information on the topic. It can be concluded that the students do not usually research, find out, and read texts other than the ones they read as a part of a course. Therefore, their teachers should guide and encourage them to do so.

It was also found that students use the strategies in the second subscale (when the reader goes back to the text) more often than the strategies in the first subscale (without going back to the text). The strategies in the first subscale are related to criticising, evaluating, reflecting, and discussing the text. However, the strategies in the second subscale are related to learning and retaining the information in the text.

The other purpose of this study was to find out if there is a significant difference between students according to their field of study, sex, and grade. It was found that ELL and ELT students did not differ significantly in post-reading strategy use in relation to their departments, sex, grade, and education at the Department of Basic English. There is a difference close to being significant in the use of *discussing the text other people* (item 7) with the ELL students using it more often.

When the findings are compared with the findings of other reading strategy studies, several similar and different results are revealed. First of all, the ELT and ELL

students in the study reported a moderate use of *summarizing*. This finding is consistent with Khaokaew (2012), who conducted a study with Thai undergraduate English major students. In both studies the students reported *sometimes* using summarizing. However, it is different from Özek and Civelek (2006) and Uzunçakmak (2005). The use of summarizing was lower in Uzunçakmak (2005) but higher in Özek and Civelek (2006). Uzunçakmak conducted her study with the students in the Department of Basic English at Middle East Technical University. Uzunçakmak (2005) also carried out her study in Turkey. However, the inconsistency between the findings might have been caused by the participants' backgrounds.

Secondly, the students reported a mild use of *checking pre-reading expectations and guesses*. Khaokaew (2012) also investigated the students' use of *evaluating plans and goals for reading* in her study, and she also found a mild use of the strategy. Another finding was a moderate use of *rereading to fix comprehension problems*. Özek and Civelek (2006) and Khaokaew (2012) also found moderate reported use of the strategy with English major students. The fact that the participants in the three studies were English major is a possible reason for the similar finding.

When the findings of the study are evaluated as a whole, it can be concluded that freshmen and sophomores of ELT and ELL departments at Akdeniz University do not use post-reading strategies very frequently. Several other studies in Turkey which investigated pre-reading and post-reading stages together with while-reading (Sarıçoban, 2002; Özek & Civelek, 2006; Kantarcı, 2006) also showed that university students use post-reading strategies less often than they do while-reading strategies.. There could be two main reasons for this. To begin with, students in

Turkey do not get instructed reading strategies in their native language reading classes. Most students start to learn about reading strategies when they start learning English, and they only practise reading strategies in their EFL classes. Therefore, they are usually slow to develop the habit of using strategies. Secondly, national exams in Turkey have a considerable effect on education. In Turkey, students have to pass national exams to study at a good high school and to study at university. Students aim to get marks as good as possible, and they study accordingly. Schools and teachers also try to prepare their students for these exams. The exams are multiple choice. There are paragraph comprehension questions in the reading section of the exams, but they do not usually require students to apply post-reading strategies. Thus, students do not get instructed or practise post-reading strategies enough in their education lives.

## **5.2. Implications for Language Teaching**

Post-reading stage is as important as pre-reading and while-reading for learners, so texts should be exploited through several post-reading activities. Post-reading activities check learners' understanding, guide them into analysing the text, and lead students to relate to the text and reflect (Barnett, 1989). Teachers can also develop learners' critical thinking skills in this stage. Teachers should incorporate activities in which learners question, analyse, and evaluate texts in order to develop critical thinking skills (Varaprasad, 1997).

In the case of academic or school related texts, reading strategies play a vital role since reading ability is closely connected to academic success. Unless students understand academic language and know what to do before, while, and after reading the text, their chance for academic success is little. Even high language proficiency

may not be enough in this case. Tertiary level students of English should also know what to do with the information in the text. They can use post-reading strategies to check their understanding, to understand better, and to retain the information from the texts. These strategies can help them increase their academic success in this way.

One of the goals of language teaching is that learners are able to read independently in and outside the classroom. Therefore, teaching how to read is crucial in EFL classes, and language teachers must know how to teach reading and guide learners. In order to train students on reading strategies, teachers should first discover the strategies they already use. They can use reading strategies questionnaires for this purpose. They can identify students' strong and weak strategies in this way, and it can help them plan their reading course. However, it should be kept in mind that students cannot be a good and strategic reader in a short time. Reading improves as much as one reads.

### **5.3. Conclusion**

Especially in academic environment, reading is considered to be the main skill for learning and doing research, since learners mainly read in their independent learning in order to get information in their subjects, improve their language abilities or succeed in academic tasks (Grabe & Stoller, 2001). Reading ability is far more important for ELT and ELL students, because not only they have to read materials in English and it is the medium of their study, but also English will be their professions. For this reason, reading strategies are also essential, as several studies have shown that reading strategy use and success at reading are positively related (Barnett, 1988; Ho, 2007; Phakiti, 2003; Sarıçoban, 2002; Tsai, Ernst & Talley, 2010; Yiğiter,

Gürses & Sarıçoban, 2005). These studies have showed that more successful readers use reading strategies more effectively.

Textbooks, articles, novels, plays, and poems are the examples of academic texts ELT and ELL students read. The study investigated the cognitive post-reading strategies they use after reading academic and school-related texts. When the findings of this study are considered as a whole, it can be seen that ELL and ELT students at Akdeniz University do not use cognitive post-reading strategies frequently. The students' unawareness of these strategies or their lack of knowledge on how to apply them might be the main reasons for low use. The students need to improve the use of these strategies, so they should be given guidance and instruction by their teachers.

#### **5.4. Suggestions for Future Studies**

The post-reading reading strategy questionnaire is the first instrument to assess language learner's use of cognitive post-reading strategies. When we look at the results of the analyses and Cronbach's alpha results, we can assert that it is a valid and reliable instrument. It can be used as an instrument for a scientific study to explore cognitive post-reading strategy use by researchers or as a classroom tool so that students can become aware of the strategies they use or learn new strategies, and the results can help teachers plan their reading classes and strategy instruction.

The questionnaire is limited to cognitive strategies. However, metacognitive strategies can also be added in the future to explore metacognitive post-reading strategy use. Another limitation was that the findings were the self-report of the students. In Özek and Civelek's study (2006), the students reported using

summarizing always or usually in the questionnaire. However, they were not seen summarizing the text in think aloud protocols. Therefore, in order to collect more data, think aloud technique can be used to see readers in action and to see if they actually use the strategies.

As noted in the method chapter, one item was eliminated because it was loaded in the other subscale. The eliminated item was *write down the important points I remember* and it had a high loading of .695 in the second subscale. Therefore, this item can be added to the questionnaire in the second factor in the following studies. In addition, the open-ended item in the questionnaire yielded several strategies that were not in the questionnaire. Each of those strategies was defined by an individual student. They can be added to the questionnaire in the following studies in order to investigate if they are used by other students as well.

Finally, the study was conducted with freshmen and sophomores, and the strategy use did not show a significant difference in relation to department or grade. A study between first and fourth grade students is suggested to find out if the education in their departments affects their strategy use. As students continue their education to third and fourth grade, they will have taken more classes related to their study, so there could be a significant difference between first and fourth grades, and between ELT and ELL students. Besides, it might be beneficial to compare academically more successful and less successful students in order to find out if use of post-reading strategies is related to academic success. Furthermore, the questionnaire can also be administered to students from different departments, different levels of English, or to students at high school education. It can also be used to discover ESL students' cognitive post-reading strategy use.

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## APPENDICES

### APPENDIX 1. POST-READING STRATEGY QUESTIONNAIRE

#### Background information

Please provide the following information.

Department: English Language Teaching ☐ English Language and Literature ☐

Sex: Female ☐ Male ☐

Year of birth: \_\_\_\_\_

Age you started learning English: \_\_\_\_\_

Did you study at English Prep School at your university? Yes ☐ No ☐

Did you pass the prep school if you studied there at the university? Yes ☐ No ☐

Which grade are you in now? 1<sup>st</sup> year ☐ 2<sup>nd</sup> year ☐

#### Post-reading Strategy Questionnaire

The aim of this questionnaire is to collect information about the various strategies you use after reading academic texts or texts in your area of study (texts related to ELT and ELL) in English in and outside the classroom (such as textbooks, articles, novels). Read each statement and circle the number which applies to you. Your answers will be used in a scientific study so please be honest with your answers. Keep in mind that there are no right or wrong answers.

0= I **never** do this.

1= I **rarely** do this.

2= I **sometimes** do this.

3= I **often** do this.

4= I **always** do this.

**After I complete reading a text in English, I ...**

|                                                                                     | never | rarely | sometimes | often | always |
|-------------------------------------------------------------------------------------|-------|--------|-----------|-------|--------|
| 1. check if my expectations and guesses before reading the text are correct or not. | 0     | 1      | 2         | 3     | 4      |
| 2. comment on what the author states in the text.                                   | 0     | 1      | 2         | 3     | 4      |

|                                                                                                                                        |   |   |   |   |   |
|----------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 3. relate the content or characters' experiences in the text to my own experiences in life by identifying similarities or differences. | 0 | 1 | 2 | 3 | 4 |
| 4. evaluate the writer's view point presented in the text.                                                                             | 0 | 1 | 2 | 3 | 4 |
| 5. criticize the ideas stated in the text.                                                                                             | 0 | 1 | 2 | 3 | 4 |
| 6. read other texts written by the same author or by other authors to learn more on the same topic.                                    | 0 | 1 | 2 | 3 | 4 |
| 7. discuss the content of the text with other people.                                                                                  | 0 | 1 | 2 | 3 | 4 |

**After I read a text in English, I go back to the text and I ...**

|                                                                                  | never | rarely | sometimes | often | always |
|----------------------------------------------------------------------------------|-------|--------|-----------|-------|--------|
| 8. reread the important points which I think to be important.                    | 0     | 1      | 2         | 3     | 4      |
| 9. reread to fix my comprehension failures.                                      | 0     | 1      | 2         | 3     | 4      |
| 10. translate either the whole text or some parts that I selected from the text. | 0     | 1      | 2         | 3     | 4      |
| 11. paraphrase some of the sentences or paragraphs from the text.                | 0     | 1      | 2         | 3     | 4      |
| 12. summarize the whole text or some parts of the text.                          | 0     | 1      | 2         | 3     | 4      |
| 13. make an outline, chart, map or diagram by using the content of the text.     | 0     | 1      | 2         | 3     | 4      |
| 14. review my notes, underlined statements and text markings on the text.        | 0     | 1      | 2         | 3     | 4      |
| 15. study the new vocabulary in the text.                                        | 0     | 1      | 2         | 3     | 4      |

**Please write down other post-reading strategies you use if there are any.**

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## APPENDIX 2. THE READING STRATEGY QUESTIONNAIRE BY MOKHTARI & SHEOREY, 2002

### SURVEY OF READING STRATEGIES (SORS)

The purpose of this survey is to collect information about the various techniques you use when you read **academic materials in English** (e.g., reading textbooks for homework or examinations, reading journal articles, etc.).

All the items below refer to your reading of **college-related academic materials (such as textbooks, not newspapers or magazines)**. Each statement is followed by five numbers, 1, 2, 3, 4, and 5, and each number means the following:

'1' means that 'I **never or almost never** do this'.

'2' means that 'I do this **only occasionally**'.

'3' means that 'I **sometimes** do this'. (About 50% of the time.)

'4' means that 'I **usually** do this'.

'5' means that 'I **always or almost always** do this'.

After reading each statement, **circle the number** (1, 2, 3, 4, or 5) which applies to you. Note that there are **no right or wrong responses** to any of the items on this survey.

| Category |     | Statement                                                                            | Never |   |   |   |   | Always |  |  |  |  |
|----------|-----|--------------------------------------------------------------------------------------|-------|---|---|---|---|--------|--|--|--|--|
| GLOB     | 1.  | I have a purpose in mind when I read.                                                | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 2.  | I take notes while reading to help me understand what I read.                        | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 3.  | I think about what I know to help me understand what I read.                         | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 4.  | I take an overall view of the text to see what it is about before reading it.        | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 5.  | When text becomes difficult, I read aloud to help me understand what I read.         | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 6.  | I think about whether the content of the text fits my reading purpose.               | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| PROB     | 7.  | I read slowly and carefully to make sure I understand what I am reading.             | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 8.  | I review the text first by noting its characteristics like length and organization.  | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| PROB     | 9.  | I try to get back on track when I lose concentration.                                | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 10. | I underline or circle information in the text to help me remember it.                | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| PROB     | 11. | I adjust my reading speed according to what I am reading.                            | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 12. | When reading, I decide what to read closely and what to ignore.                      | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 13. | I use reference materials (e.g., a dictionary) to help me understand what I read.    | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| PROB     | 14. | When text becomes difficult, I pay closer attention to what I am reading.            | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 15. | I use tables, figures, and pictures in text to increase my understanding.            | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| PROB     | 16. | I stop from time to time and think about what I am reading.                          | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 17. | I use context clues to help me better understand what I am reading.                  | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 18. | I paraphrase (restate ideas in my own words) to better understand what I read.       | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| PROB     | 19. | I try to picture or visualize information to help remember what I read.              | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 20. | I use typographical features like bold face and italics to identify key information. | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 21. | I critically analyze and evaluate the information presented in the text.             | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 22. | I go back and forth in the text to find relationships among ideas in it.             | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 23. | I check my understanding when I come across new information.                         | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 24. | I try to guess what the content of the text is about when I read.                    | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| PROB     | 25. | When text becomes difficult, I reread it to increase my understanding.               | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 26. | I ask myself questions I like to have answered in the text.                          | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| GLOB     | 27. | I check to see if my guesses about the text are right or wrong.                      | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| PROB     | 28. | When I read, I guess the meaning of unknown words or phrases.                        | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 29. | When reading, I translate from English into my native language.                      | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |
| SUP      | 30. | When reading, I think about information in both English and my mother tongue.        | 1     | 2 | 3 | 4 | 5 |        |  |  |  |  |

### APPENDIX 3. THE READING STRATEGY QUESTIONNAIRE BY OXFORD ET AL., 2004

Your ID number or name: \_\_\_\_\_

Directions: Show how often you use the strategy when reading, by checking the appropriate box. 0 means "almost never" while 5 means "almost always".

It is important to answer in terms of how well each statement describes you, NOT in terms of what you think you should do, or what other people do. THIS IS NOT A TEST. There are no right or wrong responses to these statements. The score you obtain will not affect your grade.

Depending on your language learning experience and needs, you may be using different types of strategies. The learning strategies presented here are general. Not everyone needs the same kind of strategies. A 'low' score does not mean you are a bad learner.

Before I read a text,

1. I use the title to help predict the contents.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

2. I consider what type of text it is, such as a newspaper article, a scientific paper, or a novel.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

3. I skim it first, and later I read for details.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

While I am reading a text,

4. I pay attention to parts of sentences such as phrases and clauses.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

5. I pay attention to the beginning and the end of each paragraph.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

6. I focus on the tense of a verb, such as present tense and past tense.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

7. I try to understand the meaning of every word in a text.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

8. I translate each sentence into my native language.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

9. I start reading from the first paragraph and read all the way through to the last paragraph.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

10. I pay attention to sentence structure, such as subjects and objects.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

11. I continue reading even if I have difficulty.

|                 |   |   |   |   |   |   |                  |
|-----------------|---|---|---|---|---|---|------------------|
| Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
|-----------------|---|---|---|---|---|---|------------------|

- |                                                                                                                             |                 |   |   |   |   |   |   |                  |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------|---|---|---|---|---|---|------------------|
| 12. I change reading speed depending on the difficulty of a text.                                                           | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 13. I read aloud the difficult parts of a text.                                                                             | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 14. I skip unknown words.                                                                                                   | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 15. I link the content with what I already know.                                                                            | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 16. I try to understand the meaning of an unknown word by dividing it into parts.                                           | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 17. If I don't understand something such as a word or phrase, I guess its meaning using clues from the text.                | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 18. If I don't understand something such as a word or phrase, I guess its meaning using information I know about the topic. | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 19. I check what each pronoun refers to.                                                                                    | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 20. I underline important parts.                                                                                            | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 21. I mark important parts, using colored pens or drawing stars.                                                            | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 22. I go over difficult parts several times.                                                                                | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 23. I read aloud the entire text.                                                                                           | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 24. I make a picture in my mind about what the text is saying.                                                              | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 25. I try to understand the meaning without translating the text into my native language.                                   | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 26. If I'm having trouble, I go back to previous sentences.                                                                 | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |
| 27. I follow the line I am reading with my finger or my pen.                                                                | Almost<br>never | 0 | 1 | 2 | 3 | 4 | 5 | Almost<br>always |

28. I use slashes to divide a sentence grammatically.  
 Almost never 0 1 2 3 4 5 Almost always

29. When I cannot understand a sentence even if I know every word, I skip that sentence.  
 Almost never 0 1 2 3 4 5 Almost always

30. I predict what will come next.  
 Almost never 0 1 2 3 4 5 Almost always

31. I pay attention to linking words such as "however" and "besides" so that I can understand the structure.  
 Almost never 0 1 2 3 4 5 Almost always

32. I write down key words.  
 Almost never 0 1 2 3 4 5 Almost always

33. I try to figure out the main idea of each paragraph.  
 Almost never 0 1 2 3 4 5 Almost always

34. I read the comprehension questions first and then read the text. (*This item was not included in the No Task condition because it inherently assumes the presence of a task.*)  
 Almost never 0 1 2 3 4 5 Almost always

After I read a text,

35. I summarize it in my own words.  
 Almost never 0 1 2 3 4 5 Almost always

# APPENDIX 4. ADDENDUM BY UZUNÇAKMAK, 2005 TO THE READING STRATEGY QUESTIONNAIRE BY OXFORD ET AL., 2004

## Reading Strategy Questionnaire (Addendum)

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Show how often you use the following reading strategies when reading, by checking the appropriate box. 0 means "almost never" while 5 means "almost always".

It is important to answer in terms of how well each statement describes you, NOT in terms of what you think you should do, or what other people do. **THIS IS NOT A TEST.** There are no right or wrong responses to these statements. The score you obtain will not affect your grade.

Depending on your language learning experience and needs, you may be using different types of strategies. The learning strategies presented here are general. Not everyone needs the same kind of strategies. A "low" score does not mean you are a bad learner.

|                                                                                                              |   |   |   |   |   |   |
|--------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|
| 1. I look through the text to spot specific information such as dates, names, or numbers.                    | 0 | 1 | 2 | 3 | 4 | 5 |
| 2. I pay attention to visuals such as graphs, pictures, or tables.                                           | 0 | 1 | 2 | 3 | 4 | 5 |
| 3. While reading, I ask questions related to the text or what I have read.                                   | 0 | 1 | 2 | 3 | 4 | 5 |
| 4. While reading, I try to confirm or disconfirm the predictions, guesses, or inferences I have made.        | 0 | 1 | 2 | 3 | 4 | 5 |
| 5. While reading, I consult an outside source (such as a dictionary) to help comprehension.                  | 0 | 1 | 2 | 3 | 4 | 5 |
| 6. I translate the text into my native language to help comprehension.                                       | 0 | 1 | 2 | 3 | 4 | 5 |
| 7. I try to express the ideas in the text with my own words to help me understand the main idea of the text. | 0 | 1 | 2 | 3 | 4 | 5 |
| 8. I pay attention to indirectly stated ideas and try to make inferences about them.                         | 0 | 1 | 2 | 3 | 4 | 5 |
| 9. While reading, I try to connect information within the text.                                              | 0 | 1 | 2 | 3 | 4 | 5 |
| 10. After reading the text in detail, I evaluate the text and the writer's viewpoint.                        | 0 | 1 | 2 | 3 | 4 | 5 |

## APPENDIX 5. THE READING STRATEGY QUESTIONNAIRE BY HO, 2007

### EFL Reading Strategy Questionnaire (English Version)

Hi. This is a research report to investigate EFL reading strategies used by vocational high school students in Taiwan. Your answers won't have anything to do with your grades so please feel free to answer the questionnaire. After reading each item, please check the box according to your reading experience. Thank you for your cooperation.

- |                  |
|------------------|
| 1. Never Use     |
| 2. Rarely Use    |
| 3. Sometimes Use |
| 4. Often Use     |
| 5. Always Use    |

| Strategy                                                                                                               | Frequency | 1                        | 2                        | 3                        | 4                        | 5                        |
|------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Memory Strategies                                                                                                      |           |                          |                          |                          |                          |                          |
| 33. I visualize images.                                                                                                |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 34. I read the text aloud.                                                                                             |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cognitive Strategies                                                                                                   |           |                          |                          |                          |                          |                          |
| 35. I skim an academic text first to get the main idea and then go back and read it more carefully.                    |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 36. I read a story or dialogue several times until I understand it.                                                    |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 37. I pay attention to the organization of the text, especially headings and subheadings.                              |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 38. I make ongoing summaries of the reading either in my mind or in the margins of the text.                           |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 39. I find the meaning of an English word by dividing it into parts that I understand.                                 |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 40. I try not to translate word-for-word.                                                                              |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 41. I read target language newspapers, magazines, or advertisement.                                                    |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 42. I scan to search for specific details.                                                                             |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 43. I use resources to understand a written message, such as dictionaries, word lists, grammar books, or phrase books. |           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|                                                                                                                                  |                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 44. I emphasize the major points through underlining, circling and so on.                                                        | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 45. I analyze sentence structure.                                                                                                | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 46. I reread the difficult sentence.                                                                                             | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 47. I translate it from target language to native language.                                                                      | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 48. I make use of the questions listed in the back part of the text to understand the text.                                      | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 49. I stop to recall the points I have read if the text is long.                                                                 | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 50. I use key words or phrases to understand the text.                                                                           | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 51. I make an inference with the text or the main idea.                                                                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Compensation Strategies                                                                                                          |                                                                                                                              |
| 52. I make predictions as to what will happen next.                                                                              | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 53. I guess the approximate meaning by using clues from the context of the reading material.                                     | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 54. I read English without looking up every new word.                                                                            | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 55. I use general background knowledge to make guesses.                                                                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 56. I skip unknown parts.                                                                                                        | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Metacognitive Strategies                                                                                                         |                                                                                                                              |
| 57. I read as much as possible in the target language.                                                                           | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 58. I try to find things to read for pleasure in the target language.                                                            | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 59. I find reading material that is at or near my level.                                                                         | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 60. I plan in advance how I'm going to read the text, monitor to see how I'm doing, and then check to see how much I understand. | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 61. I look for opportunities to read as much as possible in English.                                                             | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 62. I monitor the comprehension results.                                                                                         | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Social Strategies                                                                                                                |                                                                                                                              |
| 63. If I do not understand something in English, I ask other people.                                                             | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 64. I try to learn about the culture of English speakers.                                                                        | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

|                                                                                                   |
|---------------------------------------------------------------------------------------------------|
| ☆ Student Number:                                                                                 |
| ☆ Sex: <input type="checkbox"/> male <input type="checkbox"/> female                              |
| ☆ English final grade in 95 school year:                                                          |
| ☆ Have you passed GEPT elementary level? <input type="checkbox"/> Yes <input type="checkbox"/> No |



**Before reading a text, I.....**

- |                                                                       |   |   |   |   |   |   |
|-----------------------------------------------------------------------|---|---|---|---|---|---|
| 1. plan what to do before I start.                                    | 0 | 1 | 2 | 3 | 4 | 5 |
| 2. have a purpose in mind.                                            | 0 | 1 | 2 | 3 | 4 | 5 |
| 3. read the title and sub-titles before reading the rest of the text. | 0 | 1 | 2 | 3 | 4 | 5 |
| 4. focus on the key words from the title.                             | 0 | 1 | 2 | 3 | 4 | 5 |
| 5. think what I already know about the topic.                         | 0 | 1 | 2 | 3 | 4 | 5 |
| 6. think about how one sub-title relates to another sub-title.        | 0 | 1 | 2 | 3 | 4 | 5 |
| 7. look at any pictures/illustrations.                                | 0 | 1 | 2 | 3 | 4 | 5 |
| 8. think about what information the writer might present.             | 0 | 1 | 2 | 3 | 4 | 5 |

**When I read the text, I.....**

- |                                                                           |   |   |   |   |   |   |
|---------------------------------------------------------------------------|---|---|---|---|---|---|
| 9. read every sentence slowly and carefully to understand the text.       | 0 | 1 | 2 | 3 | 4 | 5 |
| 10. read the first sentence of each paragraph.                            | 0 | 1 | 2 | 3 | 4 | 5 |
| 11. read the first paragraph and last paragraph(introduction conclusion). | 0 | 1 | 2 | 3 | 4 | 5 |
| 12. guess the meanings of unknown words or phrases.                       | 0 | 1 | 2 | 3 | 4 | 5 |
| 13. skip unknown words.                                                   | 0 | 1 | 2 | 3 | 4 | 5 |
| 14. use contextual clues to help me understand the text better.           | 0 | 1 | 2 | 3 | 4 | 5 |
| 15. use English grammar to help me understand the text.                   | 0 | 1 | 2 | 3 | 4 | 5 |
| 16. skim the text quickly to get the general ideas.                       | 0 | 1 | 2 | 3 | 4 | 5 |
| 17. scan the text for specific details.                                   | 0 | 1 | 2 | 3 | 4 | 5 |

- |                                                                      |   |   |   |   |   |   |
|----------------------------------------------------------------------|---|---|---|---|---|---|
| 18. distinguish between main points and examples.                    | 0 | 1 | 2 | 3 | 4 | 5 |
| 19. differentiate important from unimportant ideas.                  | 0 | 1 | 2 | 3 | 4 | 5 |
| 20. distinguish between fact and opinion                             | 0 | 1 | 2 | 3 | 4 | 5 |
| 21. understand the relationship between ideas.                       | 0 | 1 | 2 | 3 | 4 | 5 |
| 22. analyze what the writer meant or tried to say.                   | 0 | 1 | 2 | 3 | 4 | 5 |
| 23. take notes while reading to help me understand what I have read. | 0 | 1 | 2 | 3 | 4 | 5 |
| 24. write a summary of the main information in the text.             | 0 | 1 | 2 | 3 | 4 | 5 |
| 25. translate the text from English into Thai.                       | 0 | 1 | 2 | 3 | 4 | 5 |
| 26. check if my guesses about the text are right or wrong.           | 0 | 1 | 2 | 3 | 4 | 5 |

**After reading the text , I .....**

- |                                                        |   |   |   |   |   |   |
|--------------------------------------------------------|---|---|---|---|---|---|
| 27. re-read it once or more if I do not understand it. | 0 | 1 | 2 | 3 | 4 | 5 |
| 28. make notes on the main points as I remember them.  | 0 | 1 | 2 | 3 | 4 | 5 |
| 29. evaluate my plans or goals for reading.            | 0 | 1 | 2 | 3 | 4 | 5 |

**Part 3 Complete the following questions.**

1. While reading English texts what do you do to help you understand the meaning of the text?

.....

.....

2. What do you do to help yourself find the main idea in the passage?

.....

.....

.....

## APPENDIX 7. THE INVENTORY OF READING STRATEGIES BY SARIÇOBAN, 2002

Below is an inventory to see what sort of strategies you often prefer to employ in reading. Please write "Y" for "YES" and "N" for "NO" in the blanks provided on the left-hand side of each item. Thank you very much for your contributions.

### A. Strategies for the pre-reading stage

In pre-reading activities, I try to;

- 1. find answers to given questions based on the text,
- 2. give their personal opinion about the topic,
- 3. predict the continuing text.

In critical pre-reading activities, I try to question;

- 4. the reason the author is writing about the topic,
- 5. the whole range of ways to write a particular text,
- 6. the generating of their own list of questions.

### B. Strategies for the reading stage

At this stage I try to read and react to content and language in a text by

#### 1. Annotating

I try to focus on the content and language of the text. As I read, I try to

- 7. read through the passage and *underline* difficult words and phrases, while getting a general idea of the whole passage. Next, I try to figure out the meanings of these words and phrases from context, and if necessary, look them up in a dictionary or another relevant book, encyclopedia, etc.
- 8. read the text again and solve doubts by *questioning*.
- 9. focus on the most important ideas of a text, separating what is central from what is peripheral. I try to see how information is organised and supported in a text.

#### 2. Analyzing

I try to see

- 10. What point the writer is attempting to establish,
- 11. What is being asserted as true,
- 12. Why I should accept this claim as true,
- 13. What reasons or evidence the writer gives for this claim,
- 14. On what basis I should accept this claim, I seriously think about what I am reading. This means that I:
- 15. do not believe everything I read,
- 16. question everything that doesn't make sense to me,
- 17. analyze arguments,
- 18. discount arguments based on faulty reasoning,
- 19. have good reasons for believing some things and not believing others

Language: One way of analyzing language I believe is to look for patterns or repetitions of any kind such as:

- 20. repetitions or patterns of recurring images;
- 21. repeated descriptions;
- 22. consistent ways of characterising people or events;
- 23. repeated words and phrases, examples or illustrations;
- 24. reliance on particular writing strategies;
- 25. use of opposites/opposing ideas to reveal contrasting perspectives;
- 26. use of figurative language to reflect the authors' attitudes, tone, and feelings.

Moreover, I try to see if

- 27. the author writes emotionally,
- 28. s/he uses sentiment, name calling, or other emotional means to make his/ her point,
- 29. The use of inclusive and exclusive pronouns to represent self, subject, reader, etc.;
- 30. The way nouns function, and the reasons for their selection;
- 31. The kinds of verbs used: action verbs, verbs denoting mental processes etc.;
- 32. Why the writer uses them, the purpose they serve, the meaning they convey;
- 33. The use of modal verbs, what they convey about the writer's attitude and mood: affirmative, negative, imperative, or interrogative;
- 34. The use of connectors, not just to convey ideas, but also to convey the writer's stand or position on the matter.

#### **C. Strategies for the post-reading stage**

To extend my understanding obtained from texts at the pre-reading and while-reading stages into writing tasks,

I usually make use of such techniques as:

- 35. summarizing,
- 36. evaluating,
- 37. synthesizing,
- 38. commenting, and
- 39. reflecting.

## APPENDIX 8. THE READING STRATEGY QUESTIONNAIRE BY PHAKITI 2003

### Cognitive and metacognitive questionnaire

*Directions:* A number of statements which people use to describe themselves when they were taking a test are given below. Read each statement and indicate how you thought during the test. Choose 1 (Never), 2 (Sometimes), 3 (Often), 4 (Usually) and 5 (Always).

Table 22

| Your thinking                                                                                                   | 1 | 2 | 3 | 4 | 5 |
|-----------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 1. I made short notes or underlined main ideas during the test.                                                 | 1 | 2 | 3 | 4 | 5 |
| 2. I translated the reading texts and tasks into Thai.                                                          | 1 | 2 | 3 | 4 | 5 |
| 3. I used pictures or titles of the texts to help comprehend reading tasks.                                     | 1 | 2 | 3 | 4 | 5 |
| 4. I used my own English structure knowledge to comprehend the text.                                            | 1 | 2 | 3 | 4 | 5 |
| 5. I spent more time on difficult questions.                                                                    | 1 | 2 | 3 | 4 | 5 |
| 6. I tried to understand the texts and questions regardless of my vocabulary knowledge.                         | 1 | 2 | 3 | 4 | 5 |
| 7. I tried to find topics and main ideas by scanning and skimming.                                              | 1 | 2 | 3 | 4 | 5 |
| 8. I read the texts and questions several times to better understand them.                                      | 1 | 2 | 3 | 4 | 5 |
| 9. I used my prior knowledge to help understand the reading test.                                               | 1 | 2 | 3 | 4 | 5 |
| 10. I tried to identify easy and difficult test components.                                                     | 1 | 2 | 3 | 4 | 5 |
| 11. I looked at the scores of each part to determine the weight of scores before starting to complete the test. | 1 | 2 | 3 | 4 | 5 |
| 12. I determined which parts were more important than others before starting the test.                          | 1 | 2 | 3 | 4 | 5 |
| 13. When I started to complete the test, I planned how to complete the test and followed the plan.              | 1 | 2 | 3 | 4 | 5 |
| 14. I was aware of what and how I was doing in the test.                                                        | 1 | 2 | 3 | 4 | 5 |
| 15. I checked my own performance and progress while completing the test.                                        | 1 | 2 | 3 | 4 | 5 |
| 16. I attempted to identify main points of the given reading texts and tasks.                                   | 1 | 2 | 3 | 4 | 5 |
| 17. I thought through the meaning of the test tasks/questions before answering them.                            | 1 | 2 | 3 | 4 | 5 |

|     |                                                                                                        |   |   |   |   |   |
|-----|--------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 18. | I was aware of which strategy to use and how and when to use it.                                       | 1 | 2 | 3 | 4 | 5 |
| 19. | I would correct mistakes immediately when found.                                                       | 1 | 2 | 3 | 4 | 5 |
| 20. | I asked myself how the test questions and the given texts related to what I already knew.              | 1 | 2 | 3 | 4 | 5 |
| 21. | I determined what the test tasks/questions required me to do.                                          | 1 | 2 | 3 | 4 | 5 |
| 22. | I was aware of the need to plan a course of action.                                                    | 1 | 2 | 3 | 4 | 5 |
| 23. | I was aware of how much the test remained to be completed.                                             | 1 | 2 | 3 | 4 | 5 |
| 24. | I tried to understand the questions adequately before attempting to find the answers.                  | 1 | 2 | 3 | 4 | 5 |
| 25. | I made sure I understood what had to be done and how to do it.                                         | 1 | 2 | 3 | 4 | 5 |
| 26. | I was aware of my ongoing thinking process.                                                            | 1 | 2 | 3 | 4 | 5 |
| 27. | I kept track of my own progress to complete the questions on time.                                     | 1 | 2 | 3 | 4 | 5 |
| 28. | I used multiple thinking strategies to help answer the test questions.                                 | 1 | 2 | 3 | 4 | 5 |
| 29. | I made sure to clarify the goal and know how to complete it.                                           | 1 | 2 | 3 | 4 | 5 |
| 30. | I was aware of the selected strategies to help me complete the test questions before solving them.     | 1 | 2 | 3 | 4 | 5 |
| 31. | I checked my accuracy as I progressed through the test.                                                | 1 | 2 | 3 | 4 | 5 |
| 32. | I selected relevant information to help me understand the reading texts and answer the test questions. | 1 | 2 | 3 | 4 | 5 |
| 33. | I determined how to solve the test.                                                                    | 1 | 2 | 3 | 4 | 5 |
| 34. | I carefully checked the answers before submitting the test.                                            | 1 | 2 | 3 | 4 | 5 |
| 35. | I thought about how I had completed the test.                                                          | 1 | 2 | 3 | 4 | 5 |

## APPENDIX 9. THE READING STRATEGY QUESTIONNAIRE BY SHANG, 2010

The following statements are about the strategies you use in reading the text. Using the questionnaire below, please indicate the frequency of reading strategies you use by circling the following appropriate number.

1. Never or almost never true of me
2. Usually not true of me
3. Somewhat true of me
4. Usually true of me
5. Always or almost always true of me

| Strategy       | Sets           | No | Statements                                                                                                              | Frequency scale |
|----------------|----------------|----|-------------------------------------------------------------------------------------------------------------------------|-----------------|
| Cognitive      | Rehearsal      | 1  | I try to remember key words to understand the main idea of the text.                                                    | 1 2 3 4 5       |
|                |                | 2  | I memorize key words to remind me of important concepts of the text.                                                    | 1 2 3 4 5       |
|                |                | 3  | When I read the text, I ask myself questions to make sure I understand the material I have been studying in this class. | 1 2 3 4 5       |
|                | Elaboration    | 4  | I underline key words to remind me of important concepts of the text.                                                   | 1 2 3 4 5       |
|                |                | 5  | I go back to read the details of the passage for the answers of some questions.                                         | 1 2 3 4 5       |
|                |                | 6  | When studying for this course, I often try to explain the material to a classmate.                                      | 1 2 3 4 5       |
|                |                | 7  | When I read the text, I take notes by writing down the key words.                                                       | 1 2 3 4 5       |
|                |                | 8  | When I study for this course, I write brief summaries of the main ideas from the readings and my class notes.           | 1 2 3 4 5       |
|                |                | 9  | I go back to read the details of the passage for the answers of some questions.                                         | 1 2 3 4 5       |
|                |                | 10 | I draw a conclusion about the author's purpose for writing the text.                                                    | 1 2 3 4 5       |
| Meta-cognitive | Organizational | 11 | I do not need to understand every detail in each text to get the main idea correctly.                                   | 1 2 3 4 5       |
|                |                | 12 | When I study the readings for this course, I outline the material to help me organize my thoughts.                      | 1 2 3 4 5       |
|                |                | 13 | Before I study new material thoroughly, I often skim it to see how it is organized.                                     | 1 2 3 4 5       |
|                |                | 14 | When I read the text, I try to relate the material to what I already know.                                              | 1 2 3 4 5       |
|                |                | 15 | I try not to translate word-for-word.                                                                                   | 1 2 3 4 5       |
|                |                | 16 | I skim/scan in the appropriate part of the text for the key word or idea.                                               | 1 2 3 4 5       |
|                | Planning       | 17 | I read the topic or heading of the passage.                                                                             | 1 2 3 4 5       |
|                |                | 18 | I look at the pictures of the passage.                                                                                  | 1 2 3 4 5       |
|                |                | 19 | I read the first sentence of the passage.                                                                               | 1 2 3 4 5       |
|                |                | 20 | I read the questions before I read the passage.                                                                         | 1 2 3 4 5       |
|                |                | 21 | I plan my schedule so I will have enough time to study English.                                                         | 1 2 3 4 5       |

|              |            |    |                                                                                                                                                 |           |
|--------------|------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
|              |            | 22 | I make sure that I keep up with the weekly readings and assignments for this course.                                                            | 1 2 3 4 5 |
|              |            | 23 | I have clear goals for improving my English reading skills.                                                                                     | 1 2 3 4 5 |
|              |            | 24 | When reading the text, I am able to question the significance or truthfulness of what the author says.                                          | 1 2 3 4 5 |
|              | Monitoring | 25 | I try to find as many ways as I can to comprehend the reading material.                                                                         | 1 2 3 4 5 |
|              |            | 26 | I notice my reading difficulties and try to use other methods to help me understand the text better.                                            | 1 2 3 4 5 |
|              |            | 27 | When I become confused about something I'm reading, I go back and try to figure it out.                                                         | 1 2 3 4 5 |
|              |            | 28 | When the reading text is difficult, I neither give up.                                                                                          | 1 2 3 4 5 |
|              | Regulating | 29 | I try to find out how to be a better reader of English.                                                                                         | 1 2 3 4 5 |
|              |            | 30 | I look for opportunities to read as much as possible such as magazines or newspaper articles in order to improve my reading ability in English. | 1 2 3 4 5 |
|              |            | 31 | I ask the instructor or my friend questions in order to improve my reading ability in English.                                                  | 1 2 3 4 5 |
|              |            | 32 | I slow the pace of reading when confronting with more difficult texts.                                                                          | 1 2 3 4 5 |
|              |            | 33 | I review the material while studying for an examination.                                                                                        | 1 2 3 4 5 |
| Compensation | Linguistic | 34 | I find the meaning of an English word by dividing it into parts that I understand.                                                              | 1 2 3 4 5 |
|              |            | 35 | I skip the words if I don't know the meaning.                                                                                                   | 1 2 3 4 5 |
|              |            | 36 | I read English without looking up every new word.                                                                                               | 1 2 3 4 5 |
|              |            | 37 | To understand unfamiliar English words, I make guesses from suffixes and prefixes.                                                              | 1 2 3 4 5 |
|              |            | 38 | I look for context clues to help me understand the meanings of vocabulary words.                                                                | 1 2 3 4 5 |
|              | Semantic   | 39 | The thing I do to read effectively is to focus on getting the overall meaning of the text.                                                      | 1 2 3 4 5 |
|              |            | 40 | I predict what is going to happen next while reading.                                                                                           | 1 2 3 4 5 |
|              |            | 41 | I try to predict what the author will say next.                                                                                                 | 1 2 3 4 5 |
|              |            | 42 | I use my background knowledge to guess the overall meaning of the text.                                                                         | 1 2 3 4 5 |
|              |            | 43 | I use examples and summary clues to guess the meaning of the text.                                                                              | 1 2 3 4 5 |
|              |            | 44 | I try to understand the material in this class by making connections between the readings and my prior knowledge.                               | 1 2 3 4 5 |

## APPENDIX 10. OFFICIAL PERMISSION FOR THE STUDY

Evrak Tarih ve Sayısı: 18/05/2016-E.55475



T.C.  
AKDENİZ ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Eğitim Fakültesi Dekanlığı



Sayı : 41451571-302.08.01  
Konu : Bilimsel ve Eğitim Amaçlı

### EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : 04/05/2016 tarihli ve 49841 sayılı yazı,

Eğitim Bilimleri Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı Yrd. Doç. Dr. Hatice Sezgi SARAÇ danışmanlığındaki 20108509704 numaralı Tuba TAN' ın "İDE ve İDÖ Öğrencilerinin Okuma Stratejileri Üzerine Nicel Bir Çalışma" isimli tez konusu kapsamında Fakültemizde öğrenim görmekte olan İngilizce öğretmenliği 1. ve 2. sınıf öğrencilerine ekteki ölçekleri uygulayabilmesi fakültemiz Bilim Kurulunun 09/05/2016 tarih 13/1 sayılı kurul kararı ile uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

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Bu belge 5070 sayılı Elektronik İmza Kanununun 5. Maddesi gereğince güvenli elektronik imza ile imzalanmıştır.

## APPENDIX 11. OFFICIAL PERMISSION FOR THE STUDY

Evrak Tarih ve Sayısı: 24/05/2016-E.57084



T.C.  
AKDENİZ ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Edebiyat Fakültesi Dekanlığı



Sayı : 63980100-044  
Konu : Anket

### İNGİLİZ DİLİ VE EDEBİYATI BÖLÜM BAŞKANLIĞINA

İlgi : 28/04/2016 tarihli ve 47257 sayılı yazı,

Eğitim Bilimleri Enstitüsü Yabancı Diller Anabilim Dalı İngilizce Öğretmenliği Programı Yrd. Doç. Dr. Sezgi SARAÇ danışmanlığındaki 20108509704 numaralı yüksek lisans öğrencisi Tuba TAN'ın "İDE ve İDÖ öğrencilerinin Okuma Stratejileri Üzerine Nicel Bir Çalışma" isimli tezi kapsamında Bölümünüz 1. ve 2. sınıf öğrencilerine ilgi yazı ekinde bulunan anket çalışması uygulaması isteği Dekanlığımızca da uygun görülmüştür.  
Bilgilerinizi ve gereğini rica ederim.

e-imzalıdır  
Yrd.Doç.Dr. Güven DİNÇ  
Dekan a.  
Dekan Yardımcısı

24/05/2016 Mem.  
24/05/2016 Şb.Müd.  
24/05/2016 Fak.Sek.

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Bu belge 5070 sayılı Elektronik İmza Kanununun 5. Maddesi gereğince güvenli elektronik imza ile imzalanmıştır.

## BİLDİRİM

Hazırladığım tezin tamamen kendi çalışmam olduğunu ve her alıntıya kaynak gösterdiğimi taahhüt eder, tezimin kâğıt ve elektronik kopyalarının Akdeniz Üniversitesi Eğitim Bilimleri Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanmasına izin verdiğimi onaylarım:

- ☐ Tezimin tamamı her yerden erişime açılabilir.
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09/08/2016

Tuba Tan

## **CURRICULUM VITAE**

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### **Education**

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### CHAPTER I. INTRODUCTION

English has become the international language of travel, science, business, and

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socializing. For this reason, teaching of English has become an important profession and an important field of study around the world. Besides social functions, English is an essential qualification for most high-paid jobs. Therefore, students need English in their academic studies both for their future jobs and

to be able to read resources in English in their

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academic fields. Reading enriches language learners'

knowledge of vocabulary, form, and foreign language culture, and it improves their world knowledge. Reading

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texts are full of second language input that improves learners' language skills (Carrell, 1998). Carrell and Eisterhold (1983) state that reading teachers' primary goal in

English as a Second Language (ESL) or English as a Foreign Language (EFL) is

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"to minimize reading difficulties and to maximize comprehension" (p. 566). Teaching reading strategies is a way achieving this. While students perform the complex task of reading, they manage cognitive, metacognitive, and motivational processes (Tercanlroğlu & Demiröz, 2015), so they use cognitive and metacognitive reading strategies, because they help language learners and readers overcome comprehension problems, make use of a text more efficiently, and become better readers eventually. Strategies enable

Yrd.Doc.Dr. H. Sezgi SARAC

readers to elaborate, organize, and evaluate the information in the text (Carrell, 1998).

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