

Cognitive Reading Strategies Use among EFL Learners Majoring in
English: A Study at Al Mustaqbal University

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Abstract

The purpose of this study is to investigate the use of Cognitive Reading Strategies (CRSs) by 5 EFL second year students majoring in English at Al Mustaqbal University/ College of Arts and Humanities. Qualitative paradigm was adopted and two data-collection methods were utilized and served as the main sources of data: Think Aloud Protocol (TAP) and in-depth interview. Narrative analysis was adopted for the purpose of data analysis. The results of this study revealed that the respondents showed limited usage for the CRSs. In addition, the respondents frequently used two strategies only (using dictionary and rereading) out of twelve strategies proposed by O'Malley and Chamot (1990). Moreover, five important strategies were not reported to be used by the participants (using prior knowledge, grammatical analysis, paraphrasing, using context clues, and decoding).

Keywords: Reading, reading strategies, cognitive reading strategies

1. I. Introduction

Reading is “the ability to draw meaning from the printed page and interpret this information coherently” Grabe and Stoller (2020, p.5). In the same vein, Ali (2022) defined reading as “the effort a reader exerts to understand the hidden mysteries of a written text and to appreciate its linguistic as well as esthetic beauties and intricacies”. Reading also means the “manner of gaining and forming meaning at the same time from written language through interaction and arrangement” Al Zubaidi (2021, p.152). Ghanaguru et al. (2010, p.19) posited that reading is a “complex process of making meaning from text for a variety of purposes and in a wider range of contexts”. According to Al Kusairy (2007), the concept of reading has been changed within the last decades as it was limited to the visual recognition of the written symbols and their wording.

This progress means that reading is viewed as an intellectual process that aims at comprehension. In addition, reading is a kind of challenge and interaction between the reader and the text is necessary. According to Ming (1995), comprehending a text is an interactive process between the reader's background knowledge and the text, because the reader manipulates his previous knowledge to compare it with information included in the text for comprehension. Rich background knowledge eases the process of comprehension. The results of this interaction lead to reader's evaluation of the reading text, i.e., satisfaction, dissatisfaction, pleasure, or frustration. Finally, the reader should make use of what he can comprehend or conclude from the text.

Four important factors to be considered about reading presented by Klinger (2007); used reading strategies, the reader himself, reading content, and the purpose of reading. However, Nutall (2005) suggested five variables as the central ideas for reading: the idea of meaning, the transfer of meaning from one mind to another, the transfer of message from writer to reader, how to get meaning by reading, and the contribution of the reader, the writer, and the text to the process of reading. According to Morrow and Vacca (2002), the good reader is the one who can extract ideas and meanings out of the text. Reading is a cognitive activity and good reader needs to be motivated, knowledgeable, and armed with good amount of expressions and vocabulary.

Finally, the reader must determine the purpose of reading before reading any text, i.e., to decide the nature of information the reader is looking for and why. For instance, reading for fun is unlike reading for information where the reader needs to be accurate and retains the information he had read. Accordingly, techniques and strategies used by reader depend mainly on the content and nature of the text. Different tools are needed during the reading process for better outcome and these gadgets are called reading strategies.

Reading strategies are used to organize the process of reading and aid readers to perform the reading task successfully. Utilizing a number of reading strategies in reading is useful for both, poor readers and good readers as well. These strategies help the reader to elicit the ideas and meanings included in the text. The importance of reading strategy use is also confirmed by Lawrence (2007) who argued that the use of reading strategies is often indispensable in university content areas because they facilitate the acquirement, storage, recall, and the use of information. Since reading is a cognitive process, Hamdan et al. (2010, p.3) argued "Cognitive

strategies are seen as mental processes directly concerned with the processing of information in order to learn, that is for obtaining, storage, retrieval or use of information”. Good reader is the one who knows what strategy is suitable to be used how. As these strategies ease the reading process and for better outcome, the lack of awareness in the use of reading strategies can slow down the comprehension process for readers.

1.1 Statement of the Problem

Reading for college level students is the main information input method. College level students are normally faced with various types of reading materials like textbooks, articles, and also web-based information to acquire the required knowledge. In addition, EFL/ESL students usually encounter the challenges of using a second or foreign language i.e., English. Therefore, dealing with big reading materials creates a real challenge for the college level students.

Based on the researchers’ teaching experience in English to Iraqi EFL college-level students, the researcher observed that students, in general, are not strategic readers and lack the sufficient background knowledge regarding the variety of reading in English. Reading any text, for a reasonable number of second-year students at Al Mustaqbal University, is deemed a kind of challenge for them. Most students feel embarrassed when asked to read and discouraged when asked to read loudly. Moreover, they demonstrate high level of anxiety.

This observation is supported by (Al-Rubaye, 2012; Ahmed et al., 2015; Mohammed, 2021; Al Zubaidi, 2021). Al-Kubaisy (1993, p.7) opined that “Iraqi students lack the sufficient experience and knowledge related to the content of the texts or they lack the ability to utilize their background knowledge successfully”. This notion is also echoed by Mukhlif and Amir (2017) who argued that the majority of Arab learners face kind of difficulty dealing with reading materials and attributed that to deficiency in background knowledge.

For Iraqi students, the lack of knowledge in reading strategy use is part of the problem that contributes to their weaknesses in reading comprehension. CRSs enable students to accomplish the reading comprehension task (Oxford 1990). In addition, there are some other reasons that may stand behind the students’ low performance in reading, i.e., political, administrative, and the elementary school education.

Education in Iraq is undoubtedly influenced by the decades-long state of instability in the region. In addition to economic and political reasons that shed the light on education at all level.

The Ministry of Education is in charge of overseeing the curricula of all Iraqi public schools. Textbooks, instructional strategies, and the curriculum for every subject taught in schools are created by the Iraqi Ministry of Education, (Ahmed et al., 2015). Researchers criticized the curriculum that the Ministry of Education cites. According to Al Kusairy (2007), it is concerning that the curriculum's materials and content are inadequate for meeting the demands of both teachers and pupils.

It has been noted that English language instructors in Iraqi schools frequently employ antiquated and out-of-date teaching strategies that do not align with the growing need for English as an international language. However, schools do not have the necessary learning resources (visual and aural) that are necessary for the process of learning a language. They make learning a language easier and more convenient for students.

As a result and according to (Al-Kubaisy, 1993; Al-Kusairy, 2007; Ahmed et al., 2015; Al-Noori and Al-Mosawi, 2017; Mukhlif and Amir, 2017; Mohammed, 2021; and Al Zubaidi, 2021) Iraqi EFL students' comprehension level in dealing with the academic English-based materials is deemed weak.

1.2 Research Question

The study is conducted to answer the following question:

-What types of CRSs are frequently used by the EFL, tertiary level, second-year students?

1.3 Significance of the Study

The expected findings of this study are hoped to provide information about Iraqi college level student's competence and knowledge in using the CRSs when they read academic materials. Moreover, the study is an attempt to provide Iraqi educators with new conceptions about teaching the EFL students the use of the CRSs. Besides, this study is hoped to provide the educators with information about the types of CRSs that are usually used by students when they read academic material.

For the learners, this study can help them to be aware of the CRSs as vital aid for college level readers to enhance their comprehension and their reading skills.

2. Literature Review

According to Morrow and Vacca (2002), one must improve his reading abilities and re-engage with the reading methods in order to

become a proficient reader. In the same vein, Sheorey and Mokhtari (2001), Igbaria (2003), Lawrence (2007), Feryal (2008), Hamdan et al. (2010), Al-Rubaye (2012), and Mukhlif and Amir (2017) assumed that readers should be aware of reading strategies and how they affect their performance.

Efficient reading is achieved through the use of appropriate reading strategies by reader. The reader derives the maximum benefit with the least amount of effort. For low level readers who have faint knowledge of effective reading strategies, unorganized reading is nearly a waste of time and efforts. According to Igbaria (2003), to be through a text successfully, the reader must attach various strategies to three different states; pre-reading, whilst reading, and post-reading. Phase 1: Set a purpose for reading, survey the text, activate prior knowledge, and predict what the text will say. Phase 2: the reader rereads, skips the unfamiliar words, reads on, connects the prior knowledge to the information in the text, and consider the overt and covert information in the text. Phase 3: the reader needs to summarize, make graphical illustrations, discuss and make conclusion.

2.1 Research on Cognitive Reading Strategies

Hamdan et al. (2010,p.3) argued that “Cognitive strategies are seen as mental processes directly concerned with the processing of information in order to learn, that is for obtaining, storage, retrieval or use of information”. Brown (1994) stated that cognitive strategies are precise learning acts that engage straight exploitation of the learning material itself. From the two definitions, it can be inferred that CRSs involve an interaction between the reader and the text in processing messages in the text. In the same vein, Oxford (1990) argued that CRSs help students to complete the reading task. Similarly, Williams and Burden (1997) viewed CRSs as mental processes mainly associated with information processing for the purpose of getting, storing, retrieving or using information. In the same vein, CRSs are defined by Sheorey and Mokhtari (2001) as purposeful actions usually taken by readers when some comprehension problems emerge.

After reviewing a number of definitions pertaining to the CRSs, Williams and Burden’s (1997) definition will be adopted in this study as it is the most comprehensive one in the sense it takes into consideration all the strategies related to cognitive processing of the text such as rereading, paraphrasing, note taking, etc.

The CRSs have been classified by many scholars, Rubin (1987), Oxford (1990), O'Malley and Chamot (1990). Rubin (1987) categorizes CRSs as follow: clarification, guessing, deductive reasoning, practice, memorization, and monitoring. Whereas Oxford's (1990) proposed taxonomy is as follow: practicing, receiving and sending messages, analyzing and reasoning, and creating structure for input and output. O'Malley and Chamot (1990), on the other hand, presented a more detailed and comprehensive taxonomy for the CRSs and includes:

Table1

CRSs Proposed by O'Malley and Chamot (1990)

CRSs	DESCRIPTION
1.Using background knowledge	the application of schema theory
2.Guessing	It aims to forecast the text's content based on previously provided information.
3. Rereading	to repeat a word, a phrase, or a paragraph to remember or recall the meaning.
4.Paraphrasing	the reader seeks synonyms or antonyms for particular words or paraphrase sentences using his own vocabulary.
5. Inferencing	contextual clues or the structure of words can assist in deducing the meanings of unfamiliar terms
6. Translation	the reader might also utilize his first language (L1) to find equivalents for new vocabulary within the text.
7. Skimming	the reader reads the paragraph for gist to have general idea about the content.
8. Using a dictionary	consulting a dictionary to clarify the meanings of unknown words.
9. Decoding	the reader breaks the new word into syllables in order to ease the pronunciation or processing its meaning.
10. Note taking	to elicit the important points and write notes from the text
11. Grammatical analysis	grammatical knowledge is employed to interpret and understand specific words, phrases, or sentences.
12. Using context clues	the use of visual images and visualizing the content of a text for understanding.
13. Imagery	the use of visual imagery aids in comprehending and retaining new information.

The CRSs proposed by O'Malley and Chamot (1990) will be used in the present study as a base in the analysis of the data collected from the

two research instruments i.e., TAP and in-depth interview. The reason behind adopting O'Malley and Chamot (1990) categories is due to the fact that it is the most comprehensive one and unlike the categories proposed by Rubin (1987) and Oxford (1990) which are too general to elicit the cognitive processes in the reader's mind while reading academic texts.

The research instruments are employed to find out the extent of the respondents' use of the cognitive strategies, and the purposes of using these strategies. However, the "imagery" as a CRSs (using contextual clues strategy) is not included in the taxonomy as the given texts do not contain any visual images.

2.2 Previous Studies on Reading Difficulties and CRSs

Table 2 below includes a number of (local and international) studies that discussed the issue of reading difficulties in EFL and CRSs use.

Table 2

Studies on Reading Difficulties and CRSs Use

Researcher/ Year	Purpose of the Study	Methods	Samples	Findings
Al Zubaidi, 2021	Investigated reading comprehension	Questionnaire	Iraqi Intermediate school EFL learners & 140 male & female teachers	Reading difficulty is relayed to reading behaviours.
Mohammed et al., 2021	Investigated the reading skills	reading skills scale	(250) Iraqi first grade - middle school EFL learners	Weakness in deep understanding and effective reading skill.
Mukhlif & Amir, 2017	Investigated meta CRSs & online reading difficulties	Questionnaires	50 Iraqi tertiary level students	(Problem-solving) reading strategies were more frequently used than support

				reading strategies.
Al-Rubaye, 2012	Investigated reading strategies	Survey of Reading Strategies (Mokhtari & Sheorey, 2002), modified version	115 master and PhD.) Iraqi graduate students in the US	Reading strategies were more frequently used than problem-solving strategies.
Sabah, 2011	investigated reading strategies use	Survey of Reading Strategies (Mokhtari & Sheorey, 2002)	Iraqi College level English-major learners	Moderate use of reading strategies. (Problem solving strategies) Translation, using dictionary & rereading are most frequently used.
Yayli, (2010)	Investigated CRSs. & meta CRSs use.	TAP & retrospective protocols	Turkish 6 proficient & 6 less proficient college-level learners of English	proficient used CRSs more frequently than less proficient participants
Hamdan et al., (2010)	Investigated CRSs meta CRSs use	Ozek's and Civalek's (2006) questionnaire	57 English majoring EFL Malaysian learners	High frequency use of CRSs.
Park, (2010)	-Investigated reading strategies	Survey of Reading	115 EFL Korean students in	-High frequent use

	-relationship between reading strategy use & reading comprehension ability	Strategy (SORS)	3 different universities	of reading strategies -reading comprehension ability is related to strategy use
Malcolm, (2009)	Investigated reading strategy use	think-aloud protocols, interviews, journals, (SORS) questionnaire	106 Bahraini medicine students	-High frequent use of reading strategies - most used strategies (translating & using prior knowledge)
Al Kusairy, 2007	Investigated reading comprehension skill	Questionnaire	200 Iraqi sixth-year primary school respondents	Poor performance of reading comprehension skill.
Feryal, (2007)	Investigated reading strategy use	Reading strategies scale	299 2 nd year Turkish EFL trainees	Reading strategy use leads to better learning outcomes
Al-Kubaisy, 1993	Investigated reading strategy use	Survey of Reading Strategies	Iraqi College level students	Humble use of reading strategies. (problem-solving strategies) seeking help of others, reading word by word, re-

				reading & using dictionary.
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As shown in table 2 some of the reviewed studies are in harmony with the current study i.e., the significance of reading strategy use. At the same time, the findings in some of the above mentioned studies are compatible to the problem stated in this study that assumes the low reading performance of second- year learners of English as EFL at Al-Mustaqbal University.

(Al-Kubaisy, 1993; Feryal, 2007; Malcolm, 2009; Yayli, 2010; Hamdan et al., 2010; Park, 2010; Sabah, 2011; Mukhlif and Amir, 2017) studies are in line with the current study with regard to participants. These studies used tertiary level EFL students as participants and that is similar to the current study. Nevertheless, Mukhlif and Amir (2017) investigated the use of the metacognitive reading strategies and the difficulties faced, while reading online, by fourth- year students at Al-Salam University College in Iraq. The results revealed that the most frequently used strategies are problem-solving. Support reading strategies come next and the least used ones are the global reading strategies. Mukhlif and Amir (2017) study is inline with Yayli (2010) and Hamdan et al. (2010) studies when they studied metacognitive reading strategy use and that contradicts the goal of the current study that aims at investigating CRSs use.

Similarly, Sabah (2011) conducted a study on Iraqi EFL students at the University of Anbar, College of Education and Humanities, Department of English Language. The purpose of the study was to investigate the use of the reading comprehension strategies used by first year - college level students. The study revealed that participants reported the use of problem-solving reading comprehension strategies at a moderate level for all three categories of strategies while reading academic materials in English. These strategies are using dictionary, translation, and rereading. This echoed in Al-Kubaisy's (1993) study. He conducted a study on Iraqi EFL students in the College of Education (Ibin Rushed), Department of English Language. The aim of the study was to identify the reading strategies used by these students. The findings revealed that the respondents' use of reading strategies was unsatisfactorily since they did not use efficient strategies that help them comprehend texts. However, The participants frequently used problem-solving strategies such as seeking help of others, reading the text word by word, re-reading, and using

English-Arabic dictionary. The above mentioned studies reported a humble use of reading strategies besides the used ones were problem solving strategies. That is inline with Mukhlif and Amir (2017) study and contradicts the findings of Al-Rubaye's (2012) study that revealed frequent use of reading strategies than problem-solving strategies. And that is deemed an impetus for conducting the current study.

With different category of EFL learners, Al Zubaidi (2021) investigated the reading comprehension of the Islamic High Schools students - intermediate stage and the impact of EFL teachers' variables (years of experience, gender, qualification) on the students' performance. Both, teachers and students were the sample of the study. The results showed that the reading difficulties, faced by students were due to their reading behaviours. In addition to the used teaching aids, textbook, and the teaching methods. Using the same category of learners, Mohammed et al. (2021) investigated the use of reading skills by (250) first grade - middle school students in Baghdad- Iraq and the relationship between successful reading skills and deep understanding. Reading skills scale and deep understanding test were adopted as data collection tools. The findings revealed that the students showed weakness in deep understanding and effective reading skill. The study also showed important correlation between deep understanding and successful reading skills. In the same vein and using primary school learners, Al Kusairy (2007) administered a study in Baghdad on 200 sixth-year primary school respondents. The results of the study showed that the general performance of reading comprehension of these students was poor. In addition, the results of the examination showed that the weak performance in reading of students at primary school is observed to continue gradually to secondary schools until the university level.

The participants in these three studies are intermediate and primary school students. The findings of (Al Zubaidi, 2021; Mohammed et al., 2021, and Al-Kusairy, 2007) studies confirmed the problem stated in the current study i.e., the weak performance in reading comprehension skill. Nevertheless, these studies used school (high and primary) EFL learners while the current study targets second- year tertiary level students.

Investigating the reading skill of postgraduate students, Al-Rubaye (2012) surveyed the reading strategies used by 115 US master and doctorate Iraqi graduate students in the US while reading academic text in English. English-Arabic, illustrated version of Mokhtari and Sheorey's (2002) Survey of Reading Strategies was utilized for the purpose of data

collection. The findings showed that the respondents, who were skilled readers, reported the use of variety of reading strategies for better comprehension. They used the reading strategies more than problem-solving strategies. The results also reported no significant difference in terms of reading strategy use between male and female participants. The findings in the study contradict those in (Mukhlif and Amir, 2017; Sabah, 2011; Al-Kubaisy, 1993) studies in which problem-solving strategies were reported to be frequently used by the participants. Moreover, postgraduate students were targeted in Al-Rubaye's (2012) study while undergraduate students were targeted in (Mukhlif and Amir, 2017; Sabah 2011; Al-Kubaisy, 1993) studies.

Yayli (2010) conducted a study to gather verbal report data on cognitive and metacognitive reading strategy use by the students enrolled in an English Language Teaching department in Turkey. Think-aloud and retrospective protocols were employed in this study as methods of data collection. The participants were categorized as six proficient and six less proficient readers. The proficient used CRSs more frequently than the less proficient ones in both text types, and both groups mainly used the same strategy types, such as rereading, guessing, and inferencing. This study is relevant in terms of participants i.e., (tertiary level learners) and data collection method i.e., TAP.

In the same manner and from the same country, Feryal (2007) carried out a research study to examine the reading strategies employed by 229 second-year trainee teachers at the English Language Teaching Department of a state university located in Western Turkey. The participant group consisted of 59 males and 170 females. To assess the reading strategies utilized by the respondents, Feryal created and implemented The Reading Strategies Scale. The results indicated that the application of these reading strategies not only minimizes failure but also enhances learning outcomes. Proficient readers must be familiar with various reading strategies and understand when, where, and how to apply them effectively. The significance of utilizing, developing, and sustaining effective reading strategies is particularly emphasized for academic reading throughout all phases of study.

The results also revealed the significance of effective reading strategies use in reading academic texts and that what the current study intends to investigate.

Another study undertaken by Hamdan et al. (2010) investigated the use of the cognitive and metacognitive reading strategies in reading English text among 57 participants majoring in English (43 female and 14 male) from Teachers Institute of Education in Malaysia. Ozek's and Civalek's (2006) questionnaire was used for the purpose of investigating the CRSs use. The results revealed that the respondents were high frequency users of the CRSs. These strategies are rereading, guessing, using dictionary, and note taking. The most frequently used CRSs were imagining, rereading, guessing meaning of words and sentences, as well as the use of dictionary. It is evident from the results that the most used cognitive reading strategies are word recognition. Moreover, the results of this study explained the importance of developing and enhancing the CRSs use.

In Korea, Park (2010) carried out a study on 115 EFL Korean students in five classes in three different universities, to explore the use of the reading strategies by these students. The study also aimed at investigating the relationship between the use of reading strategies and reading comprehension ability. The researcher used a modified Survey of Reading Strategy (SORS) to measure the respondents' general reading strategy use. The results revealed; high frequent use of reading strategies by the students, the students' ability of reading comprehension is related to their reading strategy use, the importance of using strategies in reading by college level students which the present study intends to find out.

Another study, conducted by Malcolm (2009), examined the academic reading strategies employed by native Arab students studying in English at a medical college in Bahrain. The research involved 160 participants, comprising 108 first-year students and 52 fourth-year students, both male and female. Data collection methods included think-aloud protocols, interviews, journals, and a self-rating questionnaire. The researcher utilized an Arabic version of the Survey of Reading Strategies (SORS), which identified 30 strategies that students employed at a notably high frequency. The findings indicated that strategies such as 'translation' and 'using prior knowledge' were utilized by both groups, with first-year students demonstrating a higher usage level compared to their fourth-year counterparts. Interestingly, students with lower initial proficiency exhibited similar reading strategy usage as those with higher initial English proficiency.

The objectives of Malcolm's study, which investigated the use of academic reading strategies among a number of the Arabic L1 students, are

compatible to the objectives of the current study. In addition, the research instruments, used in Malcolm (2009) and Yayli (2010) studies, i.e., think-aloud protocols and interviews will be employed in the present study as these data collection methods are commonly used and recommended by researchers to collect cognitive data. It is worth mentioning here, that reviewing the literature revealed a dearth of studies on CRGs in Iraq and that is the impetus for conducting the present study.

3. Research's Method

This study employed qualitative methods and because it is a case study, only five EFL English major - 2nd year students from Al Mustaqbal University- Babylon Governorate were involved and were randomly chosen. The small number of the respondents was to enable the researcher to focus on the problem studied in depth by collecting detailed information about the respondents' reading difficulties, specifically CRSs. The small sample will also enable the researcher to gather information about the respondent's profiles and previous reading experiences in detail. Two instruments were employed for the purpose of data collection; TAP and in-depth interview.

3.1 Participants

The participants (3 females and 2 males) are second- year students majoring in English from the Department of English Language and Literature. They were randomly chosen from the same stage, second-year, to determine the homogeneity composition of the group, in terms of competency level in English language. They relatively share same background i.e., they are from the same city and received same level of previous elementary education as far as English language is regarded. Their ages ranged between 20- 22 years old.

3.2 Data Collection

The purpose of this study is to investigate the awareness and use of the CRSs by a group of five EFL students, majoring in English. They are in their 2nd year from the Al Mustaqbal University, a private university in Iraq. The study is a case study as the researcher intends to understand closely and examine in detail the problems studied. Case study allows for in-depth data collection about the respondents' reading strategies, specifically CRSs. According to Van Lier (2005:196) "a case study can be single individual... However, a case can also be a group of individuals with a common context, set of goals, or some kind of institutional bound". For

the purpose of data collection method, two instruments were utilized, TAP and In-depth interview.

To conduct the TAP (see Appendix C), the respondents were asked to read two texts separately, (see Appendices A&B). Both texts were reviewed and confirmed by the head of the department of English at Al Mustaqbal University. Two texts (approximately 100 words each) were used for collecting data. Both texts were rated at approximately the twelfth-grade readability level using the Fry Readability Formula (see Appendix G).

The researcher provided an explanation of the TAP task at the start of each session. Each participant underwent two sessions, during which they were instructed to read and verbalize their thoughts. The researcher was present to assist the participants throughout the task. All sessions were audio recorded, while video recording was intentionally omitted to ensure that participants felt comfortable reading the provided texts and articulating their thoughts, as well as reporting on their use of various reading strategies. Each session lasted approximately 10 to 15 minutes, and the think-aloud process was conducted over a span of about two days.

Verbal reporting TAP has been used as an important research tool of psychological investigation, including research in reading. It has been accepted as an instrument for investigating the processes involved in cognitive performance. Ericsson and Simon (1993) argued that “verbal reports are data, and when elicited and interpreted with care, are a valuable and reliable source of evidence about human mental processes”. In addition, Block (1986:464) argued that “think-aloud protocols are most informative about the reading process when readers have problems understanding what they are reading”.

The in-depth interview consisted of 25 open - ended questions (see Appendix E) to get information that is more detailed from the participants. Participants were interviewed separately and the interviews were recorded. Video recording was not used to avoid any kind of embarrassment. Each interview lasted between 8-10 minutes. The main aim of conducting the in-depth interview was to collect detailed information pertained to the participants' experiences in learning English. It also helped to confirm information collected from the TAP in addition to collect more information related to reading difficulties faced by the participants.

3.3 Data Analysis

Qualitative data analysis is the way in which researcher summarizes, organizes a larger amount of mixed information or raw data generated by

interviews or observation setting. The analysis therefore, entails working on the raw data gained from the interview, generate categories, organize these categorizes into manageable chunks, summarize, and search for patterns to discover what is important for reporting (Hoepfl, 1997).

In this study the researcher used two qualitative research instruments, TAP and in-depth interview and thematic analysis was adapted to analyse the collected data. Thematic analysis is very useful for finding people's experiences, views, and opinions. The process started by reading the data set carefully looking for patterns and meanings. The second step was grouping data according to similarities, common ideas, patterns, and themes repeated in the data set. The third step was checking coherence and consistency among emerged themes. The last step was to define and name each emerged theme.

4. Findings

Research Question: What types of cognitive reading strategies are employed by the EFL 2nd- year students?

The verbal reports of the five participants were analysed based on the categories of cognitive reading strategies. Table 3 shows the participants' employment of different reading strategies while processing the two reading texts.

Table 3

The Reported CRSs during the TAP

Type of reading strategy	Text 1: The Expansion of English Language in Asia	Text 2: The Loan Words	Total
A-Cognitive reading strategies			
Guessing	5	3	8
Rereading	16	22	38
Inferencing	4	5	9
Translation	4	4	8
skimming	1	1	2
Using dictionary	23	16	39
Note taking	0	9	9
B-Other strategies			

Comment on behavior	4	3	7
Monitor comprehension	3	10	13
Interpret the text	2	2	4

As shown in Table 3, different reading strategies were noted. The responses of the participants were categorized into cognitive reading strategies and other reading strategies. In the think-aloud protocol, the respondents employed seven cognitive reading strategies, namely, guessing, rereading, inferencing, translation, skimming, using dictionary, and note taking. At the same time, other reading strategies were noted, namely, comment on behavior, monitor comprehension, and interpret the text). The total number of times each strategy was used in both texts shows that some strategies were used more often than other strategies by the five participants in this study.

Considering the above mentioned numbers, we can see the respondents' indiscriminate use of the CRSs. For example, rereading strategy was used 38 times and using dictionary was used 39 times. Whereas, important strategies like using prior knowledge, grammatical analysis, paraphrasing, using context clues, and decoding were not employed at all by the respondents. However, the participants showed very limited use of some important strategies, such as skimming and guessing. The results that showed moderate and very limited use of the CRSs indicate the five participants' poor knowledge in using reading strategies while reading academic materials in English.

This indiscriminate and limited usage of the reading strategies shown by the five respondents indicates that they are not fully aware of their use of CRSs. A potential explanation for this finding is the absence of a course that teach EFL learners reading techniques that ease the process for the EFL learners, as one of the B.A degree requirements in the Iraqi university environments. Such courses are indispensable for the students and by which they can learn the proper use of the reading strategies. The above mentioned indicators might make the respondents use CRSs in an indiscriminate way and at a moderate level. According to this important finding, the Iraqi college level students are in need to learn the proper use of the CRSs.

Despite the fact that the five participants reported the use of "using prior knowledge" strategy in the in-depth interview, however, none of the

five participants reported the use of this strategy in the think-aloud protocol while processing Text1 and Text2. The importance of using this important strategy is supported by Pang (2008), who said that the reader uses his prior knowledge to construct meaning in the process of comprehension. The reason could be attributed to the fact that the participants were unaware of how to employ this strategy. When asked about the reason behind not using this important strategy “using prior knowledge”, the five respondents confirmed that they use it but they did know that they have to announce that. Respondent C, for example, reported that she does not know that using prior knowledge is a reading strategy and said:

“I do not know that using previous knowledge is a strategy; but all reader depends on their old information to understand that text, that is normal thing”. (C. 38-40)

The cognitive reading strategies employed by the respondents are not adequate for college level students to assimilate the complicated academic materials. While reading Text1 and Text2 the five respondents frequently reported that they could not understand everything. For instance, respondent B said: “I do not understand the last paragraph”. (B.11). After reading this part, respondent C also reported that she could not understand some parts of the texts and said: “I cannot understand everything” (C. 26). In the same vein, respondent D said: “I have to reread the last two lines; I did not get the meaning” (D. 48-49). Respondent E, on the other hand, also announced that she could not understand what she was reading after reading one paragraph “I need to reread the paragraph and I could not understand anything” (E. 3-4). The respondents’ failure in understanding the given texts could be attributed to a number of reasons. 1) The respondents’ poor knowledge in using the cognitive reading strategies when they read academic materials. 2) The respondents are lacking the sufficient background knowledge to understand the texts properly.

5. Discussion of the Results

In answering the research question, the results showed a limited use of the cognitive reading strategies by the five respondents when only seven strategies, namely, guessing, rereading, inferencing, translation, skimming, using dictionary, and note taking. Two strategies were reported to be frequently used by the respondents (rereading and using dictionary), whereas, important strategies like using prior knowledge, grammatical analysis, paraphrasing, using context clues, and decoding were not reported to be employed by the respondents. In addition, the five respondents

reported the use of some other reading strategies like comment on behavior, monitor comprehension, and interpret the text.

In the current study, the limited use of reading strategies reported by the participants is in harmony with findings of Sabah (2011), Al Kusairy (2007), and Al- Kubaisy (1993) studies. This might attributed to the respondents' lack of sufficient knowledge to use the proper strategy. However, this findings contradict the findings of Yayli (2010), Hamdan et al (2010), Park (2010), and Malcolm (2009) studies in which the participants reported good use of trading strategies which were conducted outside Iraq.

Apparently, the five respondents frequently used one strategy at a high level of frequency and this strategy is using dictionary. The second most frequently used strategy is rereading, which was used by four respondents only, B,C,D, and E. However, respondent A unlike the other four respondents as she used note taking strategy as the second most frequently used strategy than rereading. The use of each one of them will be discussed in detail in the following sections.

A. The Use of Dictionary

The five respondents repeatedly employed using dictionary strategy (English-Arabic dictionary). The frequent use of this strategy indicates that the participants' vocabulary knowledge is very limited and that they mainly depend on the dictionary to know the meaning of the new words. In addition, it indicates that the comprehension level of the participants is low. The frequent use of this strategy reflects the previous education and how they were taught and encouraged to use this strategy for their English learning through the formal instructions they received in English classes. In addition, the use of this strategy is the first aid usually recommended by teachers in Iraqi schools. The students' reliance on using dictionary only, to find out meanings of the unfamiliar words, is criticized by Ghanaguru's et al (2010) who argued that many ESL students encounter vocabulary problems and they mainly depend on dictionary to find out the meanings of difficult vocabulary, accordingly, the frequent use of the dictionary makes fluent reading difficult. The frequent use of dictionary, as an easy way to get the meaning of the new unfamiliar words, might urges the readers to stop thinking about the other CRSs like guessing, using context clues, etc, that require some proficiency in language. The frequent use of using dictionary strategy was also confirmed in Sabah (2011), Malcolm (2009), and Al-Kubaisy (1993) studies.

Using dictionary is an ideal learning strategy that frequently employed by low proficiency learners when reading. According to Park (2010), low proficiency learners usually rely on using a dictionary for unfamiliar words and literal translation, whereas, high proficiency ESL/EFL learners try to guess meaning of the unknown words by using linguistic clues, like relating new words to certain words they already know, and non-linguistic clues, such as context clues and general background knowledge.

B. Rereading

The second most frequently used strategy is rereading. This strategy was used 38 times by the five respondents and it is usually used by the learners to improve their comprehension or when there is a failure in reading comprehension. The frequent use of this strategy indicates that the reader does not have the ability to recognize the keywords in the sentence which negatively influence the comprehension process in reading. This strategy is also used by learners to activate their prior knowledge. Again, the frequent use of this strategy reflects the respondents' low comprehension and insufficient reading skill. This notion was confirmed by Block (1986) who argued that "the use of this strategy usually indicated a lack of understanding".

Based on the literature review, this result is consistent with (Sabah, 2011; Hamdan et al, 2010; Yayli, (2010); Park, 2010; Al-Kubaisy, 1993) studies. According to the Interactive Model, using dictionary and rereading strategies are related to the bottom-up model which involves looking at sentence meaning from individual word and later stringing of the different words together to produce a reasonable meaning. This method is associated with poor readers or readers with low reading ability. As mentioned earlier, the respondents frequently announced that they could not understand everything while processing text1 and Text2 and that means that the participants' level of comprehension is low as they could not interact their bottom-up (recognition skills) and their top-down (interpretation skills). For college level students, the use of the Interactive Model is indispensable and the frequent use of the dictionary makes fluent reading difficult.

The frequent use of only two strategies only is not enough to process and assimilate academic texts. The participant's inadequate comprehension is due to the lack of reading strategy awareness and limited use of the CRSs and that is supported by Al-Kubaisy's (1993) study, which showed that Iraqi tertiary level students, used strategies such as seeking help of

others, reading the text word by word, re-reading, reading without adequate comprehension, and using dictionary. Since the participants are advanced students, they need not only to be familiar and acquainted with the CRSs but also know how to use them properly. To read any text successfully, the reader needs to adopt different strategies to perform the three different phases or reading; before reading, while reading, and after reading, (Igbaria, 2003).

6. Conclusions

In the present study only five participants in a college as EFL setting in one country were involved, and thus it will be useful to investigate on a larger scale how other groups of other students (academic disciplines, other English proficiency levels) within the local Iraqi and regional Arab countries to report their experiences. Hence, replication of the present study in other settings is recommended.

Since this study has its limitations, several recommendations are made for further and future research in CRSs.

Reading, from the initial stages of teaching, should be emphasized by; the Iraqi Ministry of Education/department of training and development, English language supervisors, schools administrations, and teachers of English. It is indispensable for EFL students to become more aware of reading strategy use. In addition, the data presented in this study can help English course designers to adopt and improve the use of the CRSs for class learning. They also can assist English language teachers in developing their students' reading skills.

It is strongly recommended that schools should be supplied with some learning aids that facilitate the learning process and help students to develop their reading skill. Learning aids are like English-Arabic and English –English dictionaries, English stories that help in enhancing the reading skill for students, CDs that helps to improve students' listening in English, etc.

High schools teachers are required to understand and consider challenges the students encounter in reading English texts. They are also highly required to prepare their students to be strategic readers and know how to use important reading strategies: such as paraphrasing, guessing, skimming, etc. These strategies were less frequently used by the participants, who mainly employed rereading and using dictionary strategies in the present study. Teachers are also required to train their students to cope academic reading challenges by using reading strategies in general and CRSs in particular.

The findings of the present study showed very limited use of CRSs by the participants, hence, it is strongly recommended to allocate reading course or strategy training program for Iraqi students at college level and mainly those who are majoring in English. Feryal (2007: 103) confirms the importance of this kind of programs as “A strategy training program is essential to develop strategic readers because it is possible to teach them how to build their own background knowledge about the topic and to determine ways for reading according to their purposes”.

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Appendix A

Text 1: The Expansion of English Language in Asia (sample)
Malaysia's various changes in the language policy of their education system have been debated over the past few years upon the use of English or Bahasa Malay as the mode of teaching. Looking into the educational trends, many developing countries had worked in bringing various changes into their policy to obtain a competitive advantage over the rapid process taken by globalization. The effects of globalization leading to country's

prosperous development lead to increasing demand for education hence, the demand for English.

Appendix B

Text 2: The loan words (sample)

According to Al Klintani 2008, live languages borrow what is suitable for its use and in the same time give to other languages what they need. Kemmer, (2009) argued that loanwords are words adopted by the speakers of one language from a different language (the source language). Borrowing is usually attributed to the consequence of cultural contact between two language communities. Borrowing of words can go in both directions between the two languages in contact, but often there is an asymmetry, such that more words go from one side to the other. In this case the source language community has some advantage of power, prestige and wealth that makes the objects and ideas it brings desirable and useful to the borrowing language community.

APPENDIX C

Transcription of the TAP (sample)

Text1: The Expansion of English Language in Asia

Transcription of protocol	Type of strategy used
<p>Text: the expansion of English language in Asia.</p> <ol style="list-style-type: none"> 1. T.A “I ...do not know the meaning of the word expansion, so I 2. have to check the dictionary.” 3. Text: Looking into the educational trends, many developing 4. countries had worked in bringing various changes into their 5. policy to obtain a competitive advantage over the rapid process 6. taken by globalization. 7. T.A “I am going to reread the first three lines.” 	(DIC)

APPENDIX E

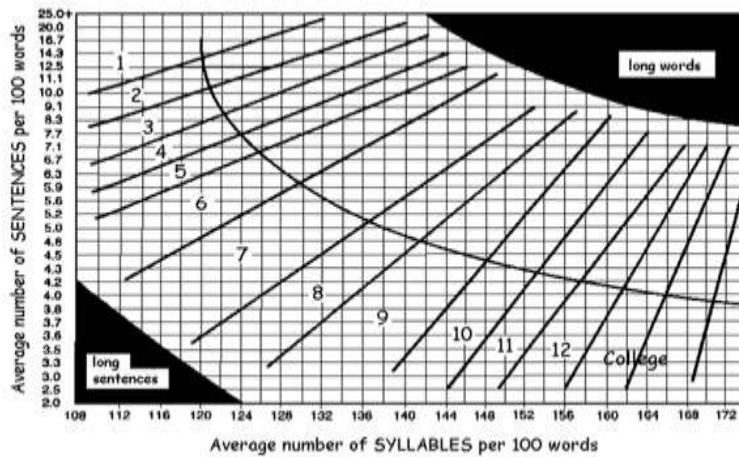
IN-DEPTH INTERVIEW TRANSCRIPTIONS

In-depth interview transcription of respondent (A), sample

Participants	Utterance	Line No.
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Interviewer	Before we start, I would like to thank you for your help and for being one of my respondents. What do you know about the importance of reading?	1 2
A	It is important because it enriches the knowledge in different field of life and it adds a lot.	3 4
Interviewer	So reading is the main input for information for readers.	5
A	One of the ways.	6
Interviewer	Since you are an English language student, did you take any course in reading?	7 8

APPENDIX G



Fry

Readability Graph