

**METACOGNITIVE READING STRATEGY AWARENESS OF B1 LEVEL  
PREP CLASS STUDENTS**



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**METACOGNITIVE READING STRATEGY AWARENESS OF B1 LEVEL  
PREP CLASS STUDENTS**

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## **ABSTRACT**

### **METACOGNITIVE READING STRATEGY AWARENESS OF B1 LEVEL PREP CLASS STUDENTS OF T.C. BAHÇEŞEHİR UNIVERSITY**

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This research aimed to explore the metacognitive reading strategy awareness of B1 level Preparatory Program students of TC. Bahçeşehir University. MARSİ (Metacognitive Awareness in Reading Skills Inventory) (Mokhtari & Reichard, 2002) was used to assess the metacognitive reading strategy awareness of the students. A mixed-research design was implemented and data triangulation was applied in order to strengthen the results. Think-aloud sessions were held with a purposive sampling group which included two students one of whom got the highest score in MARSİ. The other student who attended think-aloud session was the one who got the lowest score in MARSİ. The sessions were performed with the aim of observing and analyzing the metacognitive reading strategy use of the students with the highest and the lowest survey scores. Finally, interviews were performed with both students to search for the factors that inhibited the student who got the lowest survey score, from using metacognitive reading strategies. Also, a comparison of the students with the lowest and the highest survey scores was made in terms of their metacognitive reading strategy use in frequency and variety. According to the results of the survey; the participants used the metacognitive reading strategies in medium level. The survey scores were divided into 3 categories as; the highest, average and the lowest. Global and supportive strategies were used mostly by the highest group

while the problem-solving strategies were mostly used by the lowest group. When the lowest score and the highest score were compared, it was revealed that global strategies and supportive strategies were mostly used by the student with the highest score and, problem-solving strategies were mostly used by the student with the lowest score. The findings of the think-aloud sessions showed that the student with the highest survey score used mostly supportive and global strategies and the student with the lowest score used mostly problem-solving strategies. That is, the survey results and the findings of the think-aloud sessions were parallel. Based on the interview analysis; it could be stated that, the student with the lowest score according to the metacognitive reading strategy awareness survey, had problems in vocabulary and that situation inhibited him from using more metacognitive reading strategies.

Keywords: Metacognition, Metacognitive Strategy Awareness, Reading Strategies, Lerner's Autonomy

## ÖZ

### T.C. BAHÇEŞEHİR ÜNİVERSİTESİ B1 SEVİYE HAZIRLIK SINIFI ÖĞRENCİLERİNİN ÜSTBİLİŞSEL OKUMA STRATEJİSİ FARKINDALIKLARI

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Bu araştırma, TC. Bahçeşehir Üniversitesi Hazırlık Sınıfı B1 seviye öğrencilerinin okuma becerilerindeki üstbilişsel strateji farkındalığını ölçmeyi hedeflemektedir. 100 tane B1 seviye öğrencinin okumadaki üstbilişsel strateji farkındalığını ölçmek için MARSİ (Üstbilişsel Okuma Stratejileri Ölçme Anketi) (Mokhtari & Reichard, 2002) kullanılmıştır. Araştırmada, sonuçları kuvvetlendirmek için karışık araştırma methodu ve veri üçlemesi uygulanmıştır. Sesli düşünme seansları, bir tanesi MARSİ den en yüksek puanı, diğeri ise en düşük puanı alan iki öğrenciyle uygulanmıştır. Sesli düşünme seansı uygulanan diğeri öğrenci MARSİ den en düşük puanı alan öğrencidir. Düşünme seansları üstbilişsel okuma stratejisi farkındalığı anketinden en yüksek ve en düşük puanı alan öğrencinin okuma aktivitesindeki davranışlarını gözlemlemek ve analiz etmek için uygulanmıştır. Son olarak üstbilişsel okuma strateji farkındalığı düşük olan öğrencilerin strateji farkındalığı geliştirmesine yardımcı olacak yollar aramak için üstbilişsel okuma stratejileri farkındalığı anketinden en düşük puanı alan öğrenciyle bir röportaj yapılmıştır. Anket sonunda sonuçlar farkındalığı yüksek öğrencinin en çok global ve destekleyici stratejileri, farkındalığı düşük öğrencinin de en çok problem çözme stratejilerini kullandığını göstermiştir. Amaçlı örneklemenin sesli düşünme seans sonuçları anket sonuçları ile uyumlu çıkmıştır. Röportaj sonucuna göre ise üstbilişsel okuma strateji farkındalığı

zayıf olan öğrencinin kelime bilgisi problemi olduğu ve bu problemin, onun üstbilişsel okuma stratejilerini kullanmasını engellediği ortaya çıkmıştır denebilir.

Anahtar Kelimeler: Üstbilişsellik, Üstbilişsel Strateji Farkındalığı, Okuma Stratejileri, Öğrenci Özyönetimi





To My Family



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## LIST OF ABBREVIATIONS

EFL	English as a Foreign Language
ELT	English Language Teaching
L2	Second Language
INT	Interview
TA	Think Aloud
SLA	Second Language Acquisition





## **Chapter 1: Introduction**

### **Overview**

For many years, language learning, both as indigenously and on a secondary basis, has been a matter of question among many scientific fields and it has been under many interdisciplinary research areas including social sciences such as linguistics, social psychology, sociology, history and even human biology related to neurology, genetics, anatomy, while the extension of the coverage is still possible. First and foremost, mother tongue acquisition process is known to shed light to the second language learning. Lightbown and Spada (2013) related the second language learning process widely to early childhood, asserting the fact that background information on language learning is important as our perspectives on how children acquire their first language affect the way we understand second language learning which is abbreviated as SLA. Lightbown and Spada (2013), revisited the theories and stages related to first language acquisition (FLA) in the chapter of second language learning. They stated that until the late 1960s people had a tendency to see second language learners' speech simply as an impaired version of the target language. According to the contrastive analysis hypothesis (CAH), errors were seen as the results of transfer patterns of the first language. The mother tongue effect has continued as a contributive perception to the second language learning phenomenon for many years. Lightbown and Spada (2013) also supported that second language learners, like first language learners, experience phases of development mentioning that what is learned by one, is learned by others in the same way.

However, according to Lightbown and Spada (2013), the phenomenon of SLA has also differentiating features. While some of them are unique, the others are just modifications of the first language acquisition. Although in either case, the connection between first and second language acquisition is undeniable, there are still points where SLA can be discussed separately.

With the aim of finding answers to SLA and L1 connections, researchers have been working hard. In language teaching field; many new terms, methods and principles and skill studies are only a small outcome of them.

Being defined as a way in which language is used (Thornbury, 2006, p.205) skills study can be accepted as a vital term in English Language Teaching (ELT) field as they enabled teaching methods to get over the old-fashioned grammar-translation age and its impacts. However, without effective implementation, separate skill analysis has its own drawbacks such as hindering or preventing communication, falling apart from skills integration in language education. (Thornbury, 2006, p.205)

As the separation of the skills gains importance in ELT, so do the methods that promote them in the language learning process. Using strategies can be accepted as being one of those skill enhancers. Riding and Rayner (2000, p.80) gave a distinct definition of learning strategies and their missions as a whole by noting that learning strategies might be consisted of either one or more sets of procedures that a learner uses so that a performance of a task can be easier for him. Reading skills are no exception for this. Different types of strategies are known to have been used for reading texts some of which are based on in-class reading followed by comprehension questions. Others, which are known as metacognitive strategies, require students to be aware of what strategies they use while doing a reading task (Cantrell, 2010; Mokhtari & Reichard, 2002).

Now that, the place of skill practice and the strategies that are used for easing the skill tasks, is known to be crucial; this research is dedicated to explore the skills and strategies used for it, particularly in reading, with the strategies that are within the learners' knowledge.

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

Reading includes many complex cognitive systems in itself. Its ultimate aim is to enable a person to acquire information from a piece of text. The reader might be acknowledged or remember what he reads. However, for educational purposes, reading is not only about getting meaning simply from a text but at the same time it involves many complex cognitive skills and linguistic abilities (Nazlı, 2012). This nature of the concept might have been playing a role why reading sessions are generally challenging for second language learners. This study focuses on the problem that, there have been increasing indifference and dislike of reading skills practices among second language learners of English and, their constantly decreasing

marks are due to, in part, the lack of study methods, linguistic awareness and, deficient strategy use.

Several studies focused on the possible ways to increase success and interest in reading and assessing metacognitive strategy awareness of English language learners. Some of them regarded metacognitive strategy as a key factor to achieve high level of proficiency especially in academic reading (Yüksel, 2011). Other studies focused on the effects of metacognitive strategy training on reading skills (Razi, 2010). Some other studies examined the effects of metacognitive strategy awareness and training.

## **1.2 Significance of the Study**

As, strategy awareness and its effects on reading skills have been an increasingly popular issue in language teaching field, a lot of research have been carried out about it. However, as opposed to the belief of a great majority, the concept of strategy training for more awareness and its importance in skill practices are not new ideas. Freeman (2000) mentioned the very early times of strategy training and the process of its rise as a distinctive figure in second language teaching, explaining that, while early research searched for identifying just these kinds of learning strategies, it was not long before language educators came to realize that simply recognizing learners' contributions to the process was not enough. In order to help them to develop in their autonomy, language learners-and especially those who are not among the group of so-called 'good' learners-needed training in learning strategies.

As studies related to strategy awareness and training along with metacognitive strategies and learners' success in skills have been piling up, needs to repeatedly carry out new studies on similar topics for deeper analysis have increased. The replication of the research on metacognitive strategy regarding its effects on reading skills was suggested by some studies (Maasum & Maarof, 2012). Also, existing studies primarily brought the quantitative data into the forefront (Temur, Kargin & Bayar, 2010). Fewer studies attempted to implement an interview as a data collection tool in order to understand the process more.

### **1.3 Purpose of the Study**

Since, it is a significant topic in English language teaching, more exploratory research on strategy awareness is needed and, this study aims to explore and observe the metacognitive reading strategy awareness of B1 level Prep Class students and how they are categorized under metacognitive reading strategy subscales based on a metacognitive reading strategy awareness survey. Besides, the research searches the reasons that cause the student with the lowest score based on a metacognitive reading strategy awareness survey, to use less metacognitive reading strategies.

### **1.4 Research Questions**

Based on the purposes of the study, this study seeks for the answers of the following research questions:

1. How are the B1 level of English Language learners of Bahçeşehir University Prep Class categorized based on the metacognitive reading strategy survey?
2. How do the students with the highest and the lowest survey scores differ from each other?
  - a) How do the students with the highest and the lowest survey scores differ from each other according to the survey?
  - b) How do the students with the highest and the lowest survey scores differ from each other according to the think-aloud sessions and the interviews?

## Chapter 2: Literature Review

### 2.1 Reading

Since all the stages of this study revolve around reading as a language skill, a brief survey will serve well about it, to understand the term “reading” deeply. Being looked at its lexical meaning; some basic and expected definitions are encountered; “the activity of somebody who reads”, “an act of reading something”, “books, articles, etc. that are intended to be read”, “(of sth) the particular way in which you understand a book, a situation etc.” (Oxford, 6th ed.). As the list goes on with more connotations and collocations of reading, initial couple of its literal meaning stands out being appropriate to be connected to reading in ELT as a receptive skill.

Before starting the analysis of the term ‘reading’ in the context of second language teaching, a definition of “receptive skills”, should be given, as they are mainly associated with reading as a language skill. Actually, receptive skills do not only include reading but they also include listening. They have one significant common point that they are both means of understanding, more than acting in the process of the practice. Although both listening and reading are counted as receptive skills, differences are also prevalent; “Receptive skills are the ways in which people extract meaning from the discourse they see or hear. There are generalities about this kind of processing which apply to both reading and listening but there are also significant differences between reading and listening processes too, and in the ways we can teach these skills in the classroom” (Harmer, 2003, p.199).

In their book *Teaching and Researching* Grabe and Stoller (2002) clearly defined reading as an activity in which the reader is supposed to deduce meaning from a printed page and interpret this information correctly. Their statement of main characteristics of reading is crucial for the term’s being understood more properly. The basic properties of reading are:

- First, it does not fully cover the idea that there are many of ways to engage in reading. A reader has several possible aims for reading and each aim requires a somewhat different combination of skills and strategies

- Second, it does not emphasize the many criteria that define the nature of fluent reading abilities, it does not reveal the many skills, processes and knowledge that act as a whole and often in parallel, to create the overall reading comprehension abilities that we commonly assume as reading.
- Third, it does not explain how reading is done as a cognitive process that operates under intense time constraints; yet, these very rapid time-processing constraints are important for understanding how reading comprehension works
- Fourth, it does not show exactly how the ability to draw meaning from a text and interpret this meaning within lines, differs with the second language (L2) proficiency of the reader. (Grabe & Stoller, 2002, p. 9)

The quotation above sheds light to what we understand from reading is not actually what it is in a second language teaching context. Reading is expected to combine different factors under it and those factors can be changeable even from reader to reader.

Thornbury, in his book pointed out the genuine nature of the reading mentioning that it is more of an active process rather than a passive one as many people conceive. However, he did not deny that it is a receptive process where the reader is at times in interaction. In an ELT class readers generally come to a reading text with their personal questions, and throughout the reading they fall in an analysis, evaluation stage and sometimes they even have need to modify their questions according to the answers given by the other class members. All these steps are enough to confirm the existence of the interaction in reading classes. (Thornbury, 2006).

The very point which is the action of the reader's bringing his background knowledge to the text was also mentioned by Harmer (2003) when he stated about how human beings read and process the tasks mentally. He used specific examples to clarify it; when the people encounter with a story, or when they listen to the news, or they participate in conversation, they all employ their past knowledge as they approach the process of comprehension. Also he added that people are capable of

applying many strategies; which ones they use will be determined in regards to their their reading or listening purpose. (Harmer, 2003).

In the context of second language teaching reading has no doubt extensive missions and is in charge of interdisciplinary study. Singhal (2006); in her book, focused on reading in adult second language learners and she pointed similar characteristics of the profile of a reader in a reading process with the ones who actively involve in communication through reading activities, showing the cooperational design of the process as an evidence. She supported the fact that reading is dynamic and interactive eventhough it is accepted as a receptive skill. According to her; receiving meaning from a text does not mean that it is a one-sided operation. She mentioned the individuals' background knowledge among many other factors that shape the event of reading. She also talked about the factors that bring the learners to a full comprehension. To her, learners make use of background knowledge, text schema, lexical awareness, linguistic awareness and their own personal aims to arrive at a comprehension of the written material. She, then stated that, readers' perceptions of the nature of reading are believed to be shaped by their own social, cultural and educational histories (Singhal, 2006).

## **2.2 Learner Autonomy**

Being described as “the ability to act and make decisions without being controlled” (Oxford, 6th ed.), autonomy is not a new term in the field of second language teaching.

It first took to the stage with Henri Holec and was described as learner's ability to be responsible for his own learning (Holec, 1979). Dickinson (1987) then, defined *autonomy* as a kind of awareness that shows a clear sense of responsibility and he stated that self-direction is the attitude of this responsibility. On the other hand, Little (1998) displayed the role of responsibility in autonomous learning with a slight difference; he asserted that with accepting the responsibility for our own learning, we can develop only a part of metacognitive competence of the learning process (Little, 1998). He then went on revealing another equally effective dimension for the learners' ability of self-management. He supported the factor of moivation in autonomous learning. He claimed, motivation is an crucial factor for a

well-managed learner autonomy existing in every autonomous learner and autonomous learners have strong motivation (Little, 1998). Ann Swarbrick (1994) listed the elements that show what autonomy is not; encouraging the readers to question the concept deeply; she then, stated that autonomy is not a synonym for only self-learning without any teacher. Also, she stated that it is not a limitless choice given to learners by freeing the instructor from responsibility. On the other hand autonomy is not something that a teacher does to his students, more clearly; it is not a teaching method and the ways to teach them directly will most probably be deceiving and time consuming. Contrary to many brief definitions she mentioned that learner autonomy cannot be associated with one single definable act and it is not steady and acquired at once but it is rather a part of a process and it is developable (Swarbrick, 1994).

David Little made an extension of learner autonomy in pedagogical context, he stated that learner autonomy is governed by three pedagogical principles:

- learner involvement – engaging learners in sharing responsibility for the learning process (the affective and the metacognitive dimensions)
- learner reflection – enabling learners to think critically when they plan, monitor and evaluate their learning (the metacognitive dimensions)
- appropriate target language implementation – using the target language as the principal medium of language learning (the communicative and the metacognitive dimensions)- (Little, 1998, p.2). Being deduced from these basic principles and their respective mental categorizations, it can easily be deduced that there is a direct link between learner autonomy and metacognition which is the main interest of this study.

### **2.3 Significance of Learner Autonomy**

Learners' autonomy is a critical characteristic of a second language learner and it is interrelated with useful methods to ease the target language to be acquired such as learning strategies and strategy training which are applied for enabling the learners to be able to use learning strategies. Holec signalled the possible lead to strategy training with the introduction of learner's autonomy; he explained the



autonomous learning as a concept which requires an interpretation of objective, universal information by subjective individual knowledge. For teachers, it means new objectives which help the learner define his personal goals and help him acquire autonomy (Holec, 1979).

Deci (1995) mentioned how important it is for people to feel free and be able to use their willpower. The significance of feeling strong-willed is so apparent that it is accepted as a basic human need. Swarbrick (1994) drew a picture of learner autonomy and its necessity as similar to Deci's (1995) on the ground of its place in social sciences: "If language learners are to be efficient communicators in their target language, they must be autonomous to the extent of having sufficient independence, self-reliance and self-confidence to fulfill the variety of social, psychological and discourse roles in which they will be cast" (Swarbrick, 1994, p.82).

## **2.4 Learning Strategies**

Learning strategies have long been accepted as a necessary factor for the ultimate success. The classroom environment supplies the second language learners with the learning equipments they need for language acquisition such as functional tasks, interaction patterns and opportunities to produce what they have learned. However, there is still a missing piece in the puzzle at the end of the day when the learned knowledge melts away from the memory. David Nunan (1988) made a comment about the need for self-study and therefore the necessity of learning strategies for ELT. He phrased that everything cannot be taught in classroom (Nunan,1988).

Oxford defined learning strategies as being specific actions, behaviors, steps, or techniques students constantly use to improve their progress in understanding, interpreting, and producing the second language (Oxford, 1990).

Although it seems to be a relatively new term, there is no doubt that developing strategy in learning is crucial for language learning, and its boundaries are not limited to receptive skills only, but it includes a wide range of language studies. Even though the focus of this study is reading, there is clear evidence that learning strategies can be applied to every field or stage of the second language

learning. Cohen (2016) asserted that learning strategies are not only for receptive skills but also there is a clear link between grammar and learning strategies.

Advances made in foreign language teaching and testing, cognitive psychology and information processing systems, enabled the studies to be conducted to categorize strategies used by EFL learners when they are performing different language tasks. (Akbari, Askari, Vhadany & Shahrestani, 2016). As a requirement of autonomous learning, learning strategies studies were contributed by many linguists (Chamot & O' Malley, 1990; Cohen, 1990; Oxford, 1990; Pearson, 1988; Rubin & Wendin, 1987; Sinclair, 1989; Skehan, 1989; Thompson, 1994).

Rubin pointed learning strategies as a separate and important factor for language learning. She defined learning strategies as the methods or devices which a learner can use to acquire knowledge (Rubin, 1975, p.43).

Tarone (1983) gave a definition of learning strategies by attracting attention to its different perspectives; "Learning strategy is an attempt to develop linguistic and sociolinguistic competence in the target language to incorporate these into one's interlanguage competence" (Tarone, 1983, p.67).

Weinstein and Mayer defined the term as "behaviours and thoughts that a learner engages in during learning" (1986, p.315).

Thornbury (2006) defined learning strategies as techniques or behaviours that learners consciously apply with the aim of enhancing their learning.

In order to understand them deeply and to find successful approaches to strategy training, learning strategies need to be analyzed deeply. Actually, learning strategies and strategy training are inseparable terms, and even more than that, they are interlaced, and they arise because of the interactional need for each other: "learner training techniques originated in research into the kinds of learning strategies used by successful language learners" (Thornbury, 2006, p.115). Freeman again mentioned strategy training, where the leading factor for this new term was described as learning strategies; he said that while early research went toward identifying the requirement of learning strategies, language educators realized that simply recognizing learners' contributions to the process was not sufficient recently

(Freeman, 2000). In order to increase their potential, and contribute to their autonomy, language learners and especially those who are not among the group of “good” learners, needed training in learning strategies (Freeman, 2000). It is also stated by Freeman (2000) that Wenden (1985) made an observation comparing learner training with language training and he decided that a teacher’s time might productively be spent in the former activity. Freeman (2000) then commented that those ideas played a crucial role in leading to the application of learning strategy training which trains students in the way that they will be able to make use of learning strategies to develop themselves in their language learning experiences.

## **2.5 Metacognition and Its Relationship with Cognition**

When the learners’ autonomy and learning strategies are seen as important factors in second language learning; different dimensions of the human mind and the questions about how it works in a learning process have come into focus. Before the discussion of metacognitive strategies; cognitive strategies should better be discussed. Cognition was apparently stated by Freeman (2000) in that, in the early 1970s when the cognitive side of the learning strategies started to attract attention, being more active in their own learning process, became easier for the learners. In the light of this, Rubin (1975) focused on what good language learners did to control their learning and she came to some conclusions from the result of this investigation; by identifying some techniques which led to a wide explanation of learning strategies as discussed before.

Cognitive strategies are defined by Williams and Burden (1997) as a totally mental process where we go through a series of phases in order to learn something; such as getting information, processing it, obtaining it, retrieving it or using it. As cognition deals with mental processing, cognitive strategies are expected to be closely related to mental activity of the learner; such as meaning deducing, retrieving knowledge, memory challenge activities, testing word knowledge etc.

However, metacognition is more than just knowing but being able to manage one’s own knowledge. Flavell (1976) supported that metacognition means having knowledge of one’s own mental process. He claimed that that metacognition requires a full consciousness and active monitoring, a controlled managing over the

knowledge, and according to him, in metacognition what makes difference is the fact that the person knows what he does and why he does that (Flavell, 1979).

Baker and Brown (1984) stated that metacognition itself is awareness of one's own learning and thinking and it also includes self-monitoring.

Pressley (2002) noted that metacognition is that a person has conscious knowledge about what he thinks. Garner stated the difference between metacognition and cognition as the latter deals with the methods of the performed task while the former cares more about the tasks that are being performed successfully (Garner,1990). However, when it comes to strategy use; it is noted that cognitive and metacognitive strategies have a mutual relationship. O'Malley and Chamot (1990) noted that; cognitive strategies which are related to analyzing and translating and metacognitive strategies which are based on organizing and planning are often used together by second language learners. When used together they support each other and a combination of strategy use is far more beneficial than sticking to a single one.

In Nasab's article (2015), in the light of the quotations from Chastain, (1998) and Joseph (2010), it was stated that one of the most common problems that second language learners face in trying to develop themselves is, not knowing what to do. It was also mentioned that solving this problem is a difficult task for the teacher to the same degree. Here, metacognitive strategies help in the way that they relate the ability of thinking, developing and being able to use practical problem-solving methods which perfectly address such challenges in second language learning experience (Nasab, 2015).

Nosratina, Ghavidel, Zaker (2015) in their research of metacognitive strategies through listening comprehension, investigated the effects of teaching metacognitive strategies and the accuracy of the presumption that metacognitive strategies help develop elaborated thinking and autonomous learning, in the end leading to a better learning. They stated that findings of their study showed the fact that there was a significant role of metacognitive strategy training in second language learning.

Anderson (2002) supported that metacognitive strategy use develops thinking ability so, especially for weaker learners, it leads to better learning and helps improve their performance.

Metacognitive strategies are also associated with individual skill studies and they are accepted as crucial contributors for improvement in language skills. Vandergrift (2007) commented about the value of metacognitive strategy use in listening studies. He stated that applying metacognitive strategies significantly contributes to L2 listening abilities.

In their research; Stewart, Seifert and Rolheiser (2015) placed the effects of metacognitive strategies on writing skills making use of a variety of valuable quotations from many other researchers. One of them was Lavelle and Bushrow's (2007) statements which indicated that writers from every proficiency level get help from strategies which help them in organizing, developing tactics and ideas and those kind of strategies are classified under metacognitive strategies.

Another study started with the aim of reaffirming a conclusion which many researchers have come to. It is the fact that metacognitive strategies play an essential role in oral English too. It was stated in this article that, in a conversation, the speaker needs to decide his role according to that specific context and at the same time, he needs to differentiate important information from unimportant information. Findings of this experimental study proved the hypothesis that had been predicted in the beginning of the study (Li, Yue & Yang, 2011).

Rasekh and Ranjbar (2003) chose to focus on vocabulary learning and its reactions to metacognitive strategy training. As they stated in their article that, lexical knowledge is generally associated with cognitive strategies requiring instant knowledge and analysis, and they investigated whether metacognitive strategies help develop lexical competence. The findings of the study assured that metacognitive strategies serve as a facilitator of vocabulary learning and they suggested they are especially beneficial for the learners who are not exposed to natural language environment.

Finally, being the rationale for this study, there is no doubt that metacognitive strategy use is effective and beneficial among second language study practices.

Among all, reading has its own place at the top; to accomplish the task of comprehending the text successfully, the reader must make use of metacognitive knowledge and must produce conscious and deliberate strategies (Karbalaei, 2011). Metacognition is essential for reading, successful readers are the ones who are able to monitor their reading activities and the level of their learning, and according to their improvements, they use and adjust strategies and they evaluate their accomplishments during that reading process (Brown, Armbruster & Baker, 1986).

## **2.6 Reading and Strategy Training**

Reading might be concerned as a problematic issue in second language learning by some learners. By Andrews and Mason (1991) it was stated that learners, especially the ones who struggle understanding a text because of lack of knowledge, can utilize from metacognitive strategy training (cited in Benedict, Rivera, Antia, 2015). On the other hand, upper proficiency level students are also likely to make use of metacognitive strategies. When proficient readers approach text, they use their metacognitive knowledge and control, often unconsciously. The integration of cognitive processes to construct coherent mental representations of text eases comprehension (Benedict, Rivera, 2015).

Many other evidence for the effectiveness of metacognitive strategy use in reading tasks is available. Researchers showed that all types of learners can learn to use metacognitive strategies to construct meaning from text (Benedict, Rivera & 2015).

In receptive skills like reading, the use of metacognitive strategies even gains more importance as the strategy-focused study has a chance to be turned into a habit for further language activities. Metacognitive control, in which the reader consciously controls the reasoning process, is a particularly important part of strategic reading. When readers are aware of the reasoning that is involved in reading, they can access and apply that reasoning to similar reading activities in the future (Karbalaei, 2011).

Thus, the role of training second language learners for metacognitive strategy use is equally important. It was stated by Karbalaei that strategy training comes from the estimation that success in learning, mainly depends on proper strategy use and that unsuccessful learners can improve their reading comprehension by being trained

to use effective strategies. Many studies have shown that reading strategies can be taught to students, and when they are taught, strategies help improve students' performance in comprehension and recall tests (Karbalaei, 2011).

Table 1

*Metacognitive Strategies And Their Descriptions*

Metacognitive Strategy	Definition
Analysing Needs	Analyzing linguistic needs in order to put long term aims and personal wishes might also be counted as needs (Ellis & Sinclair, 1989,p.151).
Problem Identification	Clearly identifying the main part of the problem in a task and pinpointing the factor which hinders its successfully completion (Chamot & O'Malley, 1990, p.137).
Self-management	Perceiving the conditions that enable a language task to be completed successfully and organizing them accordingly (Chamot & O' Malley, 1990, p.119).
Think-aloud (reading)	One's verbalizing his/her thoughts as he/she reads and thus revealing the strategies he/she is using to understand the text (Oster, L., 2001)
Self-monitoring	Monitoring one's comprehension in reading or listening during the task or controlling the accuracy or appropriateness of one's written and oral production while the task is still on process (Chamot & O' Malley, 1990, p.137).
Self-evaluation	Checking one's ultimate success in a language task by a subjective accuracy understanding or criteria (Chamot & O'Malley, 1990, p.137).

## 2.7 Self-Regulated Learning and Self-Report Method

When the term metacognition is the topic, self-regulated learning needs to be included as well because the latter occurs through metacognitive learning strategies. That is, the learner achieves the self-regulated learning with metacognition.

Paris and Paris (2001) explains self-regulated learning as the autonomy of the learner. According to them, in self-regulated learning (SRL), the learner is responsible for his own learning where he observes, controls and checks his own learning. Also in the process of SRL, the learner's goal is obtaining information, expanding his expertise or improving himself. As it is strictly related to one's own self; intrinsic motivation plays an important role in self-regulated learning.

Self-report can be counted as an umbrella term for obtaining personal information which involves questionnaires, interviews, open-ended questions etc. Paulhuz and Vazire (2007) focused on the self-awareness side of the self-report method by dividing it into three categories; direct self-ratings, indirect self-reports, and open-ended self-descriptions. They also mentioned about the advantages and disadvantages of self-report. It's being rich in information is the most attractive side of the self-report method for many researchers. It is also practical and applicable. Self-report method also motivates people to be more careful about rating because when people rate each other, they might not always answer the questions realistically. However, when the matter is themselves, people take their time and analyze the questions and think about their personalities carefully before the process of rating or assessing starts (Paulhuz & Vazire, 2007).

On the other hand, Paulhuz and Vazire (2007) stated that there are many criticisms against self-report method. Cultural limitations, constraints on self-knowledge, acquiescent responding, which means agreeing with a statement without regard to its content, and extreme responding, which means choosing the maximum or the minimum points in the rating scale, are among those disadvantages.

In spite of the drawbacks of self-report method; it is still widely used especially in metacognitive explorations. Some measures might be taken in order to obtain reliable answers through self-report such as setting time limits, observing the participants, combining the method with other supportive methods etc.



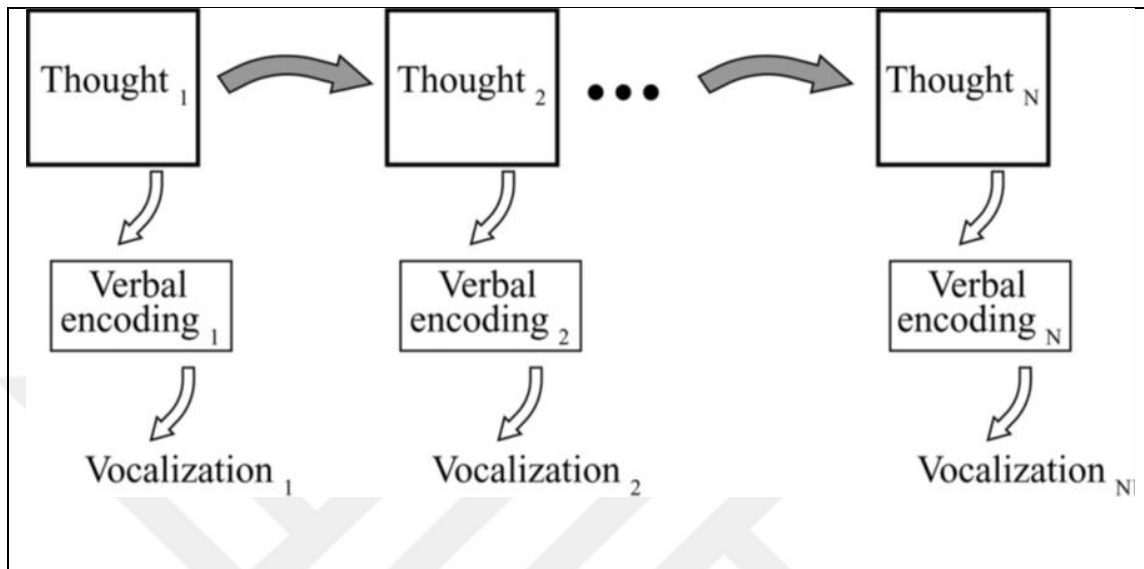
As an example for widely used self-reports, Metacognitive Awareness of Reading Strategies Inventory (MARSİ) was introduced by Mokhtari and Reichard (2002) (see Appandix A). It was designed to assess metacognitive reading strategy awareness of English language learners. It includes statements that reflect many aspects of metacognitive reading strategy use and it is easy to be applied to a large number of students. Also, it was reported by Mokhtari and Reichard (2002) that MARSİ was more appropriate for adolescent and adult readers.

MARSİ was also used in a variety of research for assessing the metacognitive reading strategy awareness of non-native participants: (Beşkardeşler & Kocaman, 2016; Meniado, 2016). It was designed with the aim of not only for assessing the metacognitive awareness of reading strategies but also for being used as a guide to find ways for increasing metacognitive strategy use of students. According to Mokhtari and Reichard (2002); there have been many research on how to assess metacognitive reading strategy awareness but few are useful to have a clear conclusion. For its appropriateness for adult learners, it's practicality to apply, and it's reliability, MARSİ was used for assessing the metacognitive reading strategy awareness of Bahçeşehir University B1 level Prep Class students in this research.

## **2.8 Protocol Analysis and Think-Aloud Method**

Being reviewed under metacognitive strategies; Protocol analysis is originally based on the ideas of Ericsson and Simon (1980) which approach verbal data as a problem-solving method in cognitive tasks. Verbal records are the things that the reader says what is in his mind while the reading process still flows. The analysis of verbal data is advocated in the way that, it is helpful to understand the attitude of the reader in terms of his use of strategies, and it plans to improve them. Ericsson and Simon (1980) derscribed the term protocol analysis systematically to investigate cognition and information processing. They asserted meaningful reasons to identify the function of it in human cognition process. The first fact they put forward was that cognitive process, which produces any kind of recordable behaviour or reaction to the task, mainly acts as inclusionary of cognitive process which produces verbalizations in the process of the task in hand. Secondly, what they stated is, the brief description of human cognition system in regards to information process. They said that human cognition is constantly in the state of information processing and a

sequence of internal states are being transformed by a variety of information processes. They went on reasoning the logic of protocol analysis with the fact that, the information which is recently acquired and on the process of usage, is the most convenient to be reached via think-aloud method (Fonteyn, Grobe & Kuipers, 2016).



*Figure 1.* An illustration of the verbalizations of most thoughts passing through attention while a person thinks aloud during the performance of a task (Ericsson, 2006).

### **2.8.1 Think-aloud method and previous research**

With the rising interest in protocol analysis among many psychologists and linguistics, there occurred many attempts to test its validity and reliability (Kuipers & Kassier, 1984; Moskowitz & Kassier, 1988; Fonteyn, Grobe & Kuipers, 1991; Grobe, Drew & Fonteyn, 1991)

The individual nature of the method no doubt, requires a small number of samplings rather than a huge amount of grouping. Whole attention should be paid on individually and this makes it rather demanding and time consuming when applied to a large number of people. Kassier (1984) reported that a methodology of discovery which is related to the extreme complexity of human mind requires rich data about individuals rather than easily analyzed data about a population (Fonteyn, 1993). To talk about the procedures of think-aloud method in the past, it should be stated that in previous research, simulation was generally applied to test think-aloud method. A problem-solving task was typical. Client simulation was widely used as it was easier

for the researchers to control the test environment while dealing with variables from real life (Fonteyn, 1993). Think-aloud is still applied with the principles. For data collection, the setting should be a quiet environment which is convenient for only one person to think aloud. During the session what the individual says is audiotaped and right after the session the audiotaped material is transcribed and the verbal data is obtained this way. An investigator presents during the session and the interaction between the individual and the investigator is kept minimum. Only if the individual keeps silent for a period of time which might hinder the process, the investigator quietly reminds him to keep thinking aloud (Fonteyn, 1993).

### **2.8.2 Think-aloud and similar research**

Wang, Yin and Zhang (2011) did an exploratory research on metacognitive knowledge which included metacognitive strategy knowledge as a subset. They intended to explore the state of metacognitive awareness of the learners by collected data in two ways. The first way was students' answers to some questions related to metacognitive awareness and the second way was performing interviews with the students. Their open-ended questionnaire included very similar questions to the interview questions of this research:

- Have you ever made plans to improve your reading?
- How do you deal with the unknown words in your reading?
- What is the most difficult problem you have when you do reading?

(Wang, Yin & Zhang, 2011)

Another research by Kit-Ying (2013) was carried out to explore metacognitive strategy use of English second language students in Hong Kong. Similar to this research, he used Metacognitive Awareness of Reading Strategies Inventory (MARSII) (Reichards & Mokhtari, 2002) as the data collection instrument.

Pinninti (2016) also aimed to explore metacognitive awareness of reading strategies of Indian students who were learners of English. Like this reaserch, he intended to identify the most and the least frequently used reading strategies. However, he planned to assess this based on the three stages of reading: pre-reading, while-reading and post-reading.

### **2.8.3 Retrospective think-aloud method**

Retrospection is not a new term, it can be dated back to ancient Greek times where prominent philosophers paid immense attention of one's looking inside. The most distinct philosopher who dealt with the term first, is known as Aristotle. He is claimed to be the first to record and analyze the thoughts systematically. Although it is so old and known, there have always been criticisms against its reliability. In the *Journal of Consciousness Studies* (2003), the reliability issue was stated with some important quotations. In several reviews it was shown that the detailed instructions and the methods to encourage participants to give verbal reports influenced the validity and reactivity of collected verbal-report (Ericsson & Simon, 1980, 1984). Ericsson and Simon also (1980, 1984) asserted that verbalization of one's own thoughts while on task, did not affect cognitive process but may only affect the individuals' speed in the process. As a reaction to the criticisms; Ericsson and Simon (1984) categorized the think-aloud process as concurrent and retrospective (Fonteyn, 1993). In concurrent verbal report, the individual is told to think aloud in the process of cognitive task. On the other hand, in retrospective process, the individual is asked questions when the task is completed. The researcher asks about the previous task each time. Retrospective think-aloud method is believed to be more reflective in terms of exploring about the use of strategies while it might be deceptive when comprehension questions are asked because people tend to use their past knowledge randomly when comprehension questions are asked (Fonteyn, 1993).

Ericsson in his article (2011) responded Schooler's (2011) comments about his meta-analysis. Schooler claimed that think-aloud is an introspection and he criticized think-aloud as being lack of capturing a full consciousness especially non-verbal conscious state. Ericsson's respond to this criticism shed light to the introspective think-aloud method. Ericsson stated that, as opposed to what Schooler supported; think-aloud is a process of focusing on the task in progress where the thoughts about the task are in the center of attention. On the other hand, retrospective think-aloud is a totally different method where the individual is asked to give detailed descriptions and explanations. Thus, retrospective think-aloud has an ability to dig deeper in the consciousness and this way, it might change the behaviour more easily (Ericsson, 2011).

## Chapter 3: Methodology

### 3.1 Research Design

In this study mixed-method research design was used. A mixed method research design is a study where both qualitative and quantitative data are collected and analyzed to explore different aspects of the issue in hand (Bryman,2004; Creswell & Clark, 2011).

According to Creswell (2009), there may be more than one reason to apply mixed method research designs. The most common aim is to broaden the understanding of the research problems, it may also be applied to enrich the explanation of the results from the other approach. In this case; both were expected. This study seeks answers to the questions: How are the B1 level of English Language learners of Bahçeşehir University Prep Class categorized based on the metacognitive reading strategy survey? How do the students with the highest and the lowest survey scores differ from each other according to the survey? How do the students with the highest and the lowest survey scores differ from each other according to the think-aloud sessions and the interviews?

To answer the research questions a methodological data triangulation was applied.

Obtaining richer information from the findings was the motivation of using more than one data collection tool. Data collection tools were chosen in compliance with the relevant questions of the survey.

### 3.1.1 Triangulation of the Study



*Figure 2. Triangulation of the study*

A methodological triangulation was applied to obtain answers to the questions of the research. In the book *Audience Research Methodologies Between Innovation and Consolidation* by Patriarce, Blandzic, Jensen and Jurisic (2014) the definition of triangulation was given with a quotation. Data triangulation was defined as an: “attempt to map out, or explain more fully, the richness and complexity of human behavior by studying it from more than one stand point” (Patriarce, Blandzic, Jensen & Jurisic, 2014, p.55).

The answer to research question 1 was planned to be given by a large-scaled survey which was conducted with 100 B1 level students. The aim of this step is to collect quantitative data about the classifications of the B1 level students in language awareness based on a metacognitive reading strategy awareness survey. In the light of the survey results, a categorization of B1 level students according to metacognitive awareness was planned to be done.

To answer research question 2 a) (How do the students with the highest and the lowest survey scores differ from each other according to the survey?); a comparison was intended to be made between the student with the highest score and the student with the lowest score based on the survey, by carrying on analysis on an individual basis.

The answer to research question 2 b) (How do the students with the highest and the lowest survey scores differ from each other according to the think-aloud

sessions and the interviews?) was intended to be given via think-aloud sessions. In those sessions, the implementations of the metacognitive reading strategies by the students with the highest and the lowest score based on the survey were planned to be observed. This process was to be carried out to reach the information of what types of metacognitive reading strategies were used by the purposive samples. Interviews were planned to be performed with the students who scored the highest and the lowest in the survey, to explore the differences between the student with the highest survey score and the student with the lowest survey score. That is, the think-aloud sessions and the interviews were planned to get information about the differences or the similarities among the metacognitive reading strategy perceptions of both students.

The triangulation of the research contributed to the research in the way that it enabled all the research questions to be answered in conformity with each other. Therefore it could be stated that the triangulation of the study made the research give a deep insight of metacognitive awareness of reading strategies of B1 level students of Bahçeşehir University Preparatory Program.

### **3.2 Target Population and Participants**

As mentioned above, the focus of this study was metacognitive strategy use in reading. It was carried with both quantitative and qualitative data. To obtain the quantitative data, a detailed metacognitive strategy survey was used and, to obtain the qualitative data, retrospective think-aloud sessions and interviews were applied.

#### **3.2.1 Participants of the survey**

B1 level students were projected to serve better in giving correct answers to the survey questions as they had been taking reading courses more intensively than the students with lower proficiency levels. Also the answers of the research questions were thought to be more beneficial to B1 level students because they were responsible for reading tasks in their midterm and final exams.

Based on all these factors, B1 level Prep Class students of Bahçeşehir University were used as participants. No other categorization was implemented.

The survey was implemented to 100 students from four congruent classes. The survey of metacognitive strategies in reading skills was used to assess the metacognitive strategy awareness of the participants.

### **3.2.2 Participants of the think-aloud sessions**

The scores of the survey were calculated in regards to a categorization of the subscales of metacognitive reading strategies (see Table 4). The results were sequenced from the highest to the lowest scores (see Table 5). Then the the highest and the lowest score were compared. The student with the highest and the student with the lowest score were invited to think-aloud sessions. The sessions were held individually and each student was given pseudonyms. The student with the highest score was called *Adam* and the student with the lowest score was called *Colin*.

### **3.2.3 Participants of the interview**

Adam and Colin were invited to perform interviews with the researcher. The purpose of the interview was to answer research question 3 and to compare the metacognitive reading strategy use of Adam and Colin in terms of variety and frequency.

## **3.3 Procedures**

Being an exploratory study; the research was completed through three main steps.



Table 2

*The Research Design Matrix*

	Data Collection Method	Data Analysis	Data collection Instruments
Research Question 1: How are the B1 level of English Language learners of Bahçeşehir University Prep Class categorized based on the metacognitive reading strategy survey?	Quantitative	Content Analysis	Survey
Research Question 2 a) How do the students with the highest and the lowest survey scores differ from each other according to the survey?	Quantitative	Content Analysis	Survey
Research Question 2 b) How do the students with the highest and the lowest survey scores differ from each other according to the think-aloud sessions and the interviews?	Qualitative	Protocol Analysis	Think-Aloud Sessions, Interview

### **3.3.1 The survey procedure**

To answer research question 1, a quantitative analysis was carried out. To obtain the information about the categorization of B1 level Prep Class students of Bahçeşehir University, based on the metacognitive reading strategy awareness survey, Metacognitive Awareness of Reading Strategies Inventory (MARSİ) (Mokhtari&Richard, 2002) was used (see Appandix A). A consent was inquired from the Bahçeşehir University Prep Class Administration Office. A negotiation was held with 4 B1 level teachers. The aim of the research, the survey questions' appropriateness for the classes, available time of the teachers were discussed. On November 10, 2016, at 8.30, the survey questions were given to 4 B1 level teachers. They distributed the surveys to their students in their classes. The teachers informed their students that they were going to do a survey about strategy use in reading activities and they did not need to write their names on the survey papers because they were not going to be assessed according to their answers. The students were also instructed to be silent during the task and to be reliable in their answers. All the students started their survey at the same time. Allocated time for answering the survey questions was 20 minutes.

### **3.3.2 Think-aloud protocol**

After the calculation and the sequence of the numerical results of the survey, the highest and the lowest-scoring students were invited to retrospective think-aloud sessions to answer research question 2.

The students were informed that:

- They were going to read a text and after they finished reading the text, some questions were going to be asked them like the previous pilot study (see Appandix F)
- They were going to be videotaped.
- Only the body parts that reveal evidence of metacognitive strategy use would be videotaped.
- Their identities would not be revealed.
- They were allowed to take their time to relax and feel comfortable, the sessions would start when they felt ready

- They were allowed to use dictionaries.
- They were allowed to take notes, underline or circle any word or phrase in the text.

The session of Adam (see Appendix C) was carried on December 7, 2016, at 10:08. Adam was told to read a biographical text in a way that he always did. He was asked to read as naturally as possible. When he finished reading the text, the retrospective questions were asked. Adam's think-aloud session lasted for 21 minutes.

The session of Colin (see Appendix D) was performed on December 8, 2016, at 13:20. He was asked retrospective questions after he read the text. The session lasted for 22 minutes.

### **3.3.3 Interview procedure**

Two interviews were performed. Adam was interviewed on December 7, 2016, at 10:26 to support the answers to research question 3, the interview lasted for 3 minutes. The focus of the research question 3 was the student with the lowest score, so another interview was also performed with Colin to look for the problems that he experienced during the think-aloud session. The interview with Colin was done on December 8, at 13:40. The interview lasted for 5 minutes.

## **3.4 Data Collection Instruments**

Three different data collection tools were used. After the calculation of the survey, to obtain verbal data; retrospective think-aloud method was used. Think-aloud sessions were held to analyze the use of the metacognitive reading strategies by the highest-scoring and the lowest-scoring students. Then, interviews were performed to reveal the factors that inhibited Colin from using metaconitive reading strategies.

### **3.4.1 Quantitative data collection tool**

The Metacognitive Awareness of Reading Strategies Inventory (MARSI) (see Appendix A) was used as a quantitative data collection tool in the research. As it was stated in the second chapter; the survey was introduced by Mokhtari and Reichard,

(2002) in order to assess the readers' metacognitive awareness of reading strategies along with their perception of metacognitive reading strategies.

The structure of the survey allows the researchers to be able to categorize the strategies in different categories. Thirty statements are arranged with the choices of five point scale. If the student thinks that he uses the strategy in the item, he grades it with the top point which is 5. If he thinks that he does not use the strategy at all or uses in a minimum level, he circles 1. Scales 2,3, and 4 are the medium points from "less" to "more". The survey has three metacognitive reading strategy subscales which are problem-solving, global strategies and supportive strategies. Each statement is designed to be under one of these subscales. The statements that attribute to solve reading problems are under problem-solving scale, the statements that approach the strategies in a more general perspective are put in the category of global strategies and the statements that imply the complimentary help for reading process are put under supportive category. The scale explanation is supported by frequency adverbs; never, almost never, only occasionally, sometimes, usually, always or almost always..

### **3.4.2 Qualitative data collection tools**

In this study; qualitative data was obtained in order to support the quantitative data and answer research question 2 b). The qualitative data was obtained in two steps.

Qualitative data collection tools were the think-aloud method and the interviews. First qualitative data was obtained via retrospective think-aloud method. Think aloud method, as it has been mentioned in literature review; best works when performed with a small number of individuals. This process has an intimate characteristics. The sessions are held with only one student and an observer.

The student with the highest survey score based on MARSİ and the student with the lowest survey score based on MARSİ were observed in two separate think-aloud sessions. They were carried out as retrospective think-aloud sessions. Both individuals were asked to read a biographical passage (see Appendix B). Soon after they read the whole text, retrospective questions were asked by the researcher. The reading passage was legally demanded from Bahçeşehir University Prep Class B2

material archive. The text was appropriate for intensive reading strategy implementation. It was a B2 level text which was appropriate for a variety of strategy use.

The main aim of the qualitative data collection tools was to give answer to research question 2 b). Therefore, they were used to see the differences between the students with the lowest and the highest survey scores in terms of their use of the metacognitive reading strategies and the problems they had in the process of using those strategies.

### **3.5 Data Collection Procedures**

To obtain quantitative data which would give answer to research question 1 and 2a); the researcher distributed the survey to four B1 level classes which were chosen according to their levels. When the survey papers were collected back; the answers were calculated according to four different categories. Then, they were recorded in MS excel on an individual basis, to differentiate the total points for each category; excel advanced data analysis tools and functions were used. Means and standard deviations both in subscales and in general scales were calculated. The averages both in subscale and in general scale were sequenced from the maximum to the minimum level. A graph was used to illustrate the findings (see Figure 3). According to the excel calculation, the student with the maximum score and the student with the minimum score were selected and their values were compared within the same subscales. Moreover, to see if the results are meaningful and the differences between the group scores are significant; statistical analysis including t-tests in top and bottom grouping.

To obtain the first qualitative data for giving answer to research question 2 b); think-aloud sessions were carried out with the purposive sampling group. Sessions were held individually one after another. Retrospective think-aloud method was applied. The students were given a B2 level biographical reading text. After they finished reading the text; exploratory questions were asked by the researcher.

The retrospective think-aloud session questions were designed by the researcher under supervision. In order to avoid any preposed attitude, the questions were carefully constructed without any words that may carry any type of idea or

emotion. Also the questions were kept short and direct to be understandable and not to distract the attention of the students. Students were allowed to consult dictionaries and take notes. The focus of all the questions was metacognitive strategy induced behaviours of the readers. The think-aloud questions that were asked by the researcher are;

- What was the first thing you saw on the text page?
- While reading the text, what was going in your mind?
- How did you start reading?
- Did you have a purpose in your mind while you were reading the text?
- How did you remember what you read in the previous paragraphs?
- How did you understand the difficult parts of the text?
- What did you do to find the key information in the text?
- What did you do to understand the unknown words?
- What do you think about the content of the text?

In order to obtain the second qualitative data; the researcher performed interviews with the student who got the lowest survey score and with the student who got the highest survey score. For the student with minimum score, the factors that blocked his metacognitive strategy use and the possible ways to overcome those problems were aimed to be explored. The interview questions were prepared by the researcher under supervision and they were paid special care about their objectivity against any inducement. They were in Simple Present form to make the reader talk about the strategy use in general.

Interview Questions:

- What do you think about retrospective think-aloud method?
- What was complex in the text?
- What can you do to solve that problem?
- What can you do to develop your reading strategies?

### **3.6 Reliability of the Survey**

This research was carried with caution against any threats to reliability and validity of the results. Some measures included:

A large number of participants in self-reported metacognitive strategies in reading survey, use of advanced excel functions for the calculation of the average scores of the whole group, differentiating the mean values of the subscales, and finding standard deviations.

Cronbach's alpha was used to test the reliability of the survey in general.

Table 3

*Cronbach's Alpha Reliabilities by Number of Participants Level*

Number of Participants	Cronbach's Alpha of the general the survey with 30 items
100 students	0.90828745

### **3.7 Limitations**

The survey was helpful as a data collection instrument but a self-report study might not always be realistic for a number of reasons; such as students' being unaware of their metacognitive reading strategy use or their being unreliable in their answers, so the self-reported answers should always be supported by different data collection tools which were applied in this research.

Bahçeşehir University Prep Class has a shifting system. The participants come to school in the morning three days a week and they come to school in the afternoon twice a week. They also leave school soon after their lessons are over so it was not easy to find an available time and a place for think-aloud sessions and the interviews. Moreover, students were tired and hungry when the lessons ended.

Before the implementation of the survey, a meeting was held with the teachers to arrange an available time and to present the survey paper to be analyzed by them. As all the teachers had different schedules, it was challenging to determine a suitable day and time for the implementation of the survey.

Although it was told that their identities would be kept confidential and they would not be graded by their performances, the students were self-conscious during the think-aloud sessions and interviews.

### **3.8 Delimitations**

This study focused on only Bahçeşehir University Prep Class B1 level students. Other level students were not involved in the study due to schedule and permit problems. In addition, due to the time constraints of the study, think-aloud sessions and interviews were held with only two participants.





## Chapter 4: Data Analysis and Results

### 4.1 Research Question 1

Research Question 1- How are the B1 level of English Language learners of Bahçeşehir University Prep Class categorized based on the metacognitive reading strategy survey?

To obtain the quantitative data and give an answer to research question 1; the average score of MARSİ was calculated both on an individual and on a group basis. General MARSİ and subscaled MARSİ strategies' scores were shown with their divisions of the levels (See Table 4). Subscales were demonstrated by MARSİ both on the survey question paper and on the assessment paper.

Table 4

*Item Distribution for the Assessment of MARSİ*

Global Reading Strategies (GLOB Subscale)	Problem- Solving Strategies (PROB Subscale)	Support Reading Strategies (SUP Subscale)	Overall Reading Strategies
1. _____	8. _____	2. _____	GLOB _____
3. _____	11. _____	5. _____	
4. _____	13. _____	6. _____	PROB _____
7. _____	16. _____	9. _____	
10. _____	18. _____	12. _____	SUP _____
14. _____	21. _____	15. _____	
17. _____	27. _____	20. _____	
19. _____	30. _____	24. _____	
22. _____		28. _____	
23. _____			
25. _____			
26. _____			
29. _____			
_____ GLOB Score	_____ PROB Score	_____ SUP Score	_____ Overall Score
_____ GLOB Mean	_____ PROB Mean	_____ SUP Mean	_____ Overall Mean

The levels (the highest, average, the lowest) were determined based on Mokhtari and Reichard's (2002) criteria notifications; "3.5 or higher = High, 2.5–3.4 = Medium, 2.4 or lower = Low"

In the first place, the scores of all the participants were calculated on an average basis. The assessment chart in the article by Mokhtari and Reichard (2002) was used to sequence the survey scores of the participants (see Table 4). According to the assessment chart; mean values which are 3,5 or over are equal to the highest score, mean values between 2,5 and 3,4 are equal to the average score, and 2,4 or lower mean values are equal to the lowest score.

35 students had the highest mean score which is 3,5 or over. 13 students got the average score with the mean values between 2,5 and 3,4. Mean scores of 22 students were in the group of the lowest score which is 2,4 or below

Table 5

*Means of Reading Strategy Use of the Whole Group According to MARSI*

<i>Strategy Use</i>	<i>M</i>	<i>SD</i>
MARSI	3.1480	0.747766
GLOB	3.1469	0.909844
PROB	3.1225	0.623098
SUP	3.1722	0.863466

Notes. MARSI = general (without categorization), GLOB = global, PROB = problem-solving, SUP = supportive, M = mean, SD = standard deviation

Although the mean values were close to each other, it could be seen that according to the data analysis of MARSI; with 3,1480 average; students in Bahçeşehir Prep Class self-reported their use of metacognitive reading strategies in Medium level (see table 5). Supportive strategies were used more than the other strategy subscales based on the survey. Problem-solving strategies were used less than all the other subscales.

Table 6

*Means of Reading Strategy Use of the Students in the Highest Score Group Which is (over) 3.5 According to MARSI*

<i>Strategy Use</i>	M	SD
MARSI	4,027619	0,13967
GLOB	<b>4.173626</b>	0.19509
PROB	3.746429	0.36818
SUP	4.066667	0.31909

Among the students with the highest survey score; global strategies were used in maximum. Then came supportive strategies with a close average. Problem-solving strategies were the least frequently applied strategies (see Table 6).

Table 7

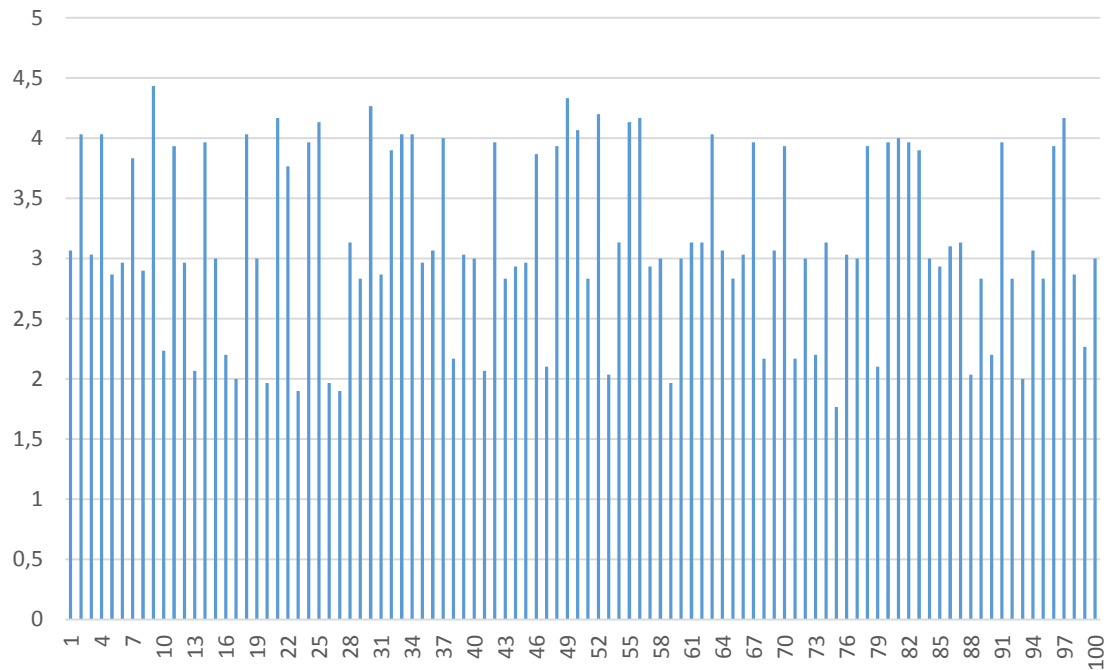
*Means of Reading Strategy Use of the Students in the Lowest Score Group Which is between 2.5 and 3.4*

<i>Strategy Use</i>	M	SD
MARSI	2,066666667	0,127242
GLOB	1.84965035	0.25948
PROB	2.494318182	0.223198
SUP	2.00	0.341178

Out of those 22 students who got the lowest mean score, problem-solving and supportive strategies were mostly used. Global strategies were applied less than the other subscales

Based on these findings the students with the highest and the lowest scores in mean values used different subscales the most.

*Mean Values of the Survey Scores*



*Figure 3. An illustration of mean values of general survey scores*

In order to see if the differences among the scores of subscales and in general MARSII are significant, a statistical analysis was carried for each subscale and for general scores.

Table 8

*Group Statistics of Global Strategy Subscale*

GLOBAL	N	Mean	Std. Deviation	Std. Error Mean
Low	33	27.3333	5.50946	.95907
High	34	54.4412	2.32498	.39873

Statistical calculation showed a higher mean value in global strategy in the top group (see table 8).

Table 9

*Independent Sample Test of Global Strategy Subscale*

		Independent Samples Test								
		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interval of the	
								Lower	Upper	
	Equal variances assumed	40.793	2.069E-08	-26.376	65	1.962E-36	-27.10784	1.02773	-29.16036	-25.05532
	Equal variances not assumed			-26.099	42.779	6.610E-28	-27.10784	1.03866	-29.20281	-25.01288

The t-test showed a significant difference between the group scores of global strategy subscale (see table 9).

Table 10

*Group Statistics of Problem Solving Strategy Subscale*

PROB	N	Mean	Std. Deviation	Std. Error Mean
1.00	40	19.9750	1.60907	.25442
2.00	34	30.7941	2.15715	.36995

Top group had a higher mean value in problem-solving strategy according to the statistical analysis (see table 10).

Table 11

*Independent Samples Test of Problem Solving Strategy Subscale*

Independent Samples Test										
		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interval of the	
									Lower	Upper
	Equal variances assumed	4.413	.039	-24.668	72	.000	-10.81912	.43858	-11.69342	-9.94482
	Equal variances not assumed			-24.097	60.201	.000	-10.81912	.44899	-11.71716	-9.92107

The group scores of Problem-solving strategies showed a significant statistical difference.

Table 12

*Group Statistics of Supportive Strategy Subscale*

SUPPORT	N	Mean	Std. Deviation	Std. Error Mean
1.00	38	20.2368	3.73033	.60514
2.00	34	36.9706	2.51643	.43156

The top group which was showed as 1.00, had higher statistical mean value in supportive strategies (see table 12).

Table 13

*Independent Test of Supportive Strategy Subscale*

		Independent Samples Test								
		Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interval of the	
									Lower	Upper
SUPPORT	Equal variances assumed	8.438	.005	-22.044	70	3.228E-33	-16.73375	.75911	-18.24775	-15.21974
	Equal variances not assumed			-22.514	65.276	1.773E-32	-16.73375	.74326	-18.21803	-15.24946

When supportive strategy scores were statistically analyzed (see Table 13), the mean values of the whole supportive strategy subscale came out as meaningful.

Table 14

*Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
TOTAL	100	53.00	133.00	94.4400	22.43298	503.239
GLOB	100	20.00	59.00	40.9100	11.82797	139.901
PROB	100	16.00	35.00	24.9800	4.98478	24.848
SUP	100	12.00	42.00	28.5500	7.77119	60.391
Valid N (listwise)	100					

As it can be seen, there was a significant difference between the highest and the lowest values (see table 14).

#### 4.2 Research Question 2 a)

Research question 2) How do the students with the highest and the lowest survey scores differ from each other? a): How do the students with the highest and the lowest survey scores differ from each other according to the survey?

A detailed calculation was applied to the scores of MARSİ where all subscales and general proportion were calculated and the results were ranked accordingly; after the calculations were completed on an individual and on a group basis, the highest and the lowest items were compared to form another score table (Table 15). According to Table 15, where the purposive sampling participants can be compared, global and supportive strategies were mostly applied by the student with the highest score. This data supported think-aloud session where the same participant used the global and the supportive strategies mostly. On the other hand, the student with the lowest score in general MARSİ, had the highest score from problem-solving strategies subscale. This also supported the think-aloud session where the student with the lowest score in MARSİ, used problem-solving strategies more than the other groups of strategies.

Table 15

#### *The Scores of the Purposive Sampling Participants*

<i>Strategy Use</i>	<u>Student with the highest score</u>		<u>Student with the lowest score</u>	
	M	SD	M	SD
MARSİ	4,4333	0,97143	1,766666667	0,72793
GLOB	4,4615	0,877058	1,538461538	0,51887
PROB	4,125	1,356202	2,125	0,353553391
SUP	4,6667	0,707106781	1,777777778	1,09291

The student with the highest score and the student with the lowest score can be compared through their means in general MARSİ and in sub-scales (see Table 15).



### 4.3 Research Question 2 b)

Research Question 2) How do the students with the highest and the lowest survey scores differ from each other? b) How do the students with the highest and the lowest survey scores differ from each other according to the think-aloud sessions and the interviews?

#### 4.3.1 Think-aloud sessions

Before the research; a pilot study was conducted with the students who scored the highest and the lowest in MARSII (see Appendix G). The pilot study was helpful especially for detecting the possible limitations of the research. Some changes were applied to the think-aloud sessions of the research with the guidance of the pilot study.

Table 16

#### *Pilot Study and the Research Comparison*

Piloting think-aloud sessions	Think-aloud sessions in the Research	Reasons of the Change
Students were not informed about additional materials such as dictionary.	Before the sessions started, each student was informed that they were allowed to use dictionary.	In the middle of the interview the student with the lowest score asked for a dictionary which might have had a negative effect on his concentration.
A B1 level less complex reading text with questions was given as a tool.	A more complex text without any question task was used.	In order to challenge the students so that they would be in more natural need to use strategies. Also omitting the question

		section, the worry of giving correct answers was aimed to be replaced with the effort to understand the text which eventually would help strategy use.
A voice recorder was used in the sessions.	The students were videotaped to enable the researcher to analyze their body language.	In the pilot study students underlined some parts of the text, they turned pages and circled some words and these visual findings were not be able to be caught via the voice recorder.

The student with the lowest score and the student with the highest score based on MARSJ were invited to retrospective think-aloud sessions. As it was mentioned before, they were given pseudonyms. The student with the highest score based on MARSJ was called Adam and the student with the lowest score was called Colin.

#### **4.3.2 Think-aloud session of the student with the highest score in the metacognitive reading strategy awareness survey**

On December 7, 2016, at the time of B1 level courses a consent was demended from the integrated skills teacher of the class coded as B1-12, for studying with the highest scored student. As a full consent had already been gotten from the head of the preparatory program, a second permission was not asked for. The class teacher gave the permission for the study. An explanation was given to Adam who was the highest scored student in the survey. However, his answers to the statements were kept confidential because it was projected that if he remembered his responses, he would try to use the same strategies at the same frequency. He was informed that a reading activity which revealed strategy use would be conducted. Then, interviews about the activity would be performed. Additional explanations were given such as

there was nothing to be distressed, he would not be graded and the activity would not last longer than an hour.

The think-aloud session of Adam started at 10:08 am. He was given a biographical text including 583 words and 5 paragraphs with first-line indent. The text was chosen from B2 level intensive reading material archive under the permission of material development office. It was challenging enough to prompt the students to pay attention. It was also appropriate for strategy use in terms of its genre because the students would need to connect the information in the paragraphs and they would need to remember the details in order to achieve a comprehension of the text.

The evidence that he was breathing deeply might mean that he was distressed. First of all, he looked at the picture for about three seconds. Then, he started reading the text with a low voice. He read the first sentence by whispering and the sentence was clearly heard. Then he stopped in the fourth second and started underlining the first sentence in a time span which was appropriate for a reading pace. However, this time, he was in a full silence. Depending on those clues, it was suggested that he reread the first sentence. He circled the words “Edinburgh”, “Great depression” and “1930s”. “Edinburgh” and “1930s” cannot be put into an unknown words category because Adam has a good command of Turkish and Edinburgh is spelled almost the in same way in Turkish. Also the period “1930s” was in the form of the symbolic representations of hindu-arabic numbers which are universally used. Based on these facts, it might be assumed that Adam’s purpose under circling the items “Edinburgh” and “1930s” was something different than marking the unknown vocabulary. Also “Great depression” was underlined as a whole without separation of “great” and “depression”. Moreover, like “Edinbrugh” it was also a proper noun. Regarding all these factors, Adam might have circled those nouns for marking specific or important information. If that was the case, then he might have used a supportive strategy.

During the fifth minute, he was reading the second paragraph without using a pencil to trace the lines. Then, he started using his right index finger to follow the line four which starts with the word “Despite”. He continued tracing the lines till the end of the second paragraph.

Paragraph 3 talks about the sudden attitude changes of Sean Connery. The reasons and the effects of that changes are also told in the same paragraph. When Adam was around the third paragraph he brought his right hand to his nose and frowned. This might mean that he was thinking more deeply or he was trying to increase his concentration level. Also it was observed that Adam put his index finger just below the bold phrase “with his tail between his legs” and stopped there for about two seconds. He might have thought about what that phrase meant in the context. If he did so, this would be a clue of global strategy use.

Based on his eye movements, it was observed that Adam was reading the fourth paragraph in the ninth minute. When he was somewhere in the middle, he took his pencil and pointed back it to the beginning of the second paragraph. The second and the fourth paragraphs are connected to each other in the way that they both talk about the job experiences of the biography character. This time, he reread the second paragraph underlining each sentence very fast. According to Mokhtari and Reichards (2002), repeated readings are signs of the use of problem-solving strategies. Then, he came back to the middle of the fourth paragraph. Here, Adam’s behaviours might be an indication of the use of a global strategy which is “I check my understanding when I come across conflicting information” (Mokhtari & Reichard, 2002). This might also be a clue for the use of another global strategy which is “I go back and forth in the text and find relationships among the ideas” (Mokhtari & Reichard, 2002). Then He took the pencil again and circled the word “subsidise”.

He looked at the picture in minute 13 and started reading the last paragraph. Although the last paragraph was longer than the second, the third and the fourth paragraphs, he read it more quickly. The familiarity of the context or simple vocabulary might have played a role in that situation. He finished reading in fifteen minutes.

Soon after he completed reading the text, retrospective think-aloud questions were asked. Some quotations from the retrospective think-aloud interview were displayed in the tables below. Adam’s think-aloud session with the retrospective interview lasted for 21 minutes.

To sum up, it was observed that Adam used some strategies in all three sub-categories. His reading some parts more than twice, slowing down in some parts of the text, implied that he used problem-solving strategies. His looking at the picture, his underlining and circling specific information and unknown vocabulary might mean that he used supportive strategies. He might also have used global strategies when he went back to previous parts of the text. However, based on the observation, it can be deduced that he used “supportive” strategies mostly during the reading activity such as underlining, circling, reading aloud, looking at the Picture but a retrospective interview was needed in order to detect the use of other strategies related to thinking to be able to confirm the assumptions made based on video observation.

In the retrospective interview, some quotations helped to reveal the metacognitive reading strategy use of Adam both at frequency and in diversity.

Table 17

*Think-Aloud Analysis of Global Strategy Use of the Student with the Highest Score*

Questions	Global Strategies
What was going in your mind while you were reading the text?	“I think how he worked and grow up and I mean with a poor family how he can live in a small home without bedroom, it’s something difficult”
Did you have a purpose in your mind while you were reading the text?	“uhmm..yes, just I wanted to know how he kind of do some good thing with hard life, you know”
How did you understand the difficult parts of the text?	“I think about, if I don’t understood, I checked it”

Table 18

*A Think-Aloud Analysis of Supportive Strategy Use of Adam*

Questions	Supportive Strategies
What was the first thing you saw on the text page?	“The picture and the words”
How did you start reading?	“I started reading by looking to the words, some difficult words”
What did you do to find the key information in the text?	“I skimmed the text”
How did you remember the information in the previous paragraphs?	“I went to back and forth from the paragraphs.”

Table 19

*A Think-Aloud Analysis of Problem-Solving Strategy Use of the Student with the Highest Score*

Questions	Problem Solving Strategies
What did you do to understand difficult vocabulary?	“ I got help,..I think”
What did you do to find the key information in the text?	“I read again”

Based on the quotations and body language it was revealed that Adam could implement metacognitive reading strategies. He used mostly global (Table 17) and supportive strategies during the think-aloud session (Table 18) The survey analysis had also pointed to the the same findings.

### **4.3.3 Think-aloud session of the student with the lowest survey score**

On December 8, 2016, in the afternoon shift of B1 level classes, a consent was demended for the student with the lowest survey score (Colin). Colin's teacher accepted the request and Colin was informed that he was going to participate a reading activity and interviews about that reading text. He was willing to participate.

When Colin was about to start he was notified that he would not be graded and his identity would be kept confidential. He was also told that he could take his time and he could start reading whenever he was ready.

Colin's think-aloud session started at 13:20. When he told he was ready, he looked at the picture for a few seconds like Adam. Then, he started reading. In the seventh second, he took his pen and started underlining the sentences. He read the first paragraph again like Adam. Maybe it was because the first paragraph included important information such as dates and places together with the subject of the whole text. Reading the first sentence twice can be counted as a problem-solving strategy.

He continued to underline each line at his reading speed. In the second paragraph he circled the word "extend" and used his dictionary to check its meaning. The word search took ten seconds and he spent another five seconds to read the explanation of the word.

Colin started the third paragraph in minute eight. He circled and checked the meanings of four words in that paragraph. First, he circled and looked up the word "rigorous". Ten seconds were spent when he turned back to reading. Then he circled and looked up the meanings of "dubting" and "tail". However, tail was a part of the idiom "with his tail between his legs" and "tail" had a methaphorical meaning in that context. Adam seemed to analyze the same phrase as a whole. Colin might have not noticed that the phrase was an idiom. He still continued to read after he checked the meaning of "tail".

He went on reading and underlining the sentences at the same time. In the first sentence of the fourth paragraph he circled the word “unsettled” and checked its meaning. During the eleventh minute he circled word “subsidise” but this time he did not look up its meaning. He stopped and looked around shortly in minute 10 when he finished underlining the last sentence of the fourth paragraph.

Once he circled the word “gradually” in the fifth paragraph, he did not check its meaning either. Lastly he circled the phrase “male beauty”. This time, he did not underline the words separately. “Male beauty” was already written in quotation marks and this might have helped him understand that those words constituted a compound noun.

Colin seemed very excited during the session, because his hands were shivering. His most prominent behavior while he was reading the text was; underlining every line. He was fast in reading the last paragraph. He circled the words “extend, rigorous, doubting, tail, pension, unsettled, subsidise, gradually, male beauty”. He used dictionary. His actions when underlining the words were projected as examples of problem-solving strategy use. He finished reading the text in nineteen minutes. His whole think-aloud session with retrospective interview, took 22 minutes.

In the retrospective think-aloud interview some questions needed to be reformulated as he paused and seemed confused. The reformulations were “While reading the text, what was going in your mind? What were you thinking?” “What do you think about the content of the text, Did you like the text?”.

The quotations from the session revealed what strategies were mostly used by Colin.

Table 20

*A Think-Aloud Analysis of Supportive Strategy Use of the Student with the Lowest Score*

Questions	Supportive Strategies
-----------	-----------------------



What was the first thing you saw on the text page?	“Picture, bold words”
How did you find the key information?	“A dictionary”

Table 21

*A Think-Aloud Analysis of Problem-Solving Strategy Use of the Student with the Lowest Score*

Questions	Problem-solving strategies
How did you remember the information in the previous texts?	“I read carefully”
How did you understand the difficult parts of the text?	“I slow, I read slowly”
What did you do to understand the unknown words?	“A dictionary”

Colin who was the student with the lowest score also performed as it was expected according to the survey results. It was obvious that the student with the least metacognitive reading strategy awareness survey score used a little variety of strategies in the think-aloud session. This qualitative finding supported the quantitative finding which revealed that the same student got more scores in problem-solving strategies in MARSII (see Table 15).

During the think-aloud sessions it was observed that both individuals used some metacognitive reading strategies at different frequencies (see Table 22).

Table 22

*A comparison of the number of strategies Adam and Colin used during the think-aloud sessions.*

Participants of the	Global Strategies	Supportive	Problem-Solving

think-aloud sessions		Strategies	Strategies
Adam	3	4	1
Colin	0	2	3

Supporting the findings of the survey, Adam who was the student with the highest score used more strategies in the think-aloud session. He used mostly supportive and global strategies which was also the same as his score distribution in the survey.

Colin applied less strategies than Adam in the think-aloud session and he applied mostly problem-solving strategies. This showed a consistency between the results of the survey and think-aloud sessions so it could be seen that the results of the think-aloud sessions were parallel with the results of the survey both on a general and on an individual basis.

#### **4.3.4 Interview with the student who got the highest score based on the survey**

An interview was performed with Adam soon after the think-aloud session. The aim of the interview was to explore Adam's thoughts about think-aloud session and the problems that inhibit his metacognitive reading strategy use in the think-aloud session. Adam expressed his fancy of the think-aloud session:

Researcher: Ok. Uhhh.. What do you think about the TA (think-aloud) session?

*Adam: TA session..It was good, ya it was great I mean (Dec 7, 2016).*

Researcher: Did you like it?

*Adam: Yes, of course I liked it (Dec 7, 2016).*

Throughout the interview he seemed more relaxed and he spoke more naturally and made less mistakes. He answered the questions willingly without spending much time in thinking.

Adam was aware of the metacognitive reading strategies he used in the think-aloud session. He also noticed the help of the use of the metaognitive reading strategies in his comprehension:

Researcher: Ok and how do you think the use of strategies affected your performance?

*Adam: Oh, ya it makes me understood, it made me understand you know, they helped me (Dec 7, 2016)*

It was observed that he was also aware of his needs for developing metacognitive reading strategies and he expressed that he needed to be assisted by his teachers:

Researcher: One last question Adam: what can you do to develop your reading skills?

*Adam: I have to read more, and I think I can get help from my teachers (Dec 7, 2016).*

The benefits of the think-aloud session could be concluded from Adam's words that expressed the need to practice more. According to the survey he got the highest score and in the interview, he stated that he still needed assistance. In regards to this; it might be deduced that the student who got the highest score was more aware about his needs to develop his metacognitive reading strategy use.

#### **4.3.5 Interview with the student who got the lowest score based on the survey**

During the think-aloud session the student with the lowest score was observed to struggle more in vocabulary.

Colin accepted that he had been having trouble with the words in the text:

Researcher: What was difficult for you in the text?

Colin: *Words.* (Dec 8, 2016)

He used his dictionary 3 times and he marked more than 10 words in the text. Those behaviours caused his attention to be distracted. Also frequent dictionary use and sticking to unknown words for too long made him slip the sentences when he

returned to the text. He did not have time to apply different strategies because he spent all his time and energy worrying about the words he did not know. Based on these findings research question 2 b) can be answered as; lack of vocabulary knowledge inhibits the student with the lowest score from the use of metacognitive reading strategies.

To guide him, a strategy-oriented question was directed about vocabulary problem;

Researcher: What can you do to solve this problem?

At the end of the interview Colin started to develop strategies with some guidance.

Researcher: What else can you do

Colin: *I use them every day.* (Dec 8, 2016)

He was able to find effective alternatives to looking up dictionary constantly and rather than suffering the stress of unknown vocabulary, he could think of some solutions.

Colin: “*I make password*” (Dec 8, 2016)

Researcher: How can you do this? I mean what kind of passwords?

Colin: “*mobile phone*” (Dec 8, 2016)

Researcher: You say that you can use them in your mobile phone as passwords?

Colin: “*yes*” (Dec 8, 2016)

He concluded that using new words in daily life might help him remember them. He also suggested that he could use new words as the password of his mobile phone.

It can be deduced from the findings that reading sessions might be supported by instructions and activities which target for improvement in the lowest scored student’s vocabulary knowledge.

## **Chapter 5: Discussion and Conclusion**

### **5.1 Discussions**

As it was stated in chapter 2, the research of Wang, Yin and Zhang (2011) was carried on for the purpose of exploring metacognitive reading strategy knowledge of Chinese English as a foreign language (EFL) learners. They paid special attention to the individual differences through three variables of metacognition: person knowledge, strategy knowledge and task knowledge. Strategy knowledge aspect of the research which includes the awareness of metacognitive reading strategies, resembles to this research in terms of data collection tools and results. Making interviews with similar questions to those in this research, they found out that learners who claimed to know and use metacognitive reading strategies, were able to use more metacognitive reading strategy while they were reading the texts. Also according to their results, readers who described themselves as poor readers had problems especially in vocabulary similar to the results of this research.

The research of Kit Ying (2013) had common points with this research. He used MARSII to assess metacognitive awareness and reading strategy use of the English as a second language students in Hong Kong. However the research categorized the scores only on subscale basis. There was no comparison made among the students individually. According to the results, students in The University of Hong Kong used metacognitive reading strategies on a moderate level which was the same in this research.

Pinninti (2016) aimed to explore the metacognitive reading strategy awareness of his students. Just as this research, he got the strategy use interpretation from the participants after the reading task. However, this time students were asked to write about the strategies they used while reading, not answering retrospective questions orally. The results were analyzed according to the frequencies of strategy use. The most frequently used strategies were “previewing” strategies which were generally related to visuals such as picture and bold words. These strategies can be counted as supportive strategies and supportive strategies were among the most

commonly used metacognitive reading strategies according to the results of this research either.

## **5.2 Implications**

Seeing that metacognitive awareness is an important factor for the students to develop their reading skills, the activities and instructions that promote metacognitive reading strategy awareness should be given priority in reading comprehension studies.

Karabenick and Zusho (2015) talked about the ways to promote metacognitive awareness of students in their article. They focused on the most effective learning methods for disabled students which were appropriate samples for teaching self study methods. What they first suggested was self-study strategies needed to be dynamic, circular and contextual which means the activities should follow each other and they needed to be easy to relate to each other. They, then, argued about the nature of the aims of the tasks. They supported that, personal goals should be promoted in order to enrich instricitive motivation of the students. Another point in the article is that; implementation of multiple methods. This issue arose from the criticisms that self-reports do not always reflect specific strategy and specific case, they are rather general perceptions of the students. For this reason it was stated in the article that not only depending barely on self-reports but also using and inventing other methods might be more reliable to assess and support metacognitive strategy awareness in students. The use of think- aloud sessions and the interviews in this research supported the article of Karabenick and Zusho (2015) in this respect.

The think-aloud sessions and interviews revealed that the student with the lowest score needed assistance to think about strategies so it can be expressed that the findings of the research supported that students with less metacognitive reading strategy awareness, might gain autonomy through strategy training. To give implications for how to train second language learners for strategy use, the ways to apply an effective strategy training should be discussed.

This research displayed the importance of strategy training. However, more than what types of strategies to teach, how to maintain an effective strategy training program is a matter in question. In order to train the second language learners for

strategy use, first of all teaching them whether implicitly or explicitly should be decided on. In my opinion, blending strategy use in intensive reading activities is a useful method in that students will develop strategy awareness naturally and as the strategy practice is kept in repetition, varying and increasing each lesson, students will form habits of developing their own strategies.

As it can be seen in this research, metacognition is deeply related to autonomy so the role of the teacher in strategy training should also be mentioned. Creating an autonomous learning environment does not mean that teacher should be out of the picture. On the contrary, the role of the teacher even gains more importance in strategy training process. Being in the center and being a good model are different things and the teacher should start the job with himself. Teacher's presenting an example for strategy use, might be useful for the learners in the way that they can develop similar behaviours more easily. The think-aloud sessions of this research showed another essential role of the teacher as an observer. In order to train the learners in strategy use, the teacher should always observe the learners to understand their developmental phases and weaknesses. He also should look for the factors that help their strengths so that he can increase them.

Considering students with insufficient strategy awareness such as Adam who was unable to use different strategies, a sequential plan should be prepared for the strategy training program. The first thing to consider is the learners' needs. What a specific group of students need in terms of developing and using metacognitive reading strategies, might be analyzed through self-reports, think-aloud sessions, interviews etc. Then the types of the strategies might be decided on. The other step of the training program can be applied as teacher's using those strategies as a model. If the teacher himself uses the metacognitive reading strategies in each reading task, then students will be more familiar with the strategy use and when they do reading alone they will be more likely to apply those strategies that the teacher uses. Then comes, monitoring which is crucial in strategy training in order to observe students' developments and for being an example to the students for observing themselves. The final step is giving rich feedback soon after the individual sessions where the teacher can observe the student using the metacognitive reading strategies. This

process might be reformulated according to the needs of the students and the teacher's goals.

On the other hand, the reading strategy implementation analysis of the student who got the lowest score in MARSI, might also be helpful to find ways to promote and support vocabulary learning strategies.

His example of mobile phone was meaningful in terms of vocabulary learning when the technology-dependent environment of our century was taken into account. Students might be encouraged to download vocabulary practice applications to use on a daily basis.

Classroom activities for vocabulary practice might also be useful for students' improvement in vocabulary knowledge. One of the activities is preparing a vocabulary corner. Students are asked to write the target words of that week in paper sticks, then, they categorize the words according to their parts of speech and hang them on the notice board. Some ornaments such as pockets or French fries cups might also be used as holders for more fun.


Another activity which includes a group of word learned at the same time-span is taboo. Students have an opportunity to be actively involved, they practice speaking and revise the new words at the same time.

For a long-term study, students might prepare a vocabulary portfolio where there are sheets of each unit of the course book with charts including many aspects of the words (see Table 23).



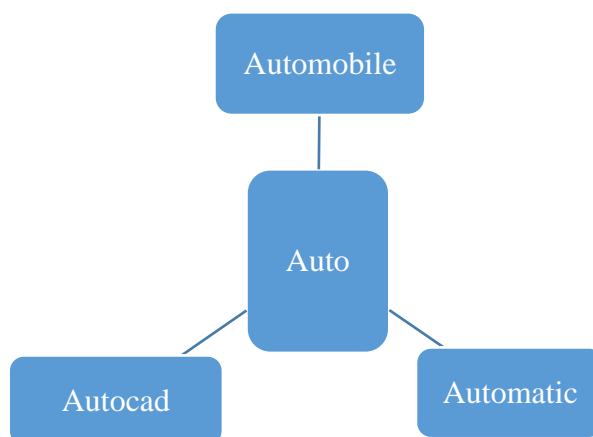
Table 23

*Criteria for Vocabulary Recording Sheet*

Meaning	Collocation	Part of Speech	Use in Context	Draw a Picture
Content: a state of happiness	With	Adjective	He is content with his decision	

Another method for students to guess the meaning of a word is; knowledge of the suffixes and prefixes. With the help of affixes it will be easier for them to understand the words they do not know. By this way, they might at least be able to have a general idea if the words have positive or negative meaning or if they are nouns or adjectives etc. After the instruction of the frequently used affixes; the word is cut up to its affixes and students try to match the base words with their suffixes or prefixes. When there is a winner of the game, the activity might be more enjoyable.

Other form-based activity is the study of the word roots. Students might be given examples of some roots and they might be asked to form words out of those roots (see Figure 3).



*Figure 4. A wordfamily scheme*

### **5.3 Conclusions**

All in all, the answers to research questions were obtained. They were all responded within the boundaries of the research analysis. According to the findings of the study it can be stated that, the metacognitive reading strategy awareness plays a role in reading comprehension of B1 level students in Bahcesehir University.

Depending on the results of MARSI; 35 students reached to the high level of the metacognitive awareness survey in general. 22 students were at the lowest level while the majority of the students were at the medium level according to the criteria notifications of Mokhtari and Reichard (2002).

Among the highest scored students, supportive and global strategies were used at the most. Out of the least scored students; problem-solving strategies were used in maximum.

In think-aloud sessions the student who got the highest score in MARSI used more global and supportive strategies. The student with the lowest score in MARSI used mostly problem-solving strategies.

In the interview the student with the lowest score based on MARSI, accepted that he had difficulty in vocabulary knowledge. Based on these results; the research questions were responded.

### **5.4 Recommendations**

Although the research found answers to the studies; metacognitive reading strategy use might change from student to student in terms of many factors like frequency, variety, reliability, etc. For that reason, it might be enlightening, if more research with different data collection tools and on different proficiency levels, is carried out.

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# A

## Metacognitive Awareness of Reading Strategies Inventory (MARSII) Version 1.0

Kouider Mokhtari and Carla Reichard © 2002

**DIRECTIONS:** Listed below are statements about what people do when they read academic or school-related materials such as textbooks, library books, etc. Five numbers follow each statement (1, 2, 3, 4, 5) and each number means the following:

- 1 means "I **never or almost never** do this."
- 2 means "I do this **only occasionally**."
- 3 means "I **sometimes** do this." (About 50% of the time.)
- 4 means "I **usually** do this."
- 5 means "I **always or almost always** do this."

After reading each statement, **circle the number** (1, 2, 3, 4, or 5) that applies to you using the scale provided. Please note that there are **no right or wrong answers** to the statements in this inventory.

TYPE	STRATEGIES	1	2	3	4	5
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 preview the text to see what it's 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
SUP	6. I summarize what I read to reflect on important information in the text.	1	2	3	4	5
GLOB	7. I think about whether the content of the text fits my reading purpose.	1	2	3	4	5
PROB	8. I read slowly but carefully to be sure I understand what I'm reading.	1	2	3	4	5
SUP	9. I discuss what I read with others to check my understanding.	1	2	3	4	5
GLOB	10. I skim the text first by noting characteristics like length and organization.	1	2	3	4	5
PROB	11. I try to get back on track when I lose concentration.	1	2	3	4	5
SUP	12. I underline or circle information in the text to help me remember it.	1	2	3	4	5
PROB	13. I adjust my reading speed according to what I'm reading.	1	2	3	4	5
GLOB	14. I decide what to read closely and what to ignore.	1	2	3	4	5
SUP	15. I use reference materials such as dictionaries to help me understand what I read.	1	2	3	4	5
PROB	16. When text becomes difficult, I pay closer attention to what I'm reading.	1	2	3	4	5
GLOB	17. I use tables, figures, and pictures in text to increase my understanding.	1	2	3	4	5
PROB	18. I stop from time to time and think about what I'm reading.	1	2	3	4	5
GLOB	19. I use context clues to help me better understand what I'm reading.	1	2	3	4	5
SUP	20. I paraphrase (restate ideas in my own words) to better understand what I read.	1	2	3	4	5
PROB	21. I try to picture or visualize information to help remember what I read.	1	2	3	4	5
GLOB	22. I use typographical aids like bold face and italics to identify key information.	1	2	3	4	5
GLOB	23. I critically analyze and evaluate the information presented in the text.	1	2	3	4	5
SUP	24. I go back and forth in the text to find relationships among ideas in it.	1	2	3	4	5
GLOB	25. I check my understanding when I come across conflicting information.	1	2	3	4	5
GLOB	26. I try to guess what the material is about when I read.	1	2	3	4	5
PROB	27. When text becomes difficult, I re-read to increase my understanding.	1	2	3	4	5
SUP	28. I ask myself questions I like to have answered in the text.	1	2	3	4	5
GLOB	29. I check to see if my guesses about the text are right or wrong.	1	2	3	4	5
PROB	30. I try to guess the meaning of unknown words or phrases.	1	2	3	4	5

**Reference:** Mokhtari, K., & Reichard, C. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94 (2), 249-259.

## B

1 Sean Connery has made over 70 films and is one of the top five movie actors in the world. But the well-known star was not born into a privileged theatrical family. On the contrary, he grew up in a working-class district of Edinburgh in Scotland during the Great Depression of the 1930s. At that time, unemployment was high and most families were poor, so Sean and his parents were not unusual in living in a two-roomed flat with no bathroom. When his father was unemployed, young Sean, glad to help, would get up at dawn to earn some money delivering milk before he went to school. By the age of ten, he already had the determination to control his own destiny, something that he continued to do throughout his life.



2 Sean left school at thirteen and worked from dawn to dusk doing any jobs he could find. The milk round provided most of his income, though it was like a hobby for him, because he loved looking after Titch, the horse that pulled his milk cart. But as Sean approached his seventeenth birthday, he was keen to extend his experience of life beyond his work, football and local dances. Despite his parents' objections, he signed on for seven years with the Royal Navy, boasting to his friends that he was off to see the world.

3 But this was not to be. After a thorough and rigorous training programme, Sean was sent no further than the south coast of England. By then, he was already doubting whether the Navy was really the right thing for him. For such an independent young man, it was hard not to be allowed to think for himself. Although in the end he had to leave the Navy for medical reasons, he must have had mixed feelings about it. On the one hand, it was a lucky escape; on the other hand it meant returning home **with his tail between his legs** and with only a small disability pension to live on.

4 After the Navy, there followed an unsettled period where he took on a variety of jobs in his home city. He delivered coal, and worked as a labourer and as a French polisher in a furniture business. In fact, he didn't mind what he did as long as the job paid him enough to subsidise his leisure pursuits, which now included bodybuilding. He even turned down the offer of a job with Manchester United Football Club on the grounds that it wouldn't leave him enough time or money for his other interests.

5 Gradually, thanks perhaps to those trips to the gym, his attractive appearance was opening up other areas of work. He became a lifeguard, did a bit of acting and worked as a fashion model for a magazine. The turning point, however, came when he entered the 'male beauty' competition known as Mr Universe. Although he didn't win, he was noticed and, on the strength of his looks alone, got a small part in the musical show *South Pacific*. Here he began to attract crowds of female admirers. His destiny was finally unfolding. Television plays followed, which then led on to films, both in Britain and the USA. A few years later, Sean would meet the man who was writing the screenplay for the first James Bond film *Dr No*. He saw in Sean Connery the perfect 007, a role that was to make the actor a household name the world over.

## C

Think-aloud session with the student who got the highest score based on MARSI

7 December, 2016, 10:08

Researcher: Can I ask you some questions about the text Adam?

Adam: Of course.

Researcher: Okay, so.. Can you tell me.. What did you see first?

Adam: The Picture and the words

Researchers: Words?

Adam: Yes.

Researcher: Okay and while reading the text what was going in your mind?

Adam: Uhhh...I think how he grow up and the working with the..I mean with a poor family, how he can live in a small home without bedroom, it's something difficult.

Researcher: Okay, Thank you very much. Alright uhhm..and how did you start reading?

Adam: I start reading by looking to the words.

Researcher: Uhummm. What kind of words?

Adam: some difficult words.

Researcher: Okay. Alright. Uhhh..Did you have a purpose in your mind while you were reading the text?

Adam: Uhhh..yes, just I wanted to know how he kind of do some good thing with hard life, you know.

Researcher: Good, thank you very much, and how did you remember the information in the previous paragraphs as you were reading the text?

Adam: I uhhh.. I went to back and forth from the paragraphs then I went back to read the another one.

Researcher: Okay, and how did you understand difficult parts of the texts?

I think about, If I dont understood I checked it?

Researcher: How did you check?

Adam: Some parts.

Researcher: Ok. Yes and what did you do to find the key information in the text?

Adam: I skin the text. I read again.

Researcher: Skimmed?

Adam: Skimmed. I m sorry. Problem.

Researcher: No problem, okay, thank you

Researcher: Uhhh..and what did you do to understand unknown vocabulary?

Adam: I got help for..what has told about his life, if I understand.

Researcher: Okay, and one more question to you: what do you think about the content of the text the subject the content of the text?

Adam: It's some difficult but not all of them but about me its difficult.

Researcher: thank you very much this is the end of our TA session.

## D

Think-aloud session with the student who got the lowest score based on MARSI

8 December, 2016, 13:20

Researcher: Can I ask you some questions about what you read

Colin: *Yes*

Researcher: Okay, so, what was the first thing you saw on the text page?

Colin: *Picture.*

Researcher: Uhummm..

Colin: and bold words

Researcher: while reading the text what was going in your mind?

Colin: *Very difficult text*

Researcher: Okay, and did you have a purpose while reading the text?

Colin: *No*

Researcher: Yes, uhhh, how did you remember the information in the previous paragraphs as you were reading..in the past paragraphs?

Colin: *Uhhh..I read carefully.*

Researcher: Okay and how did you understand the difficult parts of the text Colin?

Colin: *I stop and I read slowly*

Researcher: And what did you do to find key information in the text?

Colin: *No*

Researcher: Okay, did you look at somewhere

Colin: *No*

Researcher: I think you circled words

Colin: *I dont understand*

Researcher: Okay okay no problem, Uhmm can you please tell me what do you do to understand unknown vocabulary?

Colin: *A dictionary*

Researcher: You used dictionary?

Colin: *Yes*

Reseracher: Okay and I have one last question to you Colin: did you like the text?..what do you think about the content of the text?.. subject.

Colin: *I don't know.*

Researcher: Okay Colin thank you very much this is the end of our session.

## E

Interview With the student who got the lowest score based on MARSI

8 December, 2017, 13:40

Researcher: Colin Can I ask you some questions about reading?

Colin: *Yes*

Researcher: Ah..What do you think about TA session that we did together, I mean did you like it

Colin: *Yes*

Researcher: Good Colin what was difficult, what was complex for you in the text?

Colin: *Uhhh.. words.*

Researcher: Words? Okay so what can you do to solve this problem

Colin: *I can use dictionary*

Researcher: Very good thank you ahh colin what else can you do

Colin: *I use them every day*

Researcher: Okay and how can you do this Colin?

Colin: *Uhhh I make password*

Researcher: Password..how can you do this? I mean passwords?

Colin: *Mobile phone*

Researcher: You say that you can use them in your mobile phone as passwords

Colin: *Yes*

Researcher: Very good thank you. Uhhh.. can I ask you one last question Colin?

Colin: ....

Researcher: Okay, how can you develop these strategies I mean you said dictionary you said mobile phone, how can you develop these strategies?

Colin: *I practice*

Researcher: You practice?

Colin: *Yes*

Researcher: Okay Colin thank you for your participation. This is the end of our interview.





## F

7 December, 2016, 10:26

Interview with the student who got the highest score based on MARSII

Researcher: Adam Can I ask you some questions about the TA (think-aloud) session?

Adam: Yes, of course.

Researcher: Ok. Uhhh.. What do you think about the TA session?

Adam: TA session..It was good, ya it was great I mean.

Researcher: Did you like it?

Adam: Yes, of course I liked it.

Researcher: Ok and how do you think the use of strategies affected your performance?

Adam: Oh, ya it makes me understood, it made me understand you know, they helped me

Researcher: One last question Adam: what can you do to develop your reading skills?

Adam: I have to read more, and I think I can get help from my teachers.

## G

### Pilot Think-Aloud Session Transcript 1

November 15, 2016

1- Which strategy did you use to answer this question?

SA (Student's answer): *Uhhh.. I looked at the paragraph*

2- What helped you understand the question?

SA: *Uhhmm... I guessed the words.*

3- What did you do to find the answer?

SA: *I read the paragraph two times.*

4- What do you think of the text?

SA: *It is long and little difficult.*

5- Where did you look for the answer?

SA: *It says second paragraph so I looked at it.*

6- Can you talk about the strategies that you used to answer these questions?

SA: *I looked at the text very carefully. I underlined important words.*

7- What did you read to answer this question?

SA: *Last question?*

8- Which strategy helped you?

SA: *I look at the text carefully and read slowly.*

9- How did you understand the meaning of the word?

SA: *I read the paragraph it is in.*

10- How did you find the correct meaning?

SA: *I understand from the text*

11- Can you show me the place of the word in the text?

SA: *here!* (he circles the word)

1- What do you normally do with these types of questions.

SA: *Uhhmmm. I read carefully.*

2- What do you think about this text?

SA: *Too long. I should be careful.*

3- where is the answer in the text?

SA: *I think here.* (shows the wrong paragraph)

4- Which strategy did you use while answering this question?

SA: *I read slowly.*

5- What helped you answer this question fast?

SA: *I read quickly.*

6- How can the photo help you?

SA: *I understand the subject.*

7- What do you think about this question?

SA: *It is difficult. I am reading.*

8- How did you understand the meaning of the word?

SA: *I checked dictionary.*

9- What helped you find the synonym of this word?

SA: *I tried other options but they are not correct.*

10- What do you know about these types of questions?

SA: *I read quickly.*

## H

### Pilot TA Session Transcript 2

November 15, 2016

1- Which strategy did you use to answer this question?

*SA: I thought about what I need to know about the question.*

2- What helped you understand the question?

*SA: The title of the text gave me first clue.*

3- What did you do to find the answer?

*SA: I looked for the word 'course' in the text and read the sentences carefully.*

4- What do you think of the text?

*SA: It is interesting and easy to read because it is organized good I first see the big words...uhmm big written words and I thoght that they are important.*

5- What helped you answer this question fast?

*SA: I read the fifth paragraf again carefully and underlined the word then I looked at the passage to see the answer is true or not.*

6- How can the photo help you?

*SA: The photo helped me to understand the subject.*

7- What do you think about this question?

*SA: I read for specific information.*

8- How did you understand the meaning of the word?

*SA: I read the sentences before and after it.*

9- What helped you find the synonym of this word?

*SA: I read the sentences around too.*

10- What do you know about these types of questions?



*S.A: I should forget about my past knowledge and look at the paragraph.*

