BIRZEIT UNIVERSITY

Investigating Berziet Students' Awareness of their Knowledge and Use of

Metacognitive Reading Strategies.

MA Thesis

by

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Supervised by

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This Thesis is Submitted in Partial Fulfillment for the Requirements for the

Master's Degree in Education, College of Graduate Studies

Birzeit University - Palestine

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استقصاء مدى وعي طلاب بيرزيت بمعرفة واستخدام استراتيجيات القراءة الفوق ذهنية

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Abstract

This study aimed at investigating Birzeit students' perceived use of metacognitive reading strategies while reading English texts. Another objective of this study was to examine the differences between high proficiency students and low proficiency students in their strategy use. Furthermore, the correlation between subjects' reading strategy use and their reading comprehension achievement was explored as well to see if their reading strategy use can be used as a predictor variable to predict their reading achievement.

To this end, both quantitative and qualitative methods were utilized to obtain information and to reach more accurate results about Birzeit students' perceived use of reading strategies as well as their comprehension level. The three instruments namely, Survey of Reading Strategies (SORS), the reading comprehension exam, and the retrospective interviews were employed to collect the data from 180 participants of Birzeit students. Results revealed that Birzeit students reported using these strategies with high and medium frequencies. Their use of metacognitive reading strategies arranged in a descending order; problem solving, supportive strategies, and global strategies. Moreover, the mean scores of the use of these strategies by high proficient students outnumber those of low proficient students. Results also showed that there is a low correlation between students' use of problem solving strategies and their reading comprehension achievement. A trivial positive correlation was also observed between students' use of global strategies and their reading comprehension achievement. Finally, a weak, negligible and negative correlation was observed between students' use of supportive strategies and their reading comprehension achievement. Based on these findings, the current study recommends that instructors should focus on raising students'

awareness of the importance of using the reading strategies and provide them with sufficient instruction and training in applying these strategies. This study also recommends that reading instruction should supplement learners with adequate and extensive reading activities.

استقصاء مدى وعي طلاب بيرزيت بمعرفة واستخدام استراتيجيات القراءة الفوق ذهنية

ملخص

تهدف هذه الدراسة الى استقصاء استخدام طلاب بيرزيت لاستراتيجيات القراءة البعد ادراكية أثناء قراءتهم النصوص باللغة الانجليزية. كما تهدف لفحص الفروق في استخدام هذه الاستراتيجيات ما بين الطلاب ذوي التحصيل المرتفع والطلاب ذوي التحصيل المنخفض. ومن أهداف الدراسة أيضاً دراسة وفحص مدى الارتباط ما بين متوسط استخدام الطلاب للاستراتيجيات وتحصيلهم في القراءة الاستيعابية لمعرفة ما إذا كان استخدامهم للاستراتيجيات يمكن أن يكون مؤشراً للتنبئ بتحصيلهم.

لتحقيق هذه الأهداف تم استخدام المنهجية الكمية والكيفية لجمع المعلومات والوصول لنتائج دقيقة عن استخدام طلاب بيرزيت لاستراتيجيات القراءة البعد ادراكية ومدى ارتباطها بتحصيلهم في القراءة الاستيعابية. ولجمع البيانات استخدمت ثلاث أدوات هي: استبانة استراتيجيات القراءة، امتحان قراءة استيعابية، بالاضافة إلى المقابلات الاسترجاعية. كشفت النتائج عن أن طلاب بيرزيت يستخدمون كل الاستراتيجيات المذكورة في الاستبانة بتكرارات متوسطة وعالية. كما أن استخدامهم لهذه الاستراتيجيات جاء بترتيب تنازلي: استراتيجيات حل المشكلة، الاستراتيجيات المساندة والاستراتيجيات الشاملة. كما أظهرت النتائج أن متوسط استخدام الطلاب ذوي التحصيل العالي لهذه الاستراتيجيات فاق تلك لزملائهم من الطلاب ذوي التحصيل المنخفض. وكشفت النتائج عن ارتباط ايجابي منخفض ما بين متوسط استخدام الطلاب لاستراتيجيات حل المشكلة و تحصيلهم في القراءة الاستيعابية. كما أظهرت ارتباطاً ايجابياً ضعيفاً جداً ومهملاً أيضاً ما بين متوسط استخدامهم للاستراتيجيات الشاملة وتحصيلهم في القراءة الاستيعابية. وأخيراً أظهرت النتائج ارتباطاً سلبياً ضعيفاً جداً ومهملاً ما بين متوسط استخدام الطلاب للاستراتيجيات المساندة وتحصيلهم في القراءة الاستيعابية. أي كلما زاد استخدامهم لهذه الاستراتيجيات، كلما انخفض أدائهم في القراءة الاستيعابية. بناءاً على هذه النتائج، توصي الدراسة الحالية بضرورة زيادة وعي الطلاب بأهمية استخدام استراتيجيات القراءة، وتزويدهم بالتعليم والتدريب الكافي على كيفية استخدام هذه الاستراتيجيات. كما توصي بضرورة تزويد الطلاب بنشاطات مكثفة وكافية في القراءة.

Dedication

In memory of my parents who have always been the main source of encouragement,

support and inspiration.

To my beloved sisters and brothers,

To my beloved husband and sons,

To all of them, with love and gratitude.

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First of all I thank God (Allah) for giving me the strength and patience during this process. Next, I am deeply indebted to many people around me. Without their support and encouragement, it has been impossible for me to finish this project. Here, I would like to express my thankfulness to those who have supported me with my thesis.

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Chapter One

1.1 Introduction:

Reading is a complicated process which is considered one of the main ways of acquiring knowledge. Thus, learning or teaching reading is one of the crucial skills in foreign language education as it is closely related to general learning and writing procedures. It is a complex and interactive process where the reader interacts with the text and the writer through their shared knowledge with the aim of constructing meaning from the printed material.

According to Abushihab (2003), it is a sophisticated process which includes psychological, linguistic, and sociological aspects. Anderson (1994) emphasized this interactive nature of the reading process. He argued that the active reading framework for teaching should include six integral components. These are: activate prior knowledge, cultivate vocabulary, teach for comprehension, increase reading rate, verify reading strategies, and evaluate progress. According to Anderson (1994), these components should be part of reading lessons. This in turn emphasized the interactive nature of the reading process as each skill and strategy ties into others.

Generally speaking, students face different levels of reading difficulties that can be attributed to the students' poor language proficiency or inability to decode a text and lack of skills to cope with reading comprehension. Therefore, the more skills and strategies are used, the better would be the result and performance (Kamhi, 2009). Zhang & Wu (2009) also stressed the same points and maintained that in such an interactive meaning-making process, readers refer to various available resources and use many strategies to comprehend the text.

Numerous studies were interested in investigating reading strategies for what they reveal about the way that the readers manage their interactions with the written text, and for explaining how these strategies are related to reading comprehension (Carrell, 1989). Knowledge about text-processing strategies is the foundation for successful construction of meaning for skilled readers to comprehend a text; they actively construct meaning and integrate information from the text with relevant information from their background. Another type of knowledge that affects the reader's ability to comprehend a text is their repertoires of cognitive and metacognitive strategies in order to monitor this processing (Shih, 1992).

Recent research on reading strategies has shown that most of the comprehension activities used by effective readers take place at the metacognitive level (Zhang & Wu, 2009), and that displaying a higher degree of metacognitive awareness enables the successful readers to use reading strategies more effectively and efficiently (Carrell, 1989, Zhang, 2001).

The concept of metacognition was first introduced and discussed by John Flavell in 1970 who was interested in and conducted research on children's metamemory. He had recognized two dimensions of metacignitive ability. These include knowledge of cognition and regulation of cognition (Flavell, 1978). The first includes the readers' knowledge about his/her own cognitive resources, and the correspondence between the reader and the reading situation. Therefore, the reader can take procedures to meet the demands of a reading situation more effectively if he is aware of what is needed to perform effectively. However if the reader is not aware of the difficulty of the task, or of his/her own limitations as a reader, he/she will not be expected to take the necessary actions to recover from problems (Flavell, 1978; Carell, 1989; Baker & Brown, 1984).

Metacognition refers to one's understanding of his cognitive processes (Carell, Pharis & liberto, 1989; O'Malley & Chamot, 1990; Brown & Palincsar, 1982; Mokhtari & Sheorey, 2002). Baker and Brown (1984) put it as: "The ability to reflect on one's own cognitive processes, to be aware of one's own activities while reading, solving problems" (p.353). It can be simply defined as thinking about thinking, and the ability to make one's thinking visible (Anderson, 2003). In the context of reading, metacognition is understood as consisting of two types of cognition: one's knowledge of strategies for learning from the text, and the control of one's own actions while reading for different purposes, mainly compensating for reading comprehension failure (Carell, Pharis & Liberto, 1989).

The importance of metacognition is emphasized by many theoreticians and researchers as it facilitates awareness of one's own learning process. The readers' awareness of how these processes work and how he can optimize their functioning could enhance and maximize comprehension (Jimeneze, Puene, Alvarado & Arrebillaga, 2009; Hacker, Dunlosky & Graesser, 2009). How people monitor and control their thinking is the main focus and interest of psychologists and researchers in many fields. In the educational and academic domains in particular, educational psychologists emphasized the role and importance of metacognition as an instrument in self-regulated learning (Paris, 2002).

Under the concept "metacognition" many activities that consist of self-regulatory mechanisms were investigated and studied. These activities that are used by an active learner during any continuous attempts to solve problems include checking the outcome of any attempt to solve problems, planning one's next move, monitoring the effectiveness of any taken action, and testing, revising, and evaluating one's strategies for learning (Baker & Brown, 1984, O'malley & Chamot, 1990).

An important aspect of metacognition is comprehension monitoring which involves some awareness of goals and strategies for meeting them (Paris& Myers, 1981). This awareness and monitoring of comprehension processes are critically important aspects of proficient readers (Mokhtari & Richard, 2002). Reading comprehension is a complex process which involves many perceptual and cognitive skills (Baker & Brown, 1984). Monitoring one's level of understanding while reading is considered a major component of this process as it is considered a measure of progress to a reading goal or a signal of comprehension failure (Paris & Myers, 1981).

To become effective readers, learners have to be aware of their goals in reading and be able to administer strategies effectively. When reading a complex text (e.g., reading an unfamiliar text) the use of reading strategies in such challenging circumstances is crucial to comprehension (Hacker, Dunlosky & Graesser, 2009). Reading strategies are deliberate, planned activities that the active reader apply frequently while reading to remedy perceived cognitive failure and facilitate reading comprehension (Mokhtari & Richard, 2002; phakiti, 2006 a).

Strategies are the specific things that the reader does to learn (Anderson, 2005). These are conscious actions that the learner takes in order to enhance and improve his/her language learning. Since these strategies are conscious, the learner is actively involved in their selection and use (Anderson, 2003, Zang, 2001). He/she is not only aware of which strategies to use, but he successfully regulates the use of these strategies to suit the situation and to help him/her to accomplish the task at hand (Mokhtari & Sheory, 2002).

There are no good or bad strategies; the distinction lies in the application of these strategies. Based on Anderson's research (2005) effective and less effective

learners reported the use of the same kinds of strategies. Relying on these findings, it cannot be claimed that successful second language (L2) learners use good strategies while poor learners use bad strategies. The key issue here is that how these strategies are executed and orchestrated. According to Oxford (2003), good language learners consistently use certain types of learning strategies, and show greater ability to reflect on and articulate their own language learning processes. While less able students use strategies in a random, unconnected, and uncontrolled manner.

Proficient readers are purposeful and strategic as they use the metacognitive skills appropriately to make connections in their reading (Dolly, 2004). Anderson (2005) raised the same issue. He pointed out that reading research indicated that proficient learners have been found to have a wider repertoire of strategies and use them to accomplish a second language (L2) task. In addition, research on reading strategies emphasized the idea that less proficient L2 learners draw on a smaller number of strategies using a less effective manner.

A final issue which is of major interest of many researchers involves differentiating between what is cognitive and what is metacognitive. According to Livingston (1997) cognitive strategies are used to help the learner to accomplish a learning task, while metacognitive strategies are used to ensure the achievement of one's learning goal. Therefore, metacognitive activities usually follow the cognitive ones. More precisely, they often take place when cognition fails.

Phakiti (2006 a) argued that cognitive strategies are actual conscious behaviors that individuals apply to process language in order to understand, learn or use in some context. While metacognitive strategies are conscious processes that regulate

cognitive strategies and other processing. He further pointed out that these strategies are considered as closely related.

O'malley & Chamot (1990) stressed the same point. They mentioned that metacognition strategies are thinking about the learning process, planning for learning, monitoring for production, and self-evaluation after completing the learning activity. While cognitive strategies are directly concerned with individual learning tasks that involve the processing and the manipulating of the learning materials. They proceed to emphasize the importance of the two kinds arguing that pairing these metacognitive strategies with appropriate cognitive ones can enhance and maximize the transfer of strategy training to new tasks.

1.2 Statement of the Problem

In the last two decades, a gradual shift in the educational field has taken place. This shift has placed a great emphasis and stress on the part of the learner who is supposed to be the center of the learning process. This in turn raises an interest in exploring the learners' resources for language learning styles, skills, and strategies. Thus, an understanding of how learners' process new information and what strategies they employ to manage their reading tasks and achieve their comprehension goals is crucial since it is positively related to learners' language proficiency. Therefore, the researcher was encouraged to investigate and identify these strategies and their contribution to students' language proficiency.

Furthermore, previous research in Palestine pointed out that students lack the needed knowledge of the reading strategies which may help them to overcome the reading difficulties and become effective readers (Abed Hajouj, 2011; Abu Shmais, 2002; Kalil, 2005). Students neither know the appropriate reading strategies, such as

skimming, scanning, rereading, predicting and adjusting pace, nor know how and when to apply them (conditional knowledge). Instead, students apply poor reading habits and rely heavily on translation into their mother tongue, in addition to some teachers' direct explanation of a reading text. Furthermore, these students are not informed or instructed in strategies that they can apply and adjust according to each situation.

Up to the researcher's knowledge, there are just few studies that already have been conducted in Palestine that tackle the metacognitive reading strategies. Therefore, the lack of studies being conducted in the field of language learning in general, and reading skill in particular was one of the main stimuli that encouraged the researcher to conduct this research. More importantly, students' poor reading ability and incorrect strategies necessitated carrying out this study, and urged the researcher to investigate this phenomenon in Palestinian context on Berziet English EFL learners who might face such problems.

1.3 The Significance of the Study:

The significance of this study stems from the fact that it focuses on one of the important skills in foreign language learning, especially at this critical stage where students already have joined the university and where this skill is supposed to play a significant role while pursuing their higher education. Therefore, to help English learners become proficient; a clear understanding of their learning behavior while reading in English is needed.

To the best of the researcher knowledge, this study is one of the few studies that examine and identify the metacognitive reading strategies that students of different levels of proficiency apply while reading. But what is more interesting is

that, up to the researcher's knowledge, this study is one of the first studies conducted in Palestine to investigate the correlation between the learners' use of metacognitive reading strategies and the EFL (English as a foreign language) reading achievement. Taking into consideration that reading comprehension ability is highly correlated with success in all academic areas, thus valid research on the relationship of strategic competence to reading performance is needed.

It is hoped that this study might contribute to the understanding of this skill, and provide teachers with knowledge and deep insights into students thinking processes that students use while reading to promote their comprehension. Furthermore, it might urge teachers to instruct their students in what, how, and when to apply reading strategies. This in turn might help students to become effective readers and thus contribute to better students' future success which is considered the main objective of the language learning in general.

This study which is directed to trace and identify the general types of reading strategies that Berziet EFL learners use when approaching different English texts might raise learners' metacognitive awareness of some useful reading strategies that they could not have come across or trained in before participating in this research. Therefore, it might help them to develop effective reading strategies that could enable them to maximize their comprehension which in turn could positively affect their performance.

1.4 Research Questions:

The main objective of this study is to investigate the use and knowledge of metacognitive reading strategies among Birzeit students which are essential for them to become effective readers. To achieve this goal, this study will try to identify and

shed light on the reading strategies that good and poor students mostly use when they read, and to study the correlation between the adoption of reading strategies and the students' achievement on reading. Therefore, this study will try to answer the following questions:

1. What type of reading strategies do Birzeit students use while reading English texts?

2. What metacognitive reading strategies are used by high-proficiency readers and low-proficiency readers?

3. Is there a correlation between the adoption of reading strategies and the students' achievement?

1.5 Limitations of the Study

1. This study was only conducted on Birziet students. Therefore, the results of this study could be generalized only to students of similar characteristics in similar settings.

2. In order to measure subjects' comprehension level, only a TOEFL reading test was used which might be a limited indicator to reflect their actual proficiency level. In addition to this test, future studies might employ other kinds of oral comprehension tests or techniques to obtain more accurate knowledge of participants' comprehension.

3. One of the major instruments used in this study was a self-report questionnaire, where students were supposed to report their perceived use of reading strategies. It must be noted that results based on questionnaires have limitations. This is because the subjects' responses to the closed format questions would be restricted because of the limited range of options.

1.6 Definition of the terms

Metacognition: refers to the ability to reflect upon, understand, and control one's learning (Schraw & Dennison, 1994). It is the knowledge that people possess about their own cognitive process and products and any other information relevant for learning (Flavell, 1976, p. 232). It is cognition of cognition (Carrell, 1989).

Metacognitive awareness: it means being aware of how you think. In the ELT classroom, it means being aware of how you learn. Retrieved from

http://www.teachingenglish.org.uk/knowledge-database/metacognitive-awareness

Reading Process: the process of meaning construction that readers perform when they deal with written texts (Pearson & Stephens, 1994).

Strategies: are the conscious actions that learners take to improve their language learning (Anderson, 2003).

Reading strategies: are deliberate, conscious procedures used by readers to enhance texts comprehension (Sheorey & Mokhtari, 2001, p. 433).

Metacognitive Strategies: those strategies that are employed for managing the learning process overall (e.g., identifying one's own learning style preferences and needs, planning for an L2 task, gathering and organizing materials, arranging a study space and a schedule, monitoring mistakes, and evaluating task success, and evaluating the success of any type of learning strategy (Oxford, 2003).

Cognitive strategies: those strategies that enable the learner to manipulate the language material in direct ways (e.g., through reasoning, analyzing, note-taking,

summarizing, outlining, recognizing information to develop stronger schema, practicing structures and sounds formally) (oxford, 2003).

Learning strategies: are the conscious thoughts and actions that the learners take in order to achieve a learning goal (Chamot, 2004).

EFL (English as a Foreign Language): English learned in countries whose people's mother tongue is not English and where it is not used as the formal or primary language (for example, Palestine, China and Japan).

ESL (English as a Second Language): a traditional term for the use or study of the English language by non-native speakers in an English-speaking environment. That environment may be a country in which is the mother tongue (e.g. Australia, the U.S) or one in which English has an established role (e.g., India, Nigeria).

http://grammar.about.com/od/e/g/English-As-A-Second-Language-Esl.htm

ELL (English Language Learner): English language learners are students whose first language is not English and who are in the process of learning English.
http://www.readingrockets.org/teaching/glossary/

L1 (First Language): also called native language, the language that a person acquires in early childhood because it is spoken in the family and/or it is the language of the region where the child lives.

http://grammar.about.com/od/mo/g/Native-Language.htm

L2 (Second Language): is a language studied in a setting where that language is the main vehicle of everyday communication and where abundant input exists in that language (Oxford, 2003).

Proficient(ly): a student performance that meets the criterion established in the Standards as measured by a teacher or assessment; in the Standards, often paired with independent(ly) to suggest a successful student performance done without scaffolding; in the Reading standards, the act of reading a text with comprehension.

http://www.readingrockets.org/teaching/glossary/

Berziet students: freshmen and/or sophomore students who are enrolled in 141 prerequisite English course at Birzeit University in Palestine.

Survey of Reading Strategies (SORS): the (SORS) is a questionnaire designed by Mokhtari and Sheorey (2002) to access the frequency of learners' metacgognitive reading strategies' use. The structure of the questionnaire is based on Mokhtari and Sheorey classification of reading strategies, including the following three categories of metacognitive reading strategies, global strategies, problem solving strategies, and supportive strategies.

Chapter Two

Theoretical Framework and Literature Review

This chapter covers the discussion of major lines of theory and views concerning the process of reading. First, it presents the theoretical framework. Then, different studies on reading strategies that are relevant to the inquiry of the current study will be discussed.

2.1 Theoretical Framework

The three theories that constitute the basis for this study are constructivism, social constructivism, and transactional theory of reader response. The three theories suggest that students build on their prior knowledge and experience which serve as a basis for their new knowledge. Furthermore, the social interaction of teachers, peers and adults is critical for these students to discuss and make sense of new information so that they can manage to build on their prior knowledge. The building of the new knowledge through the interaction is the main thesis of the social constructivism (Vygotsky, 2000). While the transactional theory of reader response suggests that the transaction between the reader and the text is important for students so that they can construct meaning and acquire new knowledge (Rosenblatt, 1980).

2.1.1 Constructivism

Based on the constructivism theory, learning is a developmental process that involves change, self-generation, and construction. Each of these involves building on prior knowledge. Learning takes place through reading, listening, exploration and experience which enable the reader to construct the new understanding (Kaufman, 2004).

Fosnot (1998) defined constructivism as a theory about knowledge and learning. She pointed out that knowledge is temporary, developmental, nonobjective, internally constructed, and most importantly that it is socially and culturally mediated. The constructivism model supposes that the learner is active and self-regulated. In Hickman's words, Dewey argued that the learner is not an inactive recipient of experience, but an active player who brings a set of behaviors and expectations from past events (Hickman, Neubert & Reich, 2009).

This model also suggests that reality is not simply processed but actively constructed. Learners are constantly restructuring and adapting. Thus, in an attempt to make meaning of the world, learners make relations and inferences about actions and events, and test out these inferences (Fosnot, 1984). Students learn to build on their prior knowledge and make meaning when they are allowed to explore areas on their own and with the help of the teacher. By making connections between what they know and new concepts that are being presented, students will gain much deeper understanding.

2.1.2 Social Constructivism Theory

The social constructivist theory extends and builds on the constructivist theory by including the social aspect of learning. According to Vygotsky (1978), there is a difference between what a student could learn independently, and what he could learn while working in a social context. Vygotsky emphasized the role that the adults can play in the student's learning process. His theory concerning the zone of proximal development is defined as "the zone in which the individual is able to achieve more with assistance than he or she can manage alone" (Vygotsky, 2000, p.57). It refers to the ideal level of task difficulty with the aim of facilitating learning where the child

can achieve his learning goals successfully with the appropriate support from the surrounding adults (Tracy & Morrow, 2012).

According to Vygotsky (1978), under the guidance of adults or in collaboration with more capable peers, the student can achieve the desired outcome (problem solving). So learning is not done in isolation, but in collaboration with others. Depending on the notion of a zone of proximal development, good learning is that which is in advance of development. Vygotsky pointed out that when students learn, they in fact stimulate different internal processes which only function when an interaction is taking place between the student and his/her peers or with other adults in the surroundings.

The Vygotskian theory calls for an approach to learning and teaching that is both exploratory and collaborative. It also calls for reforming the curriculum so that it should include activities that challenge students and enable them to achieve their goals that have personal significance for them. In other words, Vygotsky (2000) stresses reconstituting classroom and schools as community of inquiry. "learning is not an end in itself, but an integral aspect of participating in community's activities and mastering the tools, knowledge and practices that enable one to do so effectively" (p.62).

Relying on the Vygotskian perspective, Forman and Cazden (2004) argued that when children work together in collaborative tasks, they are using their speech to guide the action of their partners, and they are, in turn, guided by their partners' speech. So, when students are involved in this type of social collaboration, they are able to master problems that are considered difficult, and which they would not be able to solve on their own. Considering the social constructivists believe, learning

takes place within a socio-cultural context, and is constructed through interaction with others (Tracy & Morrow, 2012). Therefore, students should have the opportunities to work in their zone of proximal development.

When learners work at a level that requires help and assistance from an adult or in collaboration with other students (more capable peers), the discussion generated between the two, helps the students in gaining knowledge which is considered necessary to experience growth. For Vygotsky, through social interaction, students continually construct the meaning of what they read and build on their prior knowledge (Forman & Cazden, 2004).

Based on the social constructivist theory, students who are required to read a text that is at their actual reading level will not experience growth. While, texts that challenge the students' level and incorporate higher-level vocabulary and more complex structures, will guarantee the necessary challenge for reading development to occur (Tracy & Morrow, 2012).

2.1.3 Transactional Theory of Reader Response

For Rosenblatt (1982):

> Reading is a transactional, a two- way process, involving a reader and a text at a particular time under particular circumstances….The words in their particular pattern stir up elements of memory, activate areas of consciousness. The reader, bringing past experiences of language and of the world to the text. (p. 268).

The transactional theory of reader response suggests that the meaning that the reader gleans from the text is not in that text or the reader, but is what happens during the transaction between the reader and the text. According to Rosenblatt (1980), the reader is actively engaged in creating the meaning by drawing upon his past experience. She uses the term "reader's stance" or "mental set" to differentiate

between reading for information (efferent), and reading for pleasure (aesthetic). She points out that the reader performs very different activities during aesthetic reading and nonaesthetic reading.

In the first type, the reader focuses his attention on what happens during the actual reading event. In nonaesthetic reading, on the other hand, the reader's attention is focused on what he can obtain from the text (information, a solution to a problem, or an action to be carried out). This type of reading is what she termed as "efferent" from the laten which means "to carry away". What ultimately alters the reader to which stance to assume, are certain stylistic or formal devices in the text. Therefore, a major difference between efferent and aesthetic reading is the degree to which the text allows for bringing into play personal associations.

According to Rosenblatt (1980), the reader of a scientific reading (efferent) must adopt the stance that will lead him to reject any personal associations activated by symbols. On the other hand, the reader of a story or a poem (aesthetic) focuses his/her attention on what is created in his/her mind based on what is read. So, depending on the stance that the reader chooses to take, will determine the meaning that he/she takes away from the text. For Rosenblatt (1980), the transaction with texts that allow the reader to draw on his/her own experiences will give rise to new experiences to be formed.

Based on the transactional theory of reader response (Rosenblatt, 1982), students bring to the reading classroom different personalities, different syntactic and semantic habits, different values and knowledge, different cultures. Thus, the text that is appropriate for one student, will not be appropriate for another. Based on the transaction view, attention must be given not only to the words of the text, but also to

what those words stimulate within each reader. "understanding the transactional nature of reading would correct the tendency of adults to look only at the text and the author's presumed intention, and to ignore as irrelevant what the child actually does make of it" (Rosenblatt,1982, p. 272).

2.2 Literature Review

This section of the study aims at reviewing and summarizing the related research on strategic reading. First it presents the five dimensions that were the main concern of several researchers in the domain of reading strategies. Then, it presents a detailed review of reading strategies studies that revolve around the following dimensions:

1) Identifying the reading strategies that the EFL learners use while reading.

2) Differences in reading-strategy use among learners of different language proficiency levels.

3) The effect of using metacognitive and other reading strategies on reading performance.

4) The effect of strategic reading instruction on reading performance.

(5) The relationship between L1 reading and L2 reading and their contribution to L2 reading proficiency.

2.2.1 Identifying the Reading Strategies that the EFL Learners Use While Reading

Several researchers were interested in investigating learners' metacognitive awareness through identifying and tracing the reading strategies that they use in order

to promote their comprehension (Abu Shmais, 2002; Jimenez, Garcia, Pearson, 1995; Schwartz, 1980; Carrell, 1989). Researchers and theoreticians in this field indicated that the research into learners' strategies is one of the main ways of understanding learners' conscious awareness of language learning (Carrell, 1989; Zhang, 2000; Pang, 2008; Wu, 2008; Lai, 2011).

Anderson (2003) conducted a research to investigate the online reading strategies that second language learners use, and to explore if the online reading strategies that are used by learners of English as a second language differ from those used by learners of English as a foreign language. To collect the data, he surveyed 247 participants. The first group of students was EFL readers from Costa Rica, while the rest were ESL readers at Brigham University. His results showed that the majority of the top 12 strategies used by online readers were problem solving strategies. These strategies were also the ones that differentiate the EFL and the ESL readers as the EFL readers reported using the problem solving strategies more frequently than did the ESL readers.

Anderson's findings confirm with other researchers' results (Ghysi, Safdarian & Farsani, 2011; Temur & Bahar, 2011; Monos, 2005 ; Mokhatari & Ritchard, 2002, Zhang & Wu, 2009). Their finding revealed that learners use problem solving, global and supporting strategies respectively. But, the strategy that learners used most is the problem solving strategies, while the least strategy used is supporting strategies. Results also showed that the high-proficiency students outperform the intermediate and the low-proficiency students in two categories of reading strategies: problem solving and global strategies (Zhang & Wu, 2009). As these researchers indicated, students use the problem solving strategies to solve comprehension problems that they face while reading in English. Thus, learners use techniques and procedures as re-

reading, adjusting their reading speed and paying closer attention to enhance their comprehension.

The results of the previous studies indicated that the EFL learners on the whole displayed characteristics of active strategic readers. They were aware and conscious of their cognitive process during reading and that they were able to utilize a wide range of reading strategies in order to achieve comprehension, emphasizing the idea that high proficient students were more aware and strategic than low proficient students (Sheorey & Mokhtari, 2001; Zhang, 2001; Zhang &Wu, 2009; Yang, 2006; Shang, 2011; Song, 2005; Park, 2010).

Ghysi, Safdarian & Farsani (2011) aimed to investigate metacognitive awareness of Iranian EFL learners at different universities in Tehran. In this study, a survey of reading strategies in addition to semi-structural interviews were used to collect the data. Results showed that participants were moderately aware of their reading strategies. In another study for Jimenez, Puente, Alvardo & Arrebillage (2009), students' metacognitive strategies were investigated and measured using reading awareness survey. The students came from public and private schools making a total number of 684 participants from ages 8-13 (375 Spaniards and 309 Argentines). The researchers stressed the importance of age as another variable other than the proficiency level that could affect students' awareness and their strategic competence. The researchers maintained that younger students have a lower level of reading awareness than older students.

In the Palestinian context, some studies were conducted at different Palestinian universities to report on investigations of reading strategy awareness and use. Kalil (2005) used a questionnaire to assess the language strategies used by high

school and university English learners. He also aimed to reveal the effect of language proficiency and gender on frequency of strategy use. His results showed that proficiency level and gender had a main effect on overall strategy use. But, their effect on the use of each of the six categories of strategies that he used in the questionnaire was variable.

But these findings do not support Abu Shmais' (2004) results. Although she emphasized and researched the same issues, her findings revealed that gender and proficiency had no significant differences on the use of strategies. Furthermore, findings obtained from the survey revealed that An-Najah majors used learning strategies with high to medium frequencies.

In a previous case study for Abu Shmais (2002), results do not go along with those of the preceding one. She investigated the metacognitive reading strategies of An-Najah University students who are majoring in English by employing both quantitative and qualitative methods. Results indicated that although the two students who participated in the study were aware of their need to be aware of their thinking process and strove hard to control and monitor this process, their use of strategies was haphazard and limited. The data obtained from the two instruments, the think aloud protocols and the survey, revealed that strategies that they used frequently were repetition, paraphrasing, translation and self questioning.

Abu Shmais (2002) added that these strategies as previous theoreticians argued are local strategies dealing mostly with comprehension of words and sentences at the linguistics level, instead of concentrating on the contextual information and text analysis. Furthermore, these are superficial strategies that less proficient students use while reading to overcome comprehension deficits. Learners' failure to focus on and

understand the textual relations and language implications revealed that these learners are not trained in using reading strategies.

Another study that was conducted in the Palestinian context is Yousef (1998). The researcher compared the use of reading strategies among students of different academic orientation in Palestine. Through employing both quantitative and qualitative methods, the data was collected from subjects of different governmental Palestinian high schools. Results showed that science-oriented students were more competent than literary-oriented ones in their strategy use. They appeared to use a larger number of processing strategies. Furthermore, they were more systematic in monitoring their reading behavior and tended to integrate new information more consistently and frequently than literary-oriented students do. These results could defend the assumption that science-oriented students are most of the times more proficient learners than literary-oriented students.

2.2.2 Differences in Reading-Strategy Use among Learners of Different Language Proficiency Levels

A body of research on reading strategy-use revealed that although language learners of different proficiency levels may use the same kind of strategies, more proficient readers tend to use a large number of different strategies, in addition to their ability to be more proficient and appropriate in organizing and manipulating these strategies (Sheorey & Mokhtari, 2001; Zhang, 2001; Zhang & Wu, 2009; Paris & Myers, 1981; Songyut, 2011; Wharton, 2000; Phakiti, 2003; Modhumathi & Ghosh, 2012). Anderson (2005) indicated that students' knowledge of how to use a strategy effectively and not the use of specific strategy, could lead to more successful reading comprehension.

Hessler & De Jong (1990) aimed at finding differences in the study process between students who are good problem solvers and students who are not. The subjects were the first-year physics who are taking a course in electricity and magnetism. Twenty-one subjects from Einbhoven University of Technology participated in the study and reported regular intervals on their study processes. Five protocols of each proficiency groups were analyzed. Findings indicated that both groups studied in an equally active way and that good and poor performers did not differ in the number of study processes scored. But, they differ in the type of study processes scored. They demonstrate that good readers applied more deep processing and less superficial processing than poor readers. They found that poor performers pay attention to declarative knowledge, whereas good performers appear to pay attention to procedural and situational knowledge.

Yang (2002) focused on reassessing both proficient and less proficient readers' comprehension monitoring. To this end, he used think aloud protocols that he employed with six subjects chosen from the freshmen English classes at national Yunlin University of Science and Technology. The participants were selected randomly from each reading ability group, proficient and less proficient. Findings maintained that in addition to their ability to apply and orchestrate a higher number of different reading strategies effectively, proficient readers employ higher levels of comprehension monitoring. They display more competency in monitoring their ongoing thinking process in order to compensate for words that had not been previously decoded.

Phakiti (2003) is another researcher who was also interested in investigating learners' differences in reading strategy use. He compared the differences in the strategy use and reading performance among highly successful, moderately successful

and unsuccessful learners groups who enrolled in a fundamental English course at Thai university. Findings of the study revealed significant differences among these students. According to his results, there was strong evidence that the highly successful learners reported significantly higher use of metacognitive strategies than the moderately successful ones, who in turn reported higher use of these strategies than the unsuccessful ones. Furthermore, qualitative data results revealed that the successful learners approached the test tasks more strategically than the less successful ones.

Shang's (2011) results are similar to those of Phakiti. He investigated the relationship and differences of four reading strategy uses (cognitive, metacognitive, compensatory, and testing strategies) between Taiwanese EFL readers with different proficiency levels on reading performance. One hundred and eight sophomores majoring in English completed the reading comprehension test and the reading strategies' questionnaire. Results indicated that students frequently applied various reading strategies while reading. Moreover, results showed that high proficiency students used more testing strategies than low proficiency ones. This in turn suggests that learners with a higher reading ability frequently use more reading strategies than do students with a poorer reading ability. Good readers seem to have distinguished themselves from poor readers in their reported frequency of having the strategic knowledge.

In the last three decades, most studies that investigated the differences between good and poor readers in their strategy use while reading were conducted on younger learners at schools, and were interested in revealing these differences to provide educators with knowledge and insights that might contribute to better

understanding of language learning and acquisition (Paris & Myers, 1981; Ehrlich, Costes, Loridant, 1993; Cain, 1999; Fehrenbach, 1991).

One of these studies that were conducted regarding good and poor readers was Paris & Myers (1981). They aimed to compare the comprehension and memory skill of thirty-two fourth graders from rural Indiana schools. Subjects were chosen from both groups of good and poor readers. To accomplish this objective, spontaneous self-correction during oral reading, directed underlining of incomprehensible words and phrases, and study behavior were utilized.

Their results revealed that poor readers engage in significantly less monitoring which in turn correlates with poorer comprehension. These results indicated that poorer readers are often not aware of the negative influence of some strategies. Results also revealed that poorer readers may adopt decoding instead of meaning comprehension goals while reading and that when applying monitoring skills to resolve comprehension failure, poorer readers tend to be less accurate.

Ehrlich, Costes & Loridant (1993) examined the individual differences among seventh grade children in their reading comprehension ability. A metacognitive knowledge questionnaire was used to survey two hundred and twenty students from a junior high school in the Paris suburbs. The participants filled it after completing a reading comprehension test that was used to classify the participants into good and poor readers. When both groups were compared, it appeared that good readers scored higher on the word recognition measure, processed richer metacognitive knowledge, and had more positive beliefs about their academic abilities.

Ferhrenbach (1991) reached similar conclusions. His study main objective was to compare the reading processing strategies of gifted readers with those of

average readers. Think aloud protocols were used as a measuring instrument of 30 males and 30 females thinking processing while reading. Fourteen middle and secondary schools from nine towns in a Midwestern state were involved in the study. Results showed that the strategies that the gifted readers used were mainly rereading, inferring, analyzing structure, watching or predicting, evaluating, and relating to context. While strategies used significantly more by average readers than by gifted readers were word pronouncing concern and summarizing inaccurately. According to these data, gifted students differ from average students in their cognitive and metacognitive processes.

Cain (1999) was interested in investigating whether there is a direct relation between young learners' reading comprehension, their knowledge about the goals and processes of reading, and their skill in applying this knowledge. Interviews with 7-8 year-old students revealed that there are differences between less skilled and skilled readers from the same age in their knowledge about reading and reading strategies. Less skilled readers appeared to be poorer than the others at adapting their reading style which might have enabled them to achieve different goals. These findings suggest that there are direct relations between comprehension skill and both knowledge about reading and reading strategies.

In another study in the same domain, Schoot, Vasbinder, Horsley & Ernest (2008) examined whether 10-12 year old children use two strategies (distinguishing between important and unimportant words, and resolving anaphoric references) to enhance and aid their comprehension. To examine their use of these strategies, recording of eye fixation on specific target words was used. Findings suggest that more successful comprehenders build more effective mental model of the text than less successful comprehenders. First, they pay and allocate more attention to the

incorporation of information that is relevant to achieve their specific goals than irrelevant information into the model. Second, they ensure that the text model is coherent and tightly connected.

The findings that the researcher summarized in this section through reviewing different studies from different areas are close to those of Pang (2008) who tried to synthesize the finding of reading research on good and poor readers' characteristics in the past 20 years along three dimensions: language knowledge and processing ability, cognitive ability, and metacognitive strategic competence.

Major findings indicated that lower-level processes like word recognition, and higher-level syntactic and semantic processes contributed significantly to the distinction between skilled and less skilled ESL readers. Poor L2 readers appear to be slower in word recognition and weak at rapid and automatic syntactic processing. Furthermore, poor readers are particularly weak in processing more complex ambiguous and vague sentences. On the contrary, good readers appeared to guess less because they expose themselves to many words in meaningful context considering the fact that they usually read more. In addition, good readers generally perform much better than poor readers in processing more complex ambiguous sentences.

According to Pang (2008) conclusions, there are four characteristics that differentiated between good and poor readers. They are (a) integration (b) recognition of aspects of text structure (c) use of general knowledge, personal experiences and associations (d) response in extensive versus reflexive modes. Moreover, a reasonable factor in comprehension that could enhance and aid reading comprehension in good readers is the use of prior knowledge.

Concerning the research on metacognitive strategic competence, Pang (2008) also found that the readers' general EFL proficiency correlated with their reading comprehension ability, and their metacognitive knowledge correlated with their reading comprehension ability, thus indicating a positive relationship between metacognitive knowledge and reading comprehension proficiency.

He demonstrated that the metacognitive strategic competence components include the good knowledge of cognition, competence in monitoring comprehension process and competence in evaluating and regulating strategy use to achieve maximum comprehension. His data also revealed that good readers displayed more monitoring ability than poor readers during their on-going reading process. It was apparent that good readers tend to monitor their reading process all the time so as to compensate for words that had not been previously decoded. They also appeared to be more sensitive to inconsistencies in the text than poor readers and responded to them appropriately.

2.2.3 The Effect of Using Metacognitive and Other Reading Strategies on Reading Performance

Several empirical and descriptive studies have indicated the positive relationship between the use of metacognitive and other reading strategies and reading achievement among both elementary and secondary school students (Baker & Brown, 1984; Wang, 2011; Crowe, 2003; Meneghetti, Carretti, De Beni, 2006; Hsieh, 2006) and college learners (Naseri & Zaferanie, 2012; phakiti, 2006 b, 2003; Yang, 2006; Pang, 2008).

Purpura (1998, 1999) used equation modeling (SEM) to examine the relationship between strategy use and second language test performance with high and

low-ability test takers. Questionnaires of reading strategies (cognitive and

metacognitive strategies) and a language test were used to collect the data. Findings

revealed that cognitive processing was a multidimensional construct which consists of

a set of comprehension, memory, and retrieval strategies, while metacognitive

strategy use appeared to be a one-dimensional construct consisting of a single set of

an evaluating process (e.g., good-setting, planning, monitoring, self-evaluating, and

self-lesting). Purpura (1999) demonstrated that metacognitive processing had

significant, direct and positive effects on all three components of cognitive processing

which in turn directly affect language performance.

In another two studies that focused on test takers' performance, Phakiti (2003,

2006 b) investigated the relationship of test takers use of cognitive and metacogntive

strategies to EFL reading performance. In the first study (2003), he employed both

quantitative and qualitative methods as he used a reading comprehension test, a

questionnaire and interviews.   384 subjects who were enrolled in a fundamental

English course at Thai university completed the questionnaire on how they thought

while completing the test. Then eight students were selected and interviewed.

Results showed that the use of cognitive and metacognitive strategies had a positive

relationship to the reading test performance. Moreover, findings revealed that highly

successful students reported significantly higher metacognitive strategy use than

moderately successful students which indicated the strong impact of these strategies

on performance.

In the second study which was carried out at a governmental university in

Thailand, 358 students took a reading comprehension test and answered a

questionnaire on their strategy use immediately after completing it. The study's main

aim was to examine the nature of cognitive and metacognitive strategies and their

direct and indirect relationships to EFL reading test performance. Collected data revealed that memory and retrieval strategies facilitated EFL reading test performance through comprehending strategies, and that monitoring strategies played an executive role on memory strategies, whereas evaluating strategies regulated retrieval strategies. In addition, results showed that planning strategies did not directly regulate memory, retrieval or comprehending strategies. Instead, these are regulated by monitoring, and evaluating strategies. It appeared to be that only comprehending strategies directly affect EFL reading test performance.

Other studies that revealed and demonstrated a positive relationship between strategy use and reading achievement are Ling's (2011), Saeedeh's (2013) and Song's (2005). In Ling's study, the use of reading strategies among Chinese sophomore English majors was studied. The study also aimed to examine the relationship between the use of reading strategies and students' reading comprehension. Two questionnaires in addition to a reading comprehension test were used to collect the data from 54 participants. Findings revealed that both metacognitive and cognitive reading strategies significantly correlated with reading achievements and that both of these strategies played an important role in reading comprehension.

Saeedeh (2013) investigated the relationship that might exist between Iranian EFL learners' reading strategy use and their reading achievement. To collect the data, a questionnaire and a standardized reading test were used. The results indicated a positive correlation. Findings revealed that overall reading strategy use was found to be a predictor of learners' scores. The research results indicated a statistically significant and positive relationship between learners' overall, global and problem solving reading strategy use and their reading performance. But, no statistically

significant relationship was found between students' support reading strategy and their scores.

In Song's research (2005) which was conducted in North America, a total of 179 participants whose age range from 16-52 took a reading test and answered a questionnaire on strategy use. The study investigated the relationship between test takers' reported strategy use and language test performance of English as a second language.

Findings of Song (2005) are close to the previous two studies. She found a positive effect on all her proficiency variables (writing, listening, reading, and composition) for a strategy called "linking with prior knowledge". This strategy was used by learners who relate and connect what they learn with what they know. But learners who tend to repeat words and sentences, and write summaries of the new texts that they read or hear, were found less successful in achieving their goals. This strategy "repeating /confirming information" was found to be affecting each proficiency variable negatively. Ilustro (2011) also found that these strategies which are categorized as supportive strategies proved to correlate negatively with students' reading achievement.

In other studies such as Shang's (2011), results revealed weak and positive correlation between cognitive and reading performance. He utilized a qualitative interviews' technique, a reading comprehension test, and quantitative research methods including a paired-sample t-test and Pearson product-Moment Correlation to examine and estimate the relationship between reading strategy use and perceived self-efficacy on Taiwanese EFL students' use of the reading strategies. In contrast

with other studies, the usage of metacognitive and compensatory reading strategies was found to have no significant impact on the reading outcome in this research.

In Park's (2010) study, results demonstrated a positive relationship between reading strategy use and reading achievement. Learners' reading comprehension ability was related to some degree to their strategy use. The more they tend to use sophisticated reading strategies, the higher their reading comprehension ability will be. But, in Yang's (2006) study, although the findings coincide with those above, he limited the benefits and the positive effect of these strategies with the way that the learners apply them. He maintained that the utilization of these strategies (i.e. Cognitive and metacognitive) functions positively only when the readers use them under specific occasions while reading new texts.

Although the above studies agreed on the fact that the use of some reading strategies might lead to reading success, some other studies' findings showed no significant relationship between learners' comprehension level and their use of reading strategies (Alsamadani , 2009; Shang, 2010; Brantmeier, 2002). Alsamadani's results indicated no significant or positive correlation between reading strategy's adoption and reading performance. He argued that other factors were perceived by Saudi EFL learners as having much effective contribution to their final reading comprehension such as prior Knowledge (Appropriate schemata), enthusiasm for reading, time on task, purpose for reading, and vocabulary.

In Shang's (2010) study, findings also revealed that there is no significant relationship observed between reading strategy use and reading score. In addition, other studies demonstrated how some reading strategies were found to be effective and correlate with reading success, while others were not, leaving no impact on

reading achievement. For example, Zare-ee (2007) found that metacognitive reading strategies correlated with reading score, while there was no significant correlation between cognitive reading strategies and reading achievement. This contradiction in results might reflect the need for more research in this domain to determine, justify or/and clarify the cause of this weak or negative effect of the use of some reading strategy on reading comprehension.

2.2.4 The Effect of Strategic Reading Instruction on Reading Performance

A vast body of research in second language reading and metacognition has focused on examining expected or possible effect of reading strategy training on reading performance. An important point that is of major interest of such studies is that for students to become effective readers and improve their comprehension, they must learn to apply a variety of reading strategies (Jensen, 2010; Abu Shmais, 2002; Wittrock, 1985; Shih, 1992). Rubin, Chamot, Harris & Anderson (2008) argued that the main purpose of instruction is to raise learners' awareness of strategies allowing them to select and use the appropriate strategies that could lead to the achievement of their learning goals.

Most of the recent studies focused on investigating the impact of strategic instruction on high school or college students (Songyut, 2011; Lim, 2009; Zhang, 2008; Bimmel, Bergh & Oostdam, 2001), while most of the previous studies in the last three decades focused on school's young students (pearson & Dole, 1987; Dole, Brown & Trathen, 1996).

The reason behind this interest could be the realization of the importance of reading strategies to the success of EFL learners in their academic learning that the educators considered thoroughly. Another fact that could be convincible in

explaining the reason that lies behind this emphasis is age which proved to be a determinant fact of the effectiveness of the use of and instruction in reading strategies. Zhang (2003) is one of the researchers who commented on this issue. He argued that researchers are, in most cases, from universities and colleges which allow them an access to a big pool of subjects in one university or college which in turn facilitates data collection.

Carrell (1989) is one of the theoreticians who conducted research on schema theory and second language reading, and who has later become interested in metacognition and reading strategies. Carrell, Pharis & Liberto (1989) conducted a study on metacognitive strategy training for reading in ESL. The main focus of the study was to examine if the metacognitive strategy training enhances L2 reading, and if any type of strategy training facilitates L2 reading better than another. 26 ESL students at Southern Illinois University participated in the experimental study.

Strategy training was provided to the experimental group, while the two control groups received no training in the metacognitive strategies' use. Results revealed the effectiveness and importance of metacognitive strategy training in enhancing second language reading, and that the effectiveness of one type of training versus another may depend on the way reading is measured. Furthermore, their results indicated a close correlation between the effectiveness of the training with students' learning styles.

Zhang (2008) also reported great success in helping students to become high-ability readers. Zhang worked within Flavells' framework of metacognition and Veygotskyan thinking of constructivism. He integrated clusters of reading strategies in the reading curriculum and conducted the reading instruction for 2 months. The

design of the study was quasi-experimental which involved a control group and an experimental group recruited from ESL students from the People's Republic of China.

Another study that examined the effectiveness of metacognitive strategy training is Cubukcu (2008). This study provides further evidence for the benefits of metacognitive strategy training. 130 third year Students from the English language department in Dokuz Eylul University have been taught metacognitive strategies for reading in a five-week program. The study utilized intact group, pretest-posttest, experimental design. Findings demonstrated that reading comprehension could be developed through systematic instruction in metacognitive language learning strategies and that the experimental group attained significantly better than the control group.

In addition to the positive effect of helping students to become efficient readers, metacognitive strategic instruction proved to be effective in harnessing and enhancing students' metacognitive awareness and helping them to become more aware of their reading process. For example, in Yphantides (2010) study, collected data provided a wealth of information that demonstrate how students had developed through the semester and became more competent in using these strategies.

In this study, 40 freshmen students from two reading classes participated in the project. A pre-course questionnaire was used to measure students' general attitudes and feelings towards reading in Japanese and English. Students' use of strategies and their reading skill were also propped through using specific questions in the questionnaire. Furthermore, students were explicitly taught eight reading strategies one strategy per week. At mid semester, students were given an assignment to do. They were required to read a text and choose three strategies to employ while

reading, to justify their choices, then to report on how their choices affected their reading. At the end of the semester, students were required to fill the same questionnaire so that a comparison can be made between the two versions.

In O'Neill's (1992) study about training students in metacognitive strategies, he maintained that the impact of this training may differ depending upon the initial reading skill level of the students. In this study, the results of students of the higher level indicated no significant relationship, which contradicts with the findings of a previous study for O'Neill. He tried to justify the insignificant relationship between the metaognitive processing measures and the comprehension measures by explaining how might students who made the strongest effort to master the use of strategies were somewhat distracted from the task of comprehension which in turn affected negatively their performance. Lim (2009) stressed the issue of student's reading skill level. He maintained that strategy-based intervention improved the EFL high school students' reading comprehension, and that reading proficiency level might determine the benefits of reading strategy training.

In other studies, researchers investigated the benefits of cognitive strategic instruction. Pardon (1992) examined the extent to which two instructional approaches (i.e., Question-Answer Relationships and Reciprocal) can improve students' use of cognitive reading strategies. Two teaching methods were used to enhance the use of cognitive reading strategies among 89 Hispanic bilingual students for grades 3 through five. Findings showed that bilingual students can benefit from instruction in cognitive strategy use. Furthermore, results indicated that students' participation in the instructional groups helped them in decreasing the use of weak strategies that might hinder their achievement of their reading goals.

Ehrman & Oxford (1990) emphasized the potential for reading strategy training based on learning styles. Moreover, they demonstrated that it is clearly possible for students to stretch themselves beyond the strategies that are normally related to their learning styles, and that explicit instruction in strategies can help them to do so. Dole, Brown & Trathen (1996) test the idea that a more interactive teaching strategy may help students perform better in an independent learning situation. The participants were 67 fifth and sixth grade at-risk readers from an elementary school in a large western city in the United States. They received strategy training and made superior gains in comprehension achievement over their peers who were taught by receiving story content or traditional basal instruction. In addition, at-risk students appeared to benefit from direct explanation, coaching, and scaffolding and from tasks that help them to become active learners.

In addition to these benefits, Macaro & Erler (2008) demonstrate how strategy instruction brought about changes in strategy use, and also improved attitudes towards reading. This intervention study was conducted among young-beginner learners of French as a foreign language in England. 62 students, whose age ranges from 11-12 year old, participated in a program of reading strategy instruction which lasted for 14 months. The effect of strategic instruction on French reading comprehension, reading strategy use, and attitudes towards French was measured before and after the intervention. Findings indicated that strategic instruction can improve effective strategy use, attitudes towards reading and in turn enhance reading comprehension.

Songyut (2011) was also interested in examining the efficacy of strategies-based instruction on reading proficiency and reading strategy use, but in this study, the effect was investigated in both L1 and L2 reading performance. Using quasi-

experimental design, 164 Thai tertiary students were involved in the study. They were students of scientific and technological domains at king Mongkut's University of Technology North Bangkok, Thailand. Mixed research approaches employing both quantitative and qualitative procedures were also adopted. Findings indicated higher gains in English and Thai reading abilities. Findings also revealed a significant correlation between strategy use and English reading proficiency as well as between English and Thai reading proficiency.

These findings summarized above are consistent with Pearson & Dole's (1988) research that show and demonstrate the benefits of explicit instruction. They aimed to synthesize recent research about comprehension instruction and to present a conceptualization of explicit comprehension instruction based on that research. To this end, Pearson & Dole's paper summarized the main results about explicit comprehension instruction relying on the most important studies of the last six years (i.e., from 1982 to 1988).

A series of studies on explicit training in inference were reviewed. All these studies shared the common feature that students can benefit from explicit comprehension when compared to what is found in a typical basal program. In another series of studies that used another successful instructional technique called reciprocal teaching, results demonstrated that small groups of poor readers improved in their independent comprehension test scores from below 40% correct to over 75% correct. This level of success was maintained 8 weeks after the intervention had stopped.

This group of studies provided compelling evidence that comprehension can be taught, or to be more precise, can be enhanced and improved. The findings also

suggest that what may be missing from the current paradigm is teacher modeling of specific strategies, teacher guidance that helps students to learn those strategies over a period of time, and that student should practice transferring the strategies to new learning situations.

Overall, the findings of these studies emphasize and support the effectiveness of explicit instruction in strategy use. Furthermore, these collected data provide strong evidence on the benefits of activating metacognitive awareness that help readers to become more aware of and in turn have more control over their cognitive processes, that is shifting from passive to active readers.

The preceding section focused on reviewing reading research that examined and traced the use of reading strategies and its contribution to reading achievement, in addition to discussing of the findings of strategic instruction and its role in reading instruction promotion. Another major strand of research in this domain was interested in examining and contrasting L1 and L2 reading, in addition to the transfer of reading skills from L1 to L2 and their relation to L2 language proficiency.

2.2.5 The Relationship between L1 reading and L2 reading and Their Contribution to L2 Reading Proficiency

Numerous studies were interested in examining the relationship between this three variables, that is, L1 (first language) reading, L2 reading and language proficiency (Alsheikh, 2011; Alsheikh & Mokhtari, 2010; Block, 1992). Carrell (1989) argued that although L1 reading and L2 reading share similarities, there are certain differences that are found to exist. She conducted her research on ESL readers where their results showed that there were differences between strategy perceptions associated with good L1 readers and those associated with good L2 readers. Results

also indicated a consistent difference between them due to L2 proficiency level. According to Carrell's (1989) data, low-proficiency readers tend to report more text-bound, local strategies than higher proficiency readers.

Numerous studies that compare strategy use in L1 and L2 reading have stressed the same issue (Horiba, 2000; Stevenson, Schoonen, De clopper, 2003, Block, 1992). They argue that FL/L2 readers use more strategies and direct their attention to lower-level linguistic processing such as decoding words and resolving their meaning, understanding sentence structure, rather than directing their attention to higher-level processing of text comprehension, such as drawing inferences or using world knowledge to construct a model of global text content.

In Feng's & Mokhtari's (1998) study, the reading strategies that are used by American university Chinese readers of advanced English proficiency levels were compared. They were asked to read easy and difficult Chinese and English texts. Results indicated the use of the same reading strategies when reading easy texts in the two languages. But, their use of reading strategies was different when they were given difficult texts in both English and Chinese. Findings showed that more strategies were used in English than in Chinese, and that more strategies were used for difficult than for easy passages in English.

Pritchard's (1990) results challenged those of Feng & Mokhtari (1998). He argued that bilingual Latino high school students used the same reading strategies when reading in different languages. Similarly, Block (1992) indicated that proficient L2 readers performed similarly to proficient L1 readers, and that less proficient L2 readers performed similarly to less proficient L2 readers. Relying on the data obtained from think aloud protocols of 25 college freshmen, He maintained that the

readers' control of various stages of the reading process depend mainly on their reading ability rather than on whether they were a first or second readers of English.

Another issue in this domain of strategic reading research that has received the attention of several researchers and educators was the transfer of metacognitive and other reading skills from L1 to L2 learning, and the contribution of L1 reading ability to L2 reading comprehension (Brisbis, 1995; Bernhardt & Kamil, 1995; Morrison, 2004; Seng & Hashim, 2006; Upton, 1997). The first study that made a valuable contribution to this field was Carrell's (1991) which examined English L1 speakers studying Spanish, and Spanish L1 speakers studying English. The results showed that the contribution of both L1 reading ability and L2 language proficiency was significant.

Another study that coincided with Carrell's is Yamashita (2002). Subjects investigated in this study were 241 Japanese university students learning English as a foreign language. He employed quantitative approach to estimate a compensation model between the two languages. His results provided positive answers through demonstrating the mutual compensation between L1 reading ability and L2 proficiency, which functions to attain the highest possible level of L2 reading comprehension for readers with different ability in L1 reading and l2 proficiency.

Han & Stevenson (2008) reached similar results. They utilized both quantitative and qualitative approaches to collect the data from 126 students in the vocational department of a foreign languages university in China. They indicated that FL comprehension monitoring made a small and unique contribution to FL reading proficiency. But L1 reading proficiency made a much larger contribution. Upton (1997) also attempted to address and determine the role that L1 and L2 play in the

reading strategies of L2 readers, and how their role vary at different proficiency level. He used qualitative think aloud protocols and retrospective interviews with eleven native speakers of Japanese who are learning English as a foreign language. Results demonstrated that subjects frequently switched to and relied on their L1 when reading an L2 text especially when they came across words that they did not encounter before. Furthermore, they resort to translating concepts into L1 to work out text and sentence meaning.

Overall, these conclusions supported previous reading research about the relationship between first language strategies and second/foreign language strategies and the vital role that the first language play in second language reading. Furthermore, there is a broad consensus that reading in a second language depends mainly on ones' employment of metacognitive reading strategies, and to some degree on the readers' proficiency in that language. To be more precise and as other educators indicated that active reading requires a degree of proficiency in both languages, L1 and L2.

2.3 Summary

This chapter summarized some of the literature review concerning reading and metacognitive reading strategies. It was evident from the revision that several studies focused on identifying and tracing the good and poor reading habits and strategies so as to provide teachers and students with beneficial educational implications (Ling, 2011; Tercanlioglu, 2004; Bereiter & Bird, 1985). Another major point that is of major interest of other studies is that for students to become effective readers and improve their comprehension, they must learn to apply a variety of reading strategies (Jensen, 2010; Abu Shmais, 2002; Wittrock, 1985; Shih, 1992).

Another point central to numerous studies is that teaching students to use strategies often produce positive results since teaching students reading-comprehension strategies have been found to improve their achievement, attitudes, and strategic awareness more than students who were not taught strategies (Schunk, & Rice, 1992; Boraie, Kassabgy & Kassabgy, 1998; Kuean & Beck, 1997). Other studies were also interested in examining the relationship between the L1 reading and L2 reading and their contribution to L2 reading proficiency (Alsheikh, 2011; Block, 1992; Carrell , 1989). The findings and the implications of the majority of these studies illustrated the important role that L1 play in L2 reading proficiency.

The current study goes along with most of these studies and shares them their interest in examining and tracing the reading strategies used by learners and their effect on reading comprehension achievement. In addition, differentiating between those reading strategies that are used by high-proficiency readers and low- proficiency readers was another aim of this study which also was of major interest of numerous researchers.

In the Palestinian context, most of the studies reviewed were interested in tracing the strategies that students use while reading through employing a questionnaire (Kalil, 2005; Abu Shmais, 2003, Abed Hajouj, 2011). Other studies used a mixed approach that is incorporating both quantitative and qualitative methods to collect more accurate data about students' use of reading strategies (Yousef, 1998; Abu Shmais, 2002).

Chapter Three

Methodology

This chapter aims to present and describe the design and methodology of the study.   It also seeks to justify the selected methods that will be employed in the research project.

3.1 Research Design

The present study used the quantitative and qualitative approaches, since both of them are considered to be the most suitable approaches to investigate the reading strategies that Berzeit students use when approaching either reading comprehension exams or tasks. The study consisted of two phases. In the first phase, students sat for a reading comprehension exam that consists of two passages. Later and in the same session, they filled the questionnaire on metacognitive strategy-use.

In the second phase of this study, retrospective interviews (i.e. retrospective think aloud protocols) were conducted. In this section of the study, 10 students were interviewed to investigate what reading and metacognitive strategies they use while reading English texts. This sample of subjects consisted of five high proficient and five low proficient students which allowed the researcher to compare the reading strategies that are used by both groups of these students. These two methods complemented each other to provide the clear picture about the intended situation in the Palestinian context.

3.2 The Population of the Study

The population of this study is 819 students from Birzeit University. These students were enrolled in 141 English course and divided into 27 sections. In

addition, 141 is a prerequisite course were students enrolled in after applying to an

English level test upon joining the university. This course focuses mainly on reading

skill and aims at fostering and enhancing students' reading comprehension skills.

Furthermore, it aims at helping students acquire good reading habits and raise their

awareness of the importance of the use of different reading strategies.

3.3 The Study Sample

In order to examine the study questions, the researcher recruited a convenient

sample of college students in order to investigate their use of metacognitive reading

strategies, which in turn enabled her to deduce their awareness and knowledge of

these strategies. The sample of this study consisted of (20%) of the population, that is

180 students were chosen randomly to participate in the study. In order to insure

getting a sufficient number of participants, 6 groups with nearly 30 students in each

were chosen randomly to be the sample of this study.

180 copies of the exam and the questionnaire were distributed to the students,

but only 151 students answered the exam and responded to the questionnaire. This is

because 29 students from all the groups were absent. The following table (1) presents

the basic background information on the participants.

Table No. (1): The Distribution of the Sample

		Frequency	Valid Percent
Valid	Male	51	33.8
	Female	100	66.2
	Total	151	100.0

3.4 Instruments of the Study

Three instruments were used in this study to elicit more accurate results, these are:

1) A reading comprehension exam which was used in Alsamadani's study (2009) (appendix A). This exam is chosen from TOEFL test which is a standardized one that is built for ESL/EFL students who intend to study in the United States and Canada. This test and TOEFL tests in general, possess high reliability and validity. Thus, the score of the test can reflect the students' English proficiency. It consists of two reading passages that are followed by seven multiple-choice questions on each which intend to assess students' reading comprehension. The maximum point for the test is 14 points while the minimum score is zero.

2) The second major instrument is Mokhtari and Sheorey (2002) Survey of Reading Strategies (SORS) which the researcher arrived at in the light of literature review (appendix B). This questionnaire has thirty items and is based on Likert's scale ranging from 5 (always), 4 (usually), 3 (sometimes), 2 (occasionally), and 1(never). It is mainly used in the context of silent reading. This instrument showed good reliability and validity as the researchers who developed it found it reliable and valid after the implementation (internal reliability .89). According to the authors of the questionnaire, the (SORS) is intended to measure the type and frequency of reading strategies that adolescents and adults who are learning English as a foreign language perceive they use while reading academic materials in English. Participants are required to read each statement and tick the choice that applies to them.

The questionnaire is divided into three primary categories, namely problem solving (8) items, global strategies (13) items, and supportive strategies (9) items. Problem Solving Strategies are the actions and procedures that readers use while

working directly with the text. The questionnaire items that measured problem solving were 7, 9, 11, 14, 16, 19, 25, and 28. And items that measured global strategies were 1, 3, 4, 6, 8, 12, 15, 17, 20, 21, 23, 24, and 27. In addition, the items that measured supportive strategies were 2, 5, 10, 13, 18, 22, 26, 29, and 30. See table (2).

Table No. (2): Taxonomy of the Metacognitive Strategies in the Questionnaire

Subcategories	Number of items	Items in the questionnaire
Problem solving strategies	8	7, 9, 11, 14, 16, 19, 25, 28
Global strategies	13	1, 3, 4, 6, 8, 12, 15,17, 20, 21, 23, 24, 27
Supportive strategies	9	2, 5, 10, 13, 18, 22, 26, 29, 30

The problem solving strategies are localized, focused techniques that are used by the reader when problems develop while understanding textual information. For example, adjusting one's speed of reading when the material becomes difficult or easy and rereading the text. Global strategies are those intentional, carefully planned techniques that readers use to monitor or manage their reading, such as using context clues to better understand what is being read. Finally, Supportive Strategies are basic support mechanisms that are intended to aid the reader in understanding the text such as using translating into the mother tongue or using the dictionary. The questionnaire was adapted to the specific context of the study by adding a biographical background section where students filled the needed information such as their student number and gender.

3) Finally, to ascertain participants' perception of reading habits and strategies, a retrospective think aloud protocols was carried out after giving a reading comprehension task for each student. Therefore, the researcher interviewed a number of the participants (10 students) with direct questions to identify the reading strategies that they usually use while reading English texts either when having a reading comprehension test or task (appendix D). These questions were based mainly on the questionnaire's elements so that more accurate data can be collected. Furthermore, some questions were adapted from Zhang's study (2001). These questions were designed to examine subjects' metacognitive knowledge of reading strategies.

In addition, the researcher tried to prompt the interviewees to clarify the actions that they might take while reading to aid or assist their comprehension and how they adjust their reading strategies according to each situation to repair their comprehension failure or weakness.

3.5 Operational Definitions of Variables

3.5.1 Independent Variables: This study has only one independent variable which is the use of metacognitive reading strategies. This variable consists of other three subscale variables: Problem solving strategies, global strategies, and supportive strategies. These variables were measured by using a five-point likert scale ranging from 5 (always), 4 (usually), 3 (sometimes), 2 (occasionally), and 1(never). The whole questionnaire consisted of 30 items.

3.5.2 Dependant Variable: The dependant variable of this study was students' reading comprehension ability in English as a foreign language. In order to measure this variable, a TOEFL reading comprehension test was used.

3.6.1 Validity of the Study Tools

In order to maintain a good level of validity of this study, many procedures were followed. First, the external validity resulted from the fact that the questionnaire was judged by five specialists such as university instructors who were given the questionnaire to examine the clarity and comprehensibility of items. Some changes regarding the wording of items were made. For example, the item number 21 "I critically analyze and evaluate the information presented in the text" is a compound one that includes two verbs "analyze" and "evaluate". Therefore, the verb evaluate was deleted as the word critically include evaluation. Other ambiguous words that could cause comprehension difficulties or could not be understood by participants were identified by the specialists to be modified or clarified. But as the researcher translated the questionnaire into Arabic to be delivered to the participant in addition to the English version, the specialists agreed that there was no need to make any changes on the questionnaire's vocabulary.

Second, the Arabic version of the questionnaire was reviewed by two specialists. Two university faculty members who had a PhD in education and TEFL respectively, and who are highly proficient in both English and Arabic were invited to review the translated Arabic version for clarity, readability, and appropriacy. All the tips that were given by referees were taken into consideration by the researcher.

Regarding the reading comprehension validity, two points were taken into consideration. First, its validity originated from the fact that it is a standardized reading comprehension test that was adopted and chosen from authentic sources. Second, another procedure that was done to prove the test validity was judging it by four college professors who were invited to examine and evaluate its appropriacy for

students' level and its ability to measure students' comprehension level. They found it quite good and satisfactory, and capable of assessing students' reading comprehension performance. Thus, the score of the test can well reflect their reading proficiency.

3.6.2 Reliability of the study Tools

Piloting the instruments can be considered an integral part of the study design and as another guarantee of reliability of the study. The pilot study was carried out two weeks prior to the actual one. The two instruments were distributed to a whole group of 29 students as two students were absent. The participants received direct and clear instructions of how to respond to the two instruments. They were also asked to give their own comments on any unclear or ambiguous items. Twenty-nine copies of the instruments were returned. There were no serious problems detected while conducting the pilot study. Only one mistake was found about a line number in one of the texts where students need to refer to determine a reference word, and which was corrected later. After completing the pilot study, the reliability of the instruments was also tested.

The reliability of this questionnaire was quite satisfactory (0.74 Cronbach's Alpha). The reliability of the subscales also was computed, but it was quite low when compared to those of the authors. Although these results might not match the authors' ones, this can be justified by the fact that the number of the participants who responded to the questionnaire in the pilot phase, only 29 subjects, is somehow small which could affect its reliability negatively. Moreover, taking into consideration the small number of the items within each category which could affect its reliability, the Cronbach's Alpha obtained can be considered good, see table (3). Thus, the

reliability of the instrument was computed after conducting the actual study and collecting the data where the overall reliability was (.817) which is considered a good level of reliability.

Table No. (3): Cronbach Alpha formula for the questionnaire subcategories

Subcategories	Cronbach's Alpha of the Pilot study	Cronbach's Alpha of the Actual study	Number of Items
Problem solving strategies	.464	.598	8
Global strategies	.601	.669	13
Supportive strategies	.384	.592	9
The overall Cronbach's Alpha	.745	.817	30

The overall reliability yield from this study approximates that of the authors who built the questionnaire. The Survey of reading Strategies (SORS) was developed and implemented by Mokhtari & Shorealy (2002) that showed satisfactory and consistent results relative to the instrument's reliability (internal reliability = .89). These results indicate a reasonable degree of consistency in measuring awareness and perceived use of reading strategies. Moreover, this scale showed high reliability and validity later in other studies such as Park's (2010) study which was (.901), and Zhang's &Wu's (2009) study where the overall reliability coefficient was (.85).

Concerning the reading comprehension test reliability, two points should be mentioned here. First, the reliability of the test stems from the fact that it is taken from authentic resources. The TOEFL test is a standardized one that usually shows high reliability. Second, to ensure the reliability, it was administered in the pilot

study. In this phase, no serious problems were found in conducting the pilot study and it showed that the research design for this study worked well. More importantly, split half coefficient was computed to examine the reliability of the test and which was also quite satisfactory (.925 spearman coefficient).

3.7 Data Collection and Study Procedures

The first step of this study was obtaining the approval of the languages and translation department head in Birzeit University to conduct the study and take their students as subjects of this research. The department head and other faculty members helped in assigning 7 groups of students who are enrolled in 141course to be the participants of the study.

Study completion and data collection were obtained through the following procedures. First, all the participants involved received a copy of both instruments of the study, the reading comprehension test and the reading strategies questionnaire. Second, directions and procedures were thoroughly explained to the subjects by the researcher. These instructions included the purpose of the test and the questionnaire, the number of items in both instruments, in addition to answering the students' questions before and during the sessions to ensure their understanding of how to respond to the instruments. The researcher clarified the purpose of the study assuring the subjects that all the information obtained from their participation would be treated confidentially and used only for research purposes.

After that, students were asked to read and answer the reading comprehension test and were given 40 minutes to do that. After completing the exam, participants were asked to respond to the questionnaire items which also took about 10 minutes. Therefore, study conduction took between 50 to 60 minutes in each session.

Furthermore, the researcher herself ensured giving explicit and clear instructions to all the subjects to guarantee successful data collection and to avoid any possible misunderstanding or comprehension difficulties that the students might encounter while responding to the questionnaire and answering the reading test.

In the second phase of the research, a qualitative method was used as a final procedure to collect the needed data through interviewing a sample of participants who agreed to be interviewed. The sample consisted of 5 high proficient and 5 low proficient students. The choice of the participants was determined according to their achievement in the reading comprehension test.

Each interview lasted for 30 minutes. In addition, every session started by giving the interviewee a reading comprehension task that consists of two paragraphs. After that, the researcher started asking specific questions that aim at learning more about the participants' awareness, and use of reading strategies. In the first question of this study which immediately followed the reading task, each participant was asked and allowed to talk freely about how he/she approaches a reading text in English. To help the interviewee be more specific, he/she was encouraged to remember how he/she behaved in the reading task that he/she already has finished.

In the other questions, participants were required to explain how they act, what procedures they take, and how they adjust their reading strategies when reading becomes difficult. Furthermore, other questions were asked about the possible procedures that the interviewees might take while reading to enhance and maximize their reading comprehension. They were also asked about their use of the mother tongue while reading, and required to explain why, how and when they refer to it. Finally, they were asked about the biggest obstacle that makes their reading difficult.

The biggest obstacle that encountered the researcher was that most of the students did not talk enough to give proper or full answers. Instead, they were satisfied with giving short answers to each question. Thus, the researcher had to stimulate them to talk more about their behavior while reading. Moreover, she had to re-ask the question in different ways to elicit the intended answer. The researcher closed each session by asking each participant to evaluate himself as a reader.

3.8 Data Analysis:

The collected data were analyzed using quantitative and qualitative approaches in order to answer the study questions. To this end, all the scores obtained from the questionnaire were converted and prepared for processing them into the computer.

For addressing the first question, scores obtained from the reading strategies questionnaire were used for answering this question and taken as indicator of subjects' strategy use awareness. Depending on the frequency scale presented in Mokhtari's & Sheorey's (2002) study and which was used as an interpretation key for general reading strategy usage, scores were categorized into three frequency levels, high, moderate and low. According to this scale, scores between 3.5 and 5.0 are considered as high in frequency, and scores between 2.5 to 3.4 are regarded as moderate. Those scores between 1.0 and 2.4 are viewed as low.

Moreover, data taken from the same questionnaire were also used to answer the second question which examines the difference between students in their strategy use according to their proficiency level. In addition, the scores obtained from the reading comprehension test were used as evidence or criteria for categorizing students into three levels (low, medium, and high) according to their reading comprehension

performance in this test. These obtained data were utilized to reveal the answer of the second and third question.

All the tests were corrected and allocated certain grades in order to analyze them through using numbers, percentages, means, and standard deviation. Using the Statistical package for social science (SPSS), the following statistical tests were used, numbers, means, standard deviations, cross tabulation, and Pearson's analysis of correlation coefficient which was used to examine the statistical correlations between the use of reading strategies and the participants' reading achievement. Finally, qualitative data obtained from the interviews were used to elaborate and learn more on participants' metacognitive reading strategies.

Chapter Four

Results

The main objective of the current study is to examine Birzeit students'
awareness of knowledge and use of metacognitive reading strategies. Another major
purpose of this study is to compare the reading strategies that are used by high
proficient and low proficient students, and in turn to draw conclusions and many other
educational implications of how might the proficiency level of the subjects affect their
use of various reading strategies and vice versa. Finally, this study aims to explore if
there is a correlation between reading strategies use and English reading
comprehension achievement. Therefore, the current study aims to answer the
following questions:

1. What type of reading strategies do Birzeit students use while reading English
   texts?
2. What metacognitive reading strategies are used by high-proficiency readers
   and low-proficiency readers?
3. Is there a correlation between the adoption of reading strategies and students'
   achievement?

4.1 The First Question

The first research question was "What type of reading strategies do the
English students use while reading?" this question seeks to identify the reading
strategies that are most widely used by Birzeit learners to aid their comprehension. In
order to answer this question, descriptive statistics were run to work out the means of
use for each strategy.

Table No. (4): Descriptive statistics of metacognitive reading strategies types

Metacognitive Reading Strategies	N	Mean	Std. Deviation
Mean Global	151	3.3776	.52505
Mean Problem solving	151	3.9123	.53693
Mean Supportive	151	3.5424	.62134
Valid N (listwise)	151		

The table (4) above shows that problem solving (M =3.9) and supportive strategies (M=3.5) fall into the high level of frequency. While global strategies (M=3.3) fall into the moderate level. This indicates that Birzeit students frequently use problem solving and supportive strategies for enhancing their comprehension when reading English texts. Thus, they show more use of problem solving strategies than supportive strategies, and their use of supportive strategies is more than global strategies.

In order to learn more about subjects' use of different subcategories of the metacognitive reading strategies, descriptive statistics was calculated for all the reading strategies types. For more clarification, these strategies were categorized in the table into three groups; these are global strategies, problem solving strategies and supportive strategies. Table (5) below shows the results.

Table No. (5): Descriptive statistics of 30 subcategories of metacognitive reading strategies

Subcategories of Metacognitive reading strategies	N	Mean	Std. Deviation
Global Strategies			
GLOB1: I have a purpose in mind when I read.	151	3.91	.975
GLOBE3: I think about what I know to help me understand what I read.	151	4.07	.939
GLOB4: I take an overview of the text to see what it is about before reading it.	151	3.46	1.264
GLOB6: I think about whether the content of the text fits my reading purpose.	151	3.21	1.170
GLOB8: I review the text first by noting its characteristics like length and organization.	151	2.75	1.323
GLOB12: When reading, I decide what to read closely and what to ignore.	151	3.38	1.199
GLOB15: I use table tables, figures, and pictures in text to increase my understanding.	151	3.11	1.244
GLOB17: I use context clues to help better understand what I am reading.	151	3.50	1.125
GLOB20: I use typographical features like bold face and italics to identify key information.	151	3.16	1.352
GLOB21: I critically analyze the information presented in the text.	151	2.83	1.197
GLOB23: I check my understanding when I come across new information.	151	3.59	.961
GLOB24: I try to guess what the content of the text is about when I read.	151	3.64	1.139
GLOB27: I check to see if my guesses about the text are right or wrong.	151	3.28	1.180
Problem Solving Strategies			
PROB7: I read slowly and carefully to make sure I understand what I am reading.	151	3.95	1.067
PROB9: I try to get back on track when I lose concentration.	151	4.19	1.011
PROB11: I adjust my reading speed according to what I am reading.	151	3.87	.975
PROB14: When text becomes difficult, I pay closer attention to what I am reading.	151	4.17	.985
PROB16: I stop from time to time and think about what I am reading.	151	3.47	1.070
PROB19: I try to picture or visualize information to help remember what I read.	151	3.67	1.231
PROB25: When text becomes difficult, I re-read it to increase my understanding.	151	4.14	.987
PROB28: When I read, I guess the meaning of unknown words or phrases.	151	3.83	1.048
Supportive Strategies			
SUP2: I take notes while reading to help me understand what I read.	151	3.09	1.246
SUP5: When text become difficult, I read aloud to help me understand what I read.	151	3.13	1.436
SUP10: I underline or circle information in the text to help me remember it.	151	4.05	1.118
SLUP13: I use reference materials (e.g., a dictionary) to help me understand what I read.	151	3.49	1.205
SUP18: I paraphrase (restate ideas in my own words) to better understand what I read.	151	3.82	1.120
SUP22: I go back and forth in the text to find relationships among ideas in it.	151	3.10	1.264
SUP26: I ask myself questions I like to have answered in the text.	151	2.99	1.278
SUP29: When reading, I translate from English into my native language.	151	3.59	1.224
SUP30: When reading, I think about information in both English and my mother tongue.	151	3.74	1.253

The means and standard deviations shown in table (5) above indicates that strategy number 9 (M=4.19) "I try to get back on track when I lose concentration" and strategy number 14 (M=4.17) "when text becomes difficult, I pay closer attention to what I'm reading", and strategy 25 (M=4.14) "when text becomes difficult, I re-read it to increase my understanding" are the most widely used by students. It is worth mentioning here that these strategies belong to the problem solving strategies and that these strategies' means fall into the high level of frequency.

On the contrary, the lowest means were for strategy number 8 (M=2.75) "I review the text first by noting its characteristics like length and organization", and strategy number 21 (M=2.83) "I critically analyze the information presented in the text" which both fall into the moderate level and belong to global strategies. This means that Birzeit learners' use of global strategies is less than supportive strategies, and in turn their use of supportive strategies is less than problem solving strategies.

According to the information presented in the table, more than half of the metacognitive strategies fall into the high level with a mean of (M=3.4) and (M=4.19), so they are always or almost always used by participants. While the rest of these strategies fall into the moderate level with a mean (2.75) and (3.49) which means that they are sometimes used by the subjects. In general, these results show that Birzeit learners employ various strategies and almost use all these strategies when reading English academic materials.

4.2 The Second Research Question

The second question of the current study was "What metacognitive reading strategies are used by high- proficiency readers and low proficiency readers?" To this

end, the participants' test papers were corrected and allocated certain marks in order to classify the students into three proficiency levels according to their achievement.

A total number of 151 students participated in the reading comprehension test and were divided on the basis of their scores into three groups. Subjects whose scores were above 11 were categorized as high-proficiency readers. Those students whose scores range between 7 and 10 were considered as readers of intermediate-proficiency. While those participants whose scores where below 6 were regarded as low-proficiency readers. Table (6) bellow illustrates students' classification according to their scores in the reading comprehension test.

Table No. (6): The results of the reading comprehension test

Proficiency Level	Frequency	Valid Percent
High (11-14)	18	11.9
Medium(7-10)	92	60.9
Low (2-6)	41	27.2
Total	151	100.0

According to the statistics in table (6) above, 41 students' scores were between 2 and 6 which means that (27.2) percent of the subjects were categorized as low proficient readers, and 92 participants with a percent of (60.9) were assigned to the intermediate group as their scores range between 7 and 10. While just 18 subjects with a percent (11.9) got scores between 11 and 14 and were classified as high proficient readers. After that, the cross tabulation test was employed in order to examine the differences in the frequency of using these reading strategies between the three groups of students. The results of this analysis are presented in table (7).

Table No. (7): Frequency distribution of usage of subcategories of metacognitive reading strategies

Grade level		Strategy		
		Global	Problem Solving	Supportive
High	Mean	3.49	4.06	3.66
	N	18	18	18
	Std. Deviation	.44403	.56758	.70328
Medium	Mean	3.35	3.9851	3.50
	N	92	92	92
	Std. Deviation	.55165	.51250	.63339
Low	Mean	3.37	3.68	3.57
	N	41	41	41
	Std. Deviation	.50006	.51999	.56005
Total	Mean	3.37	3.91	3.54
	N	151	151	151
	Std. Deviation	.52505	.53693	.62134

As seen in table (7) above, high proficiency readers use problem solving strategies (M = 4.0) and supportive strategies (M = 3.6) in a high frequency, while global strategies (M= 3.4) appear to be the least frequently used strategies of all on the one hand. Low proficiency readers on the other hand use most widely problem solving strategies (M = 3.6) and supportive strategies (M = 3.5) which both fall also into the high level of frequency. But, global strategies (M = 3.3) comes last and fall into the medium level of frequency.

Although the order of the three strategies in their use is the same by both groups of students, it is obvious that the mean scores of metacognitive strategy use of high proficient readers outnumber that of low proficient readers in the three subcategories of reading strategies. While the problem solving mean of high proficient readers is (4.0) which is considered a high frequency use, the mean of low

proficient readers in the same strategies is (3.6). When comparing their usage of strategies of the other two types of metacognitive strategies, high proficient students appear to be using supportive strategies (M = 3.6) and global strategies (M = 3.4) slightly more frequently than low proficient students with a mean of (3.5) for supportive strategies and (3.3) for global strategies.

To sum up, high proficient students use the metacognitive reading strategies more frequently than low proficient students, and in turn they can be considered more aware of these strategies use than the other group of students. These results further indicate that problem solving strategies are more favored by both groups of student, while global strategies are less favored by these two groups.

4.3 The Third Research Question

The third question that this study examined was "Is there a correlation between the adoption of reading strategies and students' achievement?" Therefore, Pearson's analysis of correlation coefficient was used to examine this relationship between the adoption of metacognitive reading strategies and Birzeit students' reading comprehension achievement. The correlation coefficient between the variables was interpreted according to Davis (1971) table (8) below.

Table No. (8): Interpreting strength of correlation coefficient

0.70 and more	Very strong Association
0.50-0.69	Substantial Association
0.30-0.49	Moderate Association
0.10-0.29	Low Association
0.01-0.09	Negligible Association

Table No. (9): The correlation between problem solving and the participants' reading comprehension achievement

		Total Grade	Mean Problem
Total Grade	Pearson Correlation	1	.192*
	Sig. (2-tailed)		.018
	N	151	151
Mean Problem	Pearson Correlation	.192*	1
	Sig. (2-tailed)	.018	
	N	151	151

*. Correlation is significant at the 0.05 level (2-tailed).

According to the statistics in table (9) above, the sig. (2-tailed) is .018 (P< 0.05) which is significant at the level of 0.05. The result of the Pearson correlation between the problem solving strategies use and the students' scores is (.192*). According to Davis (1971), this indicates that there is a low positive correlation between the use of problem solving strategies and participants' English reading comprehension scores. This conclusion further indicates that problem solving strategies play a trivial role in students' reading comprehension achievement

Table No. (10): The correlation between global strategies and participants' reading comprehension achievement

		Total Grade	Mean Global
Total Grade	Pearson Correlation	1	.051
	Sig. (2-tailed)		.532
	N	151	151
Mean Global	Pearson Correlation	.051	1
	Sig. (2-tailed)	.532	
	N	151	151

From table (10) above, it is evident that global strategies correlation with subjects' scores is (.051) which means that this correlation is trivial and negligible. In other words, the correlation between the global strategies and the participants' achievement is weakly positive, and that readers who have better reading performance rarely apply these strategies.

Table No. (11): The correlation between supportive reading achievement and reading achievement

		Total Grade	Mean Supportive
Total Grade	Pearson Correlation	1	-.015
	Sig. (2-tailed)		.851
	N	151	151
Mean Supportive	Pearson Correlation	-.015	1
	Sig. (2-tailed)	.851	
	N	151	151

Table (11) shows that the correlation between the adoption of supportive strategies and students' reading scores is (-.015) which indicates a negative negligible association between supportive strategies use and reading achievement and how they are trivially negatively correlated. This result further indicates that the more the students use supportive strategies, the less their reading comprehension scores will be. This finding implies that these students are not instructed or trained in applying these strategies effectively. It is obvious that they lack the skill of using contextual clues and textual information to enhance their comprehension. Instead, they rely heavily on translating into their mother tongue.

To sum up, none of the three reading strategies, i.e. problem solving strategies, global strategies, and supportive strategies, correlate significantly with students' reading achievement, which means that none of these strategies have the ability to

predict students' reading comprehension achievement. Moreover, only supportive strategies correlate weakly and negatively with participants' reading comprehension scores. This means that these strategies in particular affect the subjects' reading comprehension outcome negatively.

4.4 Qualitative Analysis of the Retrospective Interviews

The retrospective interviews were used as a final procedure in this study. The main aim of this step was to elaborate more on the quantitative data, and as an additional procedure to capture any other strategies that might not be mentioned by the participants in the questionnaire. To this end, 8 questions were prepared to be asked in the interviews.

All the subjects who agreed to participate were given specific dates according to their free time and desires. Before conducting the interview, each interviewee was given a reading task and was required to read it for comprehension as if he/she has an assignment to do. After that, the first question was posed which require the interviewee to talk freely about everything he did or thought about while reading for comprehension and if they encountered many new words and how they dealt with them.

Qualitative data showed that when students approach a new text, they first try to identify the main ideas to guess what the text is talking about. Furthermore, as a way of understanding the text, students reread and focus on the new words and try to guess their meaning from the context or translate them on google. It was apparent that although low proficient students used the same strategies as the high proficient students, they usually fail to comprehend the text as the high proficient students who most of the times succeed in comprehending it. Student (1), a high proficient reader

said, "I try to understand their meaning from the context. Most of the times I managed to understand their meaning, but sometimes I find it difficult. They rarely hinder my comprehension for the text." A low proficient, Student (7), comment was somewhat different "but almost all of the words were new that I did not know them. From those words that I know, I tried to understand and induce their meaning, but I failed."

This difference between the two groups of students seemed to be attributed to the difference in their L2 proficiency level and not to their strategic knowledge. Moreover, low proficient students indicated that when they fail to grasp the main idea of the text, they give up and start looking up the new words by consulting the dictionary, while high proficient students endeavor to elicit the main idea of the text.

These differences also can be justified by the fact that the two groups of students who are enrolled in the same English course receive instruction in these strategies, i.e. identifying the main idea of the text and trying to guess the meaning of the new words from the context, which are the main objectives of the course. Although most of the low proficient students reported using these strategies, they seemed to be using them ineffectively. It was evident that they failed to utilize these two strategies to aid their comprehension as none of the low proficient readers mentioned that he managed to understand the text, while the high proficient succeeded to achieve their reading goals.

When the subjects were asked about the most important objective in reading English texts for comprehension, 100% of the students mentioned knowing or learning new words and 60% of them reported obtaining new information, while just 40% of them viewed grasping the main idea of the text as the main objective of

reading. These results suggest that all students viewed knowing new words as the main objective of reading English texts. In addition, more than half of the students (5 out of 10) perceive obtaining new information as another objective of reading for comprehension. While just less than half of the subjects viewed grasping the main idea of the text as the main objective of reading taking into consideration that most of them were high proficient students. This also means that Berziet students perceive grasping the main idea of the text as less important than the other two objectives (i.e. learning new words and obtaining new information) while it is generally regarded essential to readers' efficacy in reading.

When the participants were asked about using the global strategies as if they pay attention to the main ideas or details and if they see how the texts were arranged or their logical relations, high proficient readers mentioned that they usually focus on the main ideas and on how the sentences were related logically. Moreover, neither high proficient, nor low proficient students pay attention to how texts were arranged or to the paragraphs length or organization where these strategies belong to global ones that might help students to take a general idea about the text. This also reflects their lack of knowledge of the importance of such kind of strategies.

The fourth question focuses on the problem solving strategies. When the interviewees were asked about their actions when they do not understand something in the text, such as a term or an idea, they answered that they reread the text more than once to try to conclude the meaning of the difficult terms from the context or from the words around it, otherwise, they will translate them or the whole sentence on google. This means that rereading and trying to guess the meaning of the difficult words from the context or from the surrounding words and translation are the most widely used strategies to overcome reading comprehension difficulties.

The first two strategies belong to problem solving strategies, while the last one is a supportive reading strategy. This also emphasizes the preceding idea that global strategies are once again missing and not used by participants to aid or manage their comprehension. These results also go along with those obtained from quantitative data which indicated that problem solving strategies are the most frequently used strategies by both groups of students, and these strategies are followed by supportive strategies

Furthermore, subjects were asked about the actions that they take when the text becomes difficult. On the one hand, high proficient readers reported that they usually slow down by adjusting their reading speed and reread the text. They also try to grasp the general meaning of the text by connecting or relating ideas together in order to repair their comprehension. On the other hand, low proficient readers slow down to focus on and identify the difficult words to translate them on google in order to understand their meaning as a way of overcoming reading difficulties.

It is evident that, high proficient readers use two problem solving strategies (i.e. rereading and slowing down) and a global strategy (i.e. grasping the general meaning of the text by connecting ideas together). While low proficient readers tend to depend mainly on translation to support their understanding of the text and which is a supportive strategy. These results further indicate that high proficient students distinguished themselves from low proficient students in their knowledge and use of problem solving strategies which are considered the right choice and action to take when comprehension breaks down. They also use global strategies which could help them grasp the general meaning of the text. Subject (10) who is a low proficient reader said, "I translate word by word, I translate on Google". Another low proficient

student (9) whose answer was similar comment, "I search for the difficult words and then use the dictionary to translate them"

Moreover, when students were asked about the procedures that they take or follow to support and increase their understanding of what they are reading, 60% of them reported underlining the new information or difficult words, and 80% mentioned that they translate these words on google, while just 40% of them try to paraphrase the ideas to maximize their comprehension. From the previous results, it is evident that most of students translate on google to aid and support their reading comprehension. But, when comparing these strategies with those obtained from the quantitative data, it is evident that the order of same strategies as reported in the questionnaire is somehow different. The order of the supportive strategies as reported in the quantitative instrument was mostly for underlining new information, paraphrasing, and then translation. While in the qualitative one, it was mostly for translation, underlining, and then followed by paraphrasing.

Interviewees were also asked if they use or think in their mother tongue when they read English texts. They also were required to clarify when, why and how they refer to their native language while reading in English. Both of groups, high and low proficient students, reported using their mother tongue especially when text becomes difficult to enhance their comprehension. While 60% of them mentioned that they think in Arabic to help them understand the text. This indicates that all subjects refer to their native language and that more than half of them think in Arabic to repair and enhance their comprehension. These two strategies belong to the supportive ones, which mean that almost all participants frequently use these strategies while reading.

These results confirm those obtained from quantitative data as they revealed that supportive strategies such as translation into Arabic and paraphrasing are used frequently by both groups of participants while reading English texts to assist their comprehension. Qualitative data elaborate more on this issue as almost all students maintained that they frequently refer to their mother tongue while reading to aid and repair their comprehension. A high proficient reader, Student (4), said, "I always refer to my mother tongue, either translating or thinking into Arabic, to understand the paragraph". Similarly, a low proficient student (10) comment, "I always refer to my mother tongue and translate to understand what I am reading. I always think in Arabic, without this, I will not understand anything."

When asked about the biggest obstacle that makes their reading comprehension difficult, all students mentioned the new and difficult words as the biggest obstacle. Furthermore, 30% of subjects view the length of the text as another source of difficulty. And just 20% perceive the unfamiliarity of the text (lack of background/ schema knowledge) as another barrier that hinders their reading comprehension.

These results reveal that the new and difficult words found in the reading text are the most difficult aspect that makes their reading difficult and in turn affects the attainment of their comprehension goals. These results also suggest that subjects consider vocabulary as the basic element for meaning-construction. For example, student (9) when he was asked about the biggest obstacle that makes his reading difficult said, "When I face many difficult and new words that I did not encounter before which in turn makes reading difficult."

Finally, when they were asked to evaluate themselves as readers, only 20% of participants view themselves as good readers, and 50% of them consider themselves as readers of medium level, while 30% of students view themselves as poor readers who cannot manage and repair their comprehension when it breaks down. These findings reveal that even if Birzeit students use and have good level of knowledge of these strategies; most of them fail to use these strategies effectively, or adjust them according to each situation while reading to manage their reading tasks. Moreover, although low proficient readers reported the use of these strategies, they usually fail to achieve a good level of comprehension to attain the reading comprehension goals which in turn make them view themselves as poor readers.

4.5 Conclusion

This section focused on presenting the results of the present study. The major finding indicated that Birzeit students are aware of metacognitive reading strategies examined in this study and reported using these strategies with high and moderate frequencies. This result was stressed and confirmed by both quantitative and qualitative data. Moreover, subjects showed more perceived use of problem solving strategies than supportive and global strategies. These finding were also supported by the qualitative data which showed that participants frequently use problem solving strategies and a lot of supportive strategies, such as translation and thinking in their mother tongue, to manage and aid their comprehension. This means that most students perceive the usage of global strategies as less important than the other two types of strategies.

Another major finding of this study is that high proficiency students use metacognitive reading strategies more frequently than low proficiency students. In

addition, qualitative results showed that although both groups of students use the same reading strategies when they approach a new text, high proficient readers tend to use these strategies in a more proficient way than low proficient students who usually fail to manage their reading comprehension tasks. Furthermore, qualitative data revealed that both groups were instructed in some of these strategies, but the difference in their strategy use can be attributed to their level of proficiency rather than their strategic knowledge.

Finally, problem solving strategies on the one hand, proved to correlate weakly and positively with participants reading comprehension achievements. On the other hand, supportive strategies appeared to correlate trivially and negatively with students' reading comprehension scores. This means that the more these strategies are used the less their scores in reading comprehension will be. However, global strategies which appeared to be the least frequently used by subjects, correlate trivially and positively with reading comprehension achievement.

Chapter Five

Discussion conclusions and Recommendations

This chapter will present an overview and a description of the study, its questions and major findings followed by the discussion of these results in the light of literature review and previous research on strategic reading. In the following sections, conclusions, relevant implications for reading instruction and recommendations for further research will be presented.

5.1 Summary of the Study

The current study was carried out to explore the metacognitive reading strategies that are used by Birzeit students while reading English texts. Thus, it aimed to investigate their awareness and knowledge of these strategies. Furthermore, it tried to examine the differences between students in their strategy use according to their level of proficiency, and to determine how their strategy use might affect their reading comprehension.

To answer the research questions, two methods were employed to collect the needed data, quantitative and qualitative ones. The quantitative data were obtained through a reading strategies questionnaire (SORS) that was completed by 151 participants. In addition, a reading comprehension test was used to measure students' comprehension. To collect the qualitative data, retrospective interviews were also used as a complementary procedure that might help elaborating more on quantitative data. Therefore, 10 students from the two proficiency levels were interviewed. In the following section, the research questions and the major findings will be presented.

5.2 The Research Questions

1. What type of reading strategies do Birzeit students use while reading English texts?

2. What metacognitive reading strategies are used by high-proficiency readers and low-proficiency readers?

3. Is there a correlation between the adoption of reading strategies and the students' achievement?

5.3 The Major Findings of the Study

1. Birzeit students were aware of and used almost all the metacognitive reading strategies mentioned and examined in this study, and reported using these strategies with high and medium frequencies.

2. Students reported a significantly more frequent use of problem solving strategies, and that their use of the metacognitive strategies ranked in a descending order; problem solving, supportive strategies, and global strategies.

3. The level of the participants in the reading comprehension test was medium (M=7.9).

4. The mean scores of metacognitive reading strategies use of high proficient subjects outnumber those of low proficient subjects.

5. Qualitative data showed that both groups of students, high proficient and low proficient use the same reading strategies when approaching a new text in English

6. Both quantitative and qualitative data showed that problem solving strategies, i.e., rereading, paying closer attention and guessing the meaning of the new

words from the context, are the most widely used strategies by subjects to overcome their reading difficulty.

7. Both quantitative and qualitative data revealed that students almost always translate and think in their mother tongue to support and aid their comprehension.

8. There is a low positive correlation between students' use of problem solving strategies and their comprehension level.

9. There is a negligible negative correlation between students' use of supportive strategies and their comprehension level; the more their use of these strategies, the less their performance in reading comprehension will be.

10. There is a trivial positive correlation between students' use of global strategies and their reading comprehension level.

5.4 Discussion

The findings of this study obtained from both quantitative and qualitative methods regarding the first question suggest that Birziet learners were aware of all types of the reading strategies mentioned in the study and reported using them in a high and medium frequencies. Moreover, problem solving strategies appeared to be the most widely used strategies by participants, while global strategies seemed to be the least used strategies by the subjects. In addition, students tended to refer to their native language frequently to aid their comprehension.

The finding of the first question confirms those of Anderson (2003) who indicated that the majority of the strategies used by readers were problem solving. These results also confirm those of (Ghysi, Safdarian & Farsani, 2011; Temur & Bahar, 2011; Monos, ; Mokhatari & Ritchard, 2002, Zhang & Wu, 2009) whose findings revealed that students use problem solving mostly. But, in these studies,

supportive strategies and not global strategies were the least strategies used by subjects.

Moreover, the results of the current study coincide with those of Modhumathi & Ghosh (2012) whose results revealed that students used problem solving strategies most, while they least preferred to use global strategies. While, the findings of the current study do not go along with Abu Shaims (2002) whose results revealed that students' use of strategies was haphazard and limited.

Both qualitative and quantitative data suggested that most students, especially low proficient ones, almost always translate into Arabic when reading English texts. These findings confirm those of Alsheikh (2011) who found that less proficient students rely heavily on translation while reading English texts as a strategy to aid their comprehension. Similarly, Zhang (2001) results indicated that most students, especially low proficient scorers, tend to translate into Chinese while reading English text to assist their comprehension. He maintained that although most students, even low proficient ones, were aware of the negative effect of using dictionaries and translation, they frequently reported using such strategies to understand every detail in the text.

Concerning the second question of the study, findings revealed that the mean scores of metacognitive strategies of high proficient learners outnumber those of low proficient learners. Results also showed that problem solving strategies are more favored by both groups, while global strategies are the less favored by them. The above findings go along with those of (Zhang, 2001; Zhang & Wu, 2009; Yang, 2002; Paris & Myers, 1981; Shang, 2011; Songyut, 2011; Wharton, 2000; Phakiti, 2003; Modhumathi & Ghosh, 2012) who indicated that although students of different

proficiency levels may use the same types of strategies, more proficient students tend to use these strategies more frequently, in addition to their ability to be more appropriate in organizing and manipulating these strategies. Phakiti (2003) also mentioned that there was strong evidence that the highly successful learners reported significantly more use of metacognitive strategies than the other two levels of proficiency.

The findings also go along with Frehrenbach (1991) who indicated that gifted students differ from average students in their cognitive and metacognitive processes. Where gifted readers tend to reread, infer, analyze structure, predict, evaluate and relate to context, average readers tend to summarize and be concerned more with words pronouncing.

The Qualitative finding obtained in this study also revealed that high proficient students outperform low proficient students in using problem solving and global strategies. These results coincide with those of (Zhang &Wu, 2009) who found that high proficiency learners use these strategies such as rereading, adjusting their speed and paying closer attention to enhance their comprehension. Furthermore, the idea that high proficient learners outperform low proficient learners in global strategies coincides with other researchers conclusions who found that low proficiency readers tend to report more text-bound, local strategies than higher proficiency readers (Carrell, 1989; horiba, 2000; Stevenson, Schoonen, De clopper, 2003; Block, 1992).

With regard to question three, results revealed that problem solving strategies and global strategies correlate weakly and positively with subjects reading comprehension scores. Supportive strategies on the other hand tend to correlate very

weakly and negatively with students' reading scores. This indicates that none of the

reading strategies has the ability to predict students' performance in reading

comprehension. This is because the findings of the current study indicated either low

positive correlation or low negative correlation between the adoption of these

strategies and the reading achievement.

These findings coincide with those of Shang (2011) who found a weak and

positive correlation between reading strategies and reading performance. Findings

showed that the usage of metacognitive and compensatory strategies has no

significant impact on the reading outcomes. The findings of this study also

approximate those of Song (2005) who observed a positive effect to a strategy called

"linking with prior knowledge" which also called global strategy as mentioned in the

questionnaire that is used in the current study. While, other strategies such as

repetition, writing summaries which are known as supportive strategies, were found to

be affecting students' proficiency level negatively. Another study that stressed the

same issue and revealed that supportive strategies correlate negatively with reading

comprehension achievement is Ilustro (2011).

Contrary to the findings of the current study, numerous studies indicated no

correlation between the use of reading strategies and reading achievement

((Alsamadani, 2009; Shang, 2010; Brantmeier, 2002). Alsamadani (2009) found that

there was no significant correlation between reading strategy use and reading

comprehension scores. Furthermore, he mentioned that EFL learners perceive other

factors as having much effective contribution to their final reading comprehension

such as prior knowledge, enthusiasm for reading, time on task, purpose for reading,

and vocabulary. Shang's (2010) results also stressed the same conclusions. The

results of this study indicated no significant correlation between the use of reading

strategy types and reading performance. This implies that reading strategies usage does not insure or guarantee the attainment of high level of comprehension.

On the other hand, numerous studies indicated a positive and significant relationship between reading strategy use and reading performance (Crowe, 2003; Meneghetti, Carretti, De Beni, 2006; Hsieh, 2006; Purpura, 1998,1999; phakiti, 2006, 2003; Yang, 2006; Pang, 2008). Ling (2011) found that both metacognitive and cognitive strategies correlate positively and significantly with reading comprehension achievement and that both types of strategies play a significant role in reading performance.

The findings of the current study are also not in line with those of Pang (2008) who argued that learners' knowledge and use of metacognitive reading strategies have a strong relationship with their reading comprehension achievement. These results challenged the results of the current study which revealed that none of the reading strategies play a vital role in participants reading performance. Hence, it can be concluded that there are other variables (such as prior knowledge, familiarity with the text, and time on task) that might have stronger relationship with learners' English learning achievement other than English reading strategy use.

5.5 Conclusion

The main objective of this study was to investigate Birzeit students' awareness and use of metacognitive reading strategies. Furthermore, it aimed to examine the differences between students of different proficiency levels in their strategy use and to explore the correlation between reading strategy use and reading comprehension performance. To this end, the study employed both quantitative and qualitative methods to obtain the needed information about Birzeit students' perceive use of these

strategies, in addition to the strategies used by both of the proficiency levels, as well as to the correlation between metaconitive reading strategies and reading comprehension achievement.

Although Birzeit students seem to be aware of all these strategies' types and use them frequently; it is evident from the qualitative data that these students still lack the conditional knowledge (i.e., when, how, and why to use these strategies) that could enhance their ability to use and utilize these strategies effectively. Moreover, the lack of concentrations on contextual glues, textual relations and language implications indicated that these students are not instructed or trained in using these strategies effectively.

Furthermore, there might be some studies that indicated no relationship or correlation between reading strategies use and reading achievement; it is still evident that most of the theoreticians and previous studies on reading research emphasize the positive effect that the reading strategies use might have on reading performance. This implies that EFL instructors should pay more attention to improve the use of these strategies. In addition, more attention should be given to improve the use of global strategies which seemed to be somehow neglected by most of Birzeit students.

Moreover, it was apparent that vocabulary was considered by all students the biggest obstacle that hinders their comprehension and the basic material for meaning-construction. Hence, this study suggests that reading instruction should supplement the students with sufficient and extensive reading activities, accompanied with those strategies of guessing word meaning and relating to context that might help them extend their repertoire of words. Therefore, this study recommends that EFL

educators and instructors should emphasize and focus on such objectives while planning their reading curriculum and instruction.

Last and not least, according to the researcher's impression that was gained through this experience while carrying out this research, most of Birzeit students seem to have negative attitudes towards reading in English which in turn might affect negatively their achievement and their overall success in their academic learning. Students' attitudes towards reading can be influenced by their experiences. Therefore the family background, education, cultural values and beliefs, in addition to the school context can influence students' preferences and might contribute to shaping their reading attitudes towards reading. These factors should be considered thoroughly by instructors and parents in order to work together to promote more positive attitude towards reading in general and reading in English in particular.

5.6 Recommendations of the Current Study

1. The current study recommends that instructors should focus on raising students' awareness of the importance of using global strategies, and provide them with sufficient and direct instruction and training in why, how and when to use and apply these strategies .

2. The findings of this study implies and recommends that students should receive additional and extensive practice in strategies that could enhance their ability to use contextual clues, textual information, and language implications to repair and aid their comprehension rather than relying on translating into their mother tongue which appeared to affect their performance negatively.

3. The current study found significant differences between high-proficiency and low proficiency students in their use of English reading strategies. This result

indicated that the use of reading strategies may have close and positive effects on learners' reading achievement. Therefore, it is of major importance for students to realize the importance and benefits of using these strategies. To achieve this goal, English instructors should not only endeavor to raise students' awareness of the potential benefits of using these strategies, but also encourage them to apply these strategies to enhance their reading comprehension achievement.

5.7 Recommendation for Further Studies

1. It is recommended that a replication of the current study should be conducted and extended to include students from all the Palestinian universities employing both qualitative and qualitative methods.

2. Almost most of the studies reviewed in this study indicated that strategic reading instruction can affect students' performance in reading comprehension positively. Therefore, further explanation regarding the influence of direct instruction of reading strategy use on students' outcomes could provide useful information for further effective instructional implementations. To the best of the researcher knowledge, such kind of studies has not been conducted yet in Palestine. The results of such study could inspire the whole theory of language learning and teaching with many educational implications.

3. This study revealed that proficiency level and other linguistic skills affected reading strategy use positively. Thus, a study that further examines the relationship between the proficiency level and reading strategy development might be also useful and conducive to better understanding of reading instruction.

4. Almost all Birziet students view vocabulary or new words as the basic element of meaning construction and that the lack of knowledge of lexis constitutes one of the biggest obstacles that hinder their comprehension. Therefore, further investigation of the impact of vocabulary development on reading comprehension performance could be useful and beneficial to better teaching and learning approaches.

5. More qualitative studies should be carried out to investigate what other factors other than strategy use (such as prior knowledge/schema, motivation, time of engagement, familiarity with the topic, and type of texts) can affect positively students' reading achievement.

6. "What factors can promote a more positive attitude towards reading" is a good title of a study that can be examined through subjecting students to further and in depth qualitative investigations.

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APPENDIX (A): READING COMPREHENSION TEST

Section A: Please, fill in your personal data:

Student Number………………. Gender…………………

Section B:-
 Directions: In this section, you will read two passages. Each passage is followed by a number of questions about it. Choose the **best** answer: (A), (B), (C), or (D). Please answer all questions about the information in a passage on the basis of what is stated or implied in that passage.
Passage 1
　　　　Rainforests circle the globe for twenty degrees of latitude on both sides of the equator. In that relatively narrow band of the planet, more than half of all the species of plants and animals in the world make their home. Several hundred different varieties of trees may grow in a single acre, and just one of those trees may be the habitat for more than ten thousand kinds of spiders, ants, and other insects. More species of amphibians, birds, insects, mammals, and reptiles live in rainforests than anywhere else on earth.

　　　　Unfortunately, half of the world's rainforests have already been destroyed. Scientists estimate that as many as fifty million acres are destroyed annually. In other words, every sixty seconds, one hundred acres of rainforests is being cleared. By the time you finish reading this passage, two hundred acres will have been destroyed! When
 this happens, constant rains erode the former forest floor, the thin layer of soil no longer supports plant life, and the ecology of the region is altered forever. Thousands of species of plants and animals are condemned to extinction and, since we aren't able to predict the ramifications of this loss to a delicate global ecology, we don't know what we may be doing to the future of the human species as well.

1. The word "relatively" in line 2 could best be replaced by
(A) Temporarily
(B) Typically
(C) Comparatively
(D) Extremely

2. According to the passage, more than half of all species of plants and animals
(A) Live in twenty rainforests.
(B) Live in several hundred different varieties of trees.
(C) Live in areas where rainforest has been cleared.
(D) Live in a forty-degree band of latitude.

3. What is the current rate of destruction?
(A) One acre per minute.
(B) One acre per second.
(C) One hundred acres per minute
(D) Two hundred acres per hour.

4. What is the meaning of the word "just" in line 4?
(A) Fairly
(B) Only
(C) Correctly
(D) Precisely

5. What will NOT happen if the rainforest continues to be cleared?
(A) The land will be eroded by the rains.
(B) Many species of plants and animals that depend on the rainforest will become extinct.
(C) The future of the human species may be changed.
(D) The rainforest will grow, but at a much slower rate.

6. The word "altered" in line 12 is closet in meaning to
(A) Changed
(B) Terminated
(C) Harmed
(D) Invaded

7. The word "this" in line 11 refers to
(A) The destruction of the acres.
(B) The reading of the passage.
(C) The erosion of the forest floor
(D) The constant rain.

Passage 2

Human memory, formerly believed to be rather inefficient, is really more sophisticated than that of a computer. Researchers approaching the problem from a variety of points of view have all concluded that there is a great deal more stored in our minds than has been generally supposed. Dr. Wilder Penfield, a Canadian neurosurgeon, proved that by stimulating their brains electrically, he could elicit the total recall of specific events in his subjects' lives. Even dreams and other minor events supposedly forgotten for many years suddenly emerged in detail.

The memory trace is the term for whatever is the internal representation of the specific information about the event stored in the memory. Assumed to have been made by structural changes in the brain, the memory trace is not subject to direct observation but is rather a theoretical construct that we use to speculate about how information presented at a particular time can cause performance at a later time. Most theories include the strength of the memory trace as a variable in the degree of learning, retention, and retrieval possible for a memory. One theory is that the fantastic capacity for storage in the brain is the result of an almost unlimited combination of interconnections between brain cells, stimulated by patterns of activity. Repeated references to the same information support recall. To say that another way, improved performance is the result of strengthening the chemical bonds in the memory.

1. With what topic is the passage mainly concerned?
(A) Wilder Penfield
(B) Neurosurgery
(C) Human memory
(D) Chemical reactions

2. The word "formerly" in line1 could best be replaced by
(A) In the past
(B) From time to time
(C) In general
(D) By chance

3. Compared with a computer, human memory is
(A) More complex
(B) More limited
(C) Less dependable
(D) Less durable

4. The word "that" in line 2 refers to
(A) The computer
(B) The efficiency
(C) The sophistication
(D) The memory

5. According to the passage, researchers have concluded that
(A) The mind has a much greater capacity for memory than was previously believed.
(B) The physical basis for memory is clear.
(C) Different points of view are valuable.
(D) Human memory is inefficient.

6. According to the passage, the capacity for storage in the brain
(A) Can be understood by examining the physiology.
(B) Is stimulated by patterns of activity.
(C) Has a limited combination of relationships.
(D) Is not influenced by repetition.

7. All of the following are true of a memory trace EXCEPT that
(A) It is probably made by structural changes in the brain.
(B) It is able to be observed.
(C) It is a theoretical construct.
(D) It is related to the degree of recall.

APPENDIX (B): SURVEY OF READING STRATEGIES

Dear student, you are invited to participate in this survey of my study (**Investigating Birzeit University Students' Awareness of Knowledge and Use of Metacognitive Reading Strategies**) which will be part of a research project on improving of reading comprehension. Your participation is completely voluntary & your opinions will be strictly confidential and will be used for the purpose of this project only. Please fill in your personal data:

Student number…………   Gender…………

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

All the items below refer to your reading of the **college-related academic** *materials (***such as textbooks***, not newspapers or magazines). After reading each statement***, please tick (⊾) the choice*** that applies to you. Note that there are* **no right and wrong responses** *to any of the items on this survey.*

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

APPENDIX (C): The Arabic Version of the Reading strategies Questionnaire

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استبانة استراتيجيات القراءة

عزيزي الطالب، أنت مدعو للمشاركة في هذه الاستبانة والتي ستكون جزء من دراسة بعنوان (فحص وعي طلاب بيرزيت بمعرفة واستخدام استراتيجيات القراءة الماوراء معرفية) والتي قد تسهم في تطوير القراءة الاستيعابية. مشاركتك هي بالكامل اختيارية وآرائك ستعامل بسرية تامة وستستخدم لأغرض البحث فقط.

رقم الطالب.................. الجنس..................

ان الهدف من هذا البحث هو جمع معلومات عن التقنيات التي تستخدمها عندما تقرأ **المواد الأكاديمية باللغة الانجليزية** (مثل كتاب القراءة لحل الواجبات البيتية أو الامتحانات، قراءة المقالات ...)

كل العناصر بالأسفل تعود لقرائتك **لمواد اكاديمية جامعية** (مثل **الكتاب الدراسي** وليس الجرائد أو المجلات). بعد قراءة كل عبارة ضع **اشارة (ے) تحت الخيار** الذي ينطبق عليك. لاحظ أنه **لا يوجد اجابات صح أو خطأ** لأي من العبارات في هذه الاستبانة.

</div>

دائماً	عادةً	أحياناً	نادراً	ولا مرة	العبارة	الرقم
					يكون هناك هدفاً في ذهني عندما أقرأ	1
					أدون ملاحظات خلال القراءة لفهم ما أقرأ.	2
					أفكر فيما أعرف لفهم ما أقرأ.	3
					أنظر للنص نظرة شاملة لمعرفة ما يدور حوله النص قبل قراءته	4
					عندما يصبح النص صعباً، أقرأ بصوت مرتفع لمساعدتي في فهم ما أقرأ.	5
					أفكر فيما إذا كان محتوى النص يتناسب مع هدفي من القراءة.	6
					أقرأ ببطء وانتباه للتأكد من فهمي لما أقرأ.	7
					أراجع النص أولاً بملاحظة خصائصه مثل الطول والتنظيم.	8
					أحاول العودة إلى مساري عندما أفقد التركيز.	9
					أقوم بوضع خط أو دائرة حول المعلومات في النص لتذكرها.	10
					أعدل سرعتي في القراءة تبعاً لما أقرأ.	11
					عندما أقرأ، أقرر ما يجب قراءته بعناية وما يجب تجاهله.	12
					استخدم مواد مرجعية (مثل القاموس) لمساعدتي في فهم ما أقرأ.	13
					أركز انتباهي أكثر لما أقرأ عندما يكون النص صعباً.	14
					استخدم الجداول أو/والأشكال أو/والصور لزيادة فهمي.	15
					أتوقف من وقت لآخر للتفكير فيما أقرأ.	16
					استخدم دليلاً من السياق لمساعدتي في فهم أفضل لما أقرأ.	17
					أعيد صياغة ما أقرأ (إعادة ذكر الأفكار بكلماتي الخاصة) لفهمه بشكل أفضل.	18
					أحاول تصور أو تخيل المعلومات لمساعدتي في تذكرها.	19
					استعين بخصائص طباعية مثل الخط الغامق أو المائل لتحديد المعلومات المفتاحية.	20
					احلل المعلومات المقدمة في النص بطريقة ناقدة.	21
					أتحرك للخلف والأمام أثناء قراءة النص لإيجاد علاقة ما بين الأفكار فيه.	22
					أتفحص فهمي عندما أقرأ معلومات جديدة.	23
					أحاول أن أخمن ما يدور حوله محتوى النص عندما أقرأ.	24
					عندما يصبح النص صعباً أعيد قراءته لزيادة فهمي.	25
					أسأل نفسي أسئلة أحب أن أجد إجاباتها في النص.	26
					أفحص لأرى تخميناتي حول النص فيما إذا كانت صحيحة أو خاطئة.	27
					عندما أقرأ، أخمن معنى الكلمات والعبارات غير المعروفة.	28
					عندما أقرأ أترجم من الانجليزية لغتي الأم (العربية).	29
					عندما أقرأ أفكر بالمعلومات باللغة الانجليزية واللغة الأم (العربية).	30

APPENDIX (D): The questions of the retrospective interviews

1. When you were given an English text to read for comprehension, what did you do first? Did you have a lot of new words? How did you deal with them?

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2. What do you think the most important objective in reading in English as a foreign language, e.g. learning English grammar, vocabulary, obtaining new information, grasping the main idea of the text, or something else?

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3. Did you pay attention to the main ideas or details? Did you see how the texts were arranged or their logical relations?

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4. When you read for comprehension in English, what did you do when you couldn't understand something in the text (e.g. term, idea…..)?

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5. When text became difficult, what did you do to understand what you are reading (rereading, reading slowly and carefully, paying closer attention, stop and think…)?

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6. What procedures or techniques did you take or follow to increase your understanding while reading (taking notes, reading aloud, using dictionaries, underlining or circling new information, paraphrasing, translating….)?

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7. When you read for comprehension, did you use or refer to your mother tongue? When, how and why?

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8. What do you think is the biggest obstacle that makes your reading difficult? What do you do to overcome this obstacle?

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9. How do you evaluate yourself as a reader of English texts?

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APPENDIX (E): The English Text that was Used in the Retrospective Interviews

All that we really need to plot out the future of our universe are a few good measurements. This does not mean that we can sit down today and outline the future course of the universe with anything like certainty. There are still too many things we do not know about the way the universe is put together. But we do know exactly what information we need to fill in our knowledge, and we have a pretty good idea of how to go about getting it. Perhaps the best way to think of our present situation is to imagine a train coming into a switchyard. All of the switches are set before the train arrives, so that its path is completely determined. Some switches we can see, others we cannot. There is no ambiguity if we can see the setting of a switch: we can say with confidence that some possible futures will not materialize and others will. At the unseen switches, however, there is no such certainty. We know the train will take one of the tracks leading out, but we have no idea which one. The unseen switches are the true decision points in the future, and what happens when we arrive at them determines the entire subsequent course of events.

When we think about the future of the universe, we can see our "track" many billions of years into the future, but after that there are decision points to be dealt with and possible fates to consider. The goal of science is to reduce the ambiguity at the decision points and find the true road that will be followed.

APPENDIX (F): Qualitative Analysis of the Retrospective Interviews

student number	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	
student 1	first of all I read the text quickly. For example, I read the first paragraph and try to identify the main idea. And when I want to look for an information, I don't depend on the first reading, but I reread the text again. Yes, nearly 5. but I try to understand their meaning from the context. most of the times I managed to understand their meaning, but sometimes I find it difficult. they rarely hinder my comprehension for the text.	to understand the paragraph and knowing new words because language is practicing the language, obtaining new information,	I pay attention to the main ideas more, then the details, no I don't pay attention to the way the text arranged, but I pay attention to how they are related logically as I can't understand the text without noticing this relation.	I will try to read it more than once trying to induce the meaning from the context or to understand the general meaning of the text, it might not be perfect but usually I try.	rereading the text, if I could not succeed, I will reread from the last point. I slow down, but I rarely stop to think while reading.	I rarely take notes, I use the electronic dictionary when the words are difficult so that I can understand them, I underline the new information, and I translate into Arabic the new words to understand them, I also think into the mother tongue most of the time.	nearly 50% of the time I referred to mother tongue, this helps me in understanding the new words and thinking in Arabic also helps me in understanding the text	when the text is boring and do not have new information, and when it is full of difficult vocabulary	I consider my self as an excellent reader
student 2	I start reading normally trying to identify the main idea of the next. I try to translate into Arabic the new words, I try to imagine what the text is about. nearly three words, I tried to guess their meaning from the context. I think that I succeed to induce their meaning that they do not hinder my understanding of the text.	new information, new vocabulary and the main ideas	the main ideas, but I refer to them when necessary. I don't pay attention to the shape of text but to how ideas are arranged that is their logical relations.	I will reread it more than once if I could not understand it and I will try to induce the main idea of the text, I will try to guess the meaning of the new words from the context through rereading the sentences again and moving back and forth in the text so that I might understand.	I will reread it and I will try to guess the meaning of the new words, I try to relate and connect ideas with the main idea of the text so that I can understand the it, I slow down and focus on the beginning of the paragraph trying to relate it to the middle and end of the paragraph, trying to think in what I am reading.	I think into Arabic and try to translate words and not texts into Arabic using Google	I refer to it for difficult and strange words so that I can understand what I am reading	the difficult and new vocabulary. usually I encounter only few words and I manage to guess their meaning from the context	I consider my self as a reader of middle level
student 3	I started searching for the title to see what the text is about, then I read the whole text to avoid returning to it again. But if I could not understand it, I will return to it again. Yes, I faced some new words, I tried to guess their meaning from the context. furthermore, I usually use the main idea or my general understanding to know what the text is talking about.	to answer questions, to know new words, to know my reading ability, to obtain new information.	I read every thing and then identify the key words or information, I pay attention on general ideas but to answer the question I focus on the details. I can understand the details without understanding the text. I pay attention to the logical relations more than the texts shape.	I return and reread the text again slowly and carefully so that I might understand the text, then I continue trying to understand, if I could not I will reread.	I will start searching for the key and new information. I also reread so that I could understand. I make use of questions to understand what I am reading.	I do not usually take notes, but I use Google to translate into my mother tongue. I also think in Arabic which also help me to understand. I only occasionally read aloud to help me understand what I am reading.	I always refer to my mother tongue, either translating or thinking into Arabic, to understand the paragraph	not to know the meaning of the new words in Arabic, specially if I encountered many of them, therefore, I will not be able to build a general understanding of the paragraph and in turn to the text, but I always try to guess the meaning of them from the context.	I consider my self as a good reader because if I could not understand the meaning of the new words or even the text, I always manage to answer the questions properly
student 4	I always focus on the first line to identify the main idea, and also the last line because these lines contains the main ideas. I tried to think while reading and to connect ideas of the text, to understand those words that I could not understand I try to go back and forth to induce their meanings read aloud to help me understand . yes, nearly three words, I tried to guess their meaning and to translate into Arabic	to obtain new information, and the main ideas of the text, but I always forget the meaning of the new words.	the main ideas that explains the details. I pay attention to how the sentences were related or connected logically	rereading and rereading the main ideas trying to relate and connect the ideas so that I might understand the text. Furthermore, I always translate into Arabic the whole idea to comprehend what I am reading.	I reread, I raise my voice or read aloud, I translate into Arabic, reading in the same speed without changing it. I try to connect the new information to what I know to help me understand	I circle the new information, I read aloud, I paraphrase, I translate the sentences and paragraphs into Arabic	I refer to Arabic when the text or the words become difficult, that facilitate understanding it and help me to connect the idea and relate them together. But the last way to refer to is to think in Arabic	to have many new , long and difficult words. if the topic is new and I do not have a good idea about it. If the text is too long and full of ideas.	I consider my self a reader of midi am level
student 5	I read the text trying to grasp the topic, when I found that I did not understand the text, I return to it as it full of new and ambiguous words. I reread to induce the meaning. Yes, nearly 4-5 words. I tried to go back and forth to understand the context so that I might understand the meaning of the new words. I usually use the electronic dictionary	to know new information, new words, general knowledge and the main ideas.	I pay attention to the details to know every thing, while the main idea give you just the general idea. I also pay attention to how sentences are related to each other	I reread again and again, If I could not understand, I try to find and identify the key word and to translate them to understand	I reread, I slow down to understand, I focus on the difficult words to understand their meanings	I use the electronic dictionary, I underline the key words, I translate and think into Arabic to understand what I am reading	I most of the times refer to my mother tongue Especially when I encounter new words , I also think in Arabic. That's help me a lot	the new and difficult words, the topic, if it's familiar or not, the length of the text.	medium level
student 6	I tried to find the main idea. I faced many new words which I tried to guess their meaning from the context.	to obtain new information, and to know new words.	I focus on the main ideas, and on the logical relations between sentences, I also focus on the meaning of the new words and the sentences.	I try to induce the meaning of the new words from those words that follow that I might find a definition or they might help me to understand the meaning of these difficult words, or from the context.	I reread, I slow down and reread many times to understand what I am reading. I also try to use the context.	translating into Arabic, underlining new information, or difficult words, I translate on Google	Yes, I always refer to my mother tongue. And I sometimes think in Arabic. I only occasionally connect the new information to what I know.	the new and difficult words which I did not encounter before.	I consider my self as a reader of medium level
student 7	I took an overview of the text, then I read line by line, but almost all of the words were new that I did not know them. From those words that I know, I tried to understand and induce their meaning, but I failed.	the meaning of the new words, grammar, understanding the meaning of the whole sentence.	I paid the details more attention than the main ideas, I also focused on how the text and the paragraphs are arranged.	I reread each line twice, but all my endeavors were fruitless. I usually translate.	I just reread the text. I use the words that I know to understand or guess the meaning of words that I do not know and to understand what I am reading.	I try to connect the part that I can understand with the difficult one, I take notes and I try to paraphrase most, and translate into Arabic most of the time.	I refer to my mother tongue most of the time through which I can better understand what I am reading. When I find the text very difficult I translate and think in Arabic.	having many difficult and new words as I try to use Google to translate , and I endeavor (try hard)to understand their meaning but that does not work out	I do not consider my self as a good reader, most of the times I fail to comprehend the text.
student 8	first, I read the text quickly, then I reread the text again to focus on the difficult and new words. Yes, nearly three words, I was supposed to conclude their meaning from the context, but I could not. I failed to relate the words or even sentences to each other to comprehend the text.	to know what the text is talking about, in addition to the new words to grasp the main idea of the new text	I pay attention to the details more than the main ideas, as they explain the topic, while the main ideas give you a general idea about it without giving examples or details. I also focus on how the texts were arranged.	I will translate using Google, I will also try to induce their meaning from the context.	I slow down and focus on those words that I did not know in order to translate them. I reread to understand but I always loose hope and translate on Google.	I underline new and important information, I also paraphrase to understand what am reading.	I only reefer to Arabic when I could not understand a sentence	when I face many difficult and new words that I did not encounter before which in turn makes reading difficult.	I am not good reader
student 9	I always focus on the topic sentence to understand what the text is talking about. Yes some words are difficult. Through going back and forth into the text and using the context.	to improve my reading and to learn new vocabulary	I focused on the main ideas which constitute the bases for understanding the details. I focused on how the sentences were related to each other logically	I search for the difficult words and then use the dictionary to translate them so as to relate and connect what I can understand with what I can not.	I reread, slow down and read carefully , I try to divide the long sentences into shorter ones	I read aloud, I take notes, I paraphrase	I refer to Arabic when the text or the words become difficult, that facilitate understanding it and help me to connect the idea and relate them	when the text is too long, full of difficult words, when there are not enough reference words	medium level
student 10	I read word by word, those that I understood I translate them in Arabic, while those that I did not< I underline them to focus on or to translate on Google.	to understand the text to answer the questions, to know new words	I focused on the main ideas as they in turn explain the details so that to understand the text	I translate word by word, I translate on Google	I reread the text word by word, then I try to translate on Google, I try to look for the topic sentence to help comprehend the text, but all my endeavors are fruitless as I face difficulties in reading for comprehension	I underline the difficult words, I circle the key information, I translate on Google, I read aloud, I occasionally	I always refer to my mother tongue and translate to understand what I am reading, I always think in Arabic, without this I will not understand any thing	I do not know many words, I find it difficult to identify the subject and the object. I can not identify the topic sentence, even if I know the meaning of the words, I can just understand it in Arabic not in English	I consider my self a poor reader

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| 1- when students read a new text, they first try to identiufy the main ideas to guess what the text is talking about.
2- As away of understanding the text, students reread and focus on the new words and try to guess their meaning from the context or to translate them on google.
3- although low proficient students use the same strategies as the high proficient students, they fail to comprehend the text as the high proficient students who most of the times succeed in comprehending the text. | 1-Knowing new words, (10),
2-obtaining new information (6) 3- grasping the main idea of the text (4) | 1-high proficient students usually focus on the main details and focus on how sentences were related logically.
2-Niether high proficient, nor low proficient students pay attention to how texts were arranged | when students can not understand a term or an idea, they usually reread the text more than once trying to conclude the meaning of the difficult terms from the context or from those words around it, otherwise they will translate them or the whole idea in order to understand. | 1-when reading becomes difficul, high proficient readers usualy reread and slow down by adjusting their reading speed and try to grasp the general meaning of the text by connecting or relating ideas to gather in order to repair their comprehension.
2-Low proficient readers slow down and focus and identify the difficult words to translate them on google in order to understand their meaning as a way of overcoming reading difficulty. | 2-High and Low proficient readers usualy underline new or difficult words (6 students)to translate them on google (8), and some times paraphrase to maximise their reading (4 students). | Both high and low proficient students refer to their mother tongue when text becomes difficult. They also think in Arabic to help them understand the text (6). | The new and difficult words is considered the biggest obstacle that makes their reading difficult. 30% of students view the length of the text as another obstacle. And only 20% of them percieve the unfamiliarity of the text as an obstaclte that hinders their reading comprehension. | |
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