



**The Effectiveness of Teaching Reading (Meta) Cognitive
Strategies in Improving UAE Grade-12 Students' Reading
Comprehension Proficiency for School-based Tests and
University Admission Exams**

مدى فاعلية تدريس الاستراتيجيات (المتا) معرفية في تحسين كفاءة القراءة والفهم
في الاختبارات المدرسية وامتحانات القبول بالجامعات لدى طلاب الصف الثاني عشر
بدولة الإمارات العربية المتحدة

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Dissertation submitted in partial fulfilment of the requirements for
the degree of Master of Education in Teaching English to Speakers
of Other Languages (TESOL)

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2015

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The Effectiveness of Teaching Reading (Meta) Cognitive Strategies in Improving UAE Grade-12 Students' Reading Comprehension Proficiency for School-based Tests and University Admission Exams

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Dedication

I dedicate this dissertation to the soul of my father who passed away early after my university graduation. I also dedicate this work to my mother who has always been praying for my brothers and myself to succeed in our study so we can help the community and ourselves in the near future. They used to spend the majority of their time teaching and encouraging us to be good citizens.

I also dedicate this work to my life partner, my dear wife (*Um Baraa*), who has always been an inexhaustible source of inspiration and personal power, and to my four children; *Israa*, *Baraa*, *Ahmed* and *Khalid* (may Allah bless and keep them safe and healthy) to whom I owe the success to complete this study. They have been supportive and never complained any time I failed to fulfil my family duties due to my study commitments.

I never forget my brother-like friend; Abu Ahmed (*Rashid Al-Salami*) who was and still a great source of inspiration all along the journey of my academic study and professional development. He was always energizing my enthusiasm with his encouraging words and motivating discussions.

I would also like to thank Mr. *Obeid Ibrahim*; the principal of Hamad Bin Abdullah secondary School for boys and *Um Fahd*; the principal of AL-Masah Secondary school for girls for their highly recognized support and encouragement to carry out the experimental part of the study at their schools. I do NOT forget to express my gratitude and regards to the colleagues from both schools who devoted their time and efforts to support me during the training sessions, interviews and the class observations.

Finally, I also dedicate this work to all my profession colleagues wherever they are. I owe them a great portion of my expertise and experience as a teacher of English and EFL/ ESL researcher. Without their constructive remarks and encouragement to pursue my professional development and academic studies, I might not be able to stand on such a solid ground.

Acknowledgment

My heartfelt thanks to Almighty Allah for granting me the courage and dedication to complete this dissertation despite all challenges and difficulties.

I am sincerely grateful to **Dr. Yasemin Yildiz**; my dissertation supervisor, for her outstanding guidance and support without which completing this research would not be possible. Along the journey of writing these pages, I encountered serious family and personal problems; however, with her unlimited patience and understanding, I was finally able to submit this paper. Dr. Yasemin did not only offer help through office – face-to-face – meetings, but also made herself available on Skype for extended assistance and immediate support. Thank you **Dr. Yasemin**.

I wish to extend my appreciation to all members of the British University in Dubai (BUiD) for the remarkable role in introducing me to the real world of research. I will never forget any of the tutors whose expertise and advice guided our academic pathway and took our hands patiently toward such noticeable success in order to become independent researchers. I also like to extend my gratitude to the faculty administrators and the library staff for their kindness and wonderful support.

I do not forget to extend my thanks and appreciation to all students, researchers and authors who have guided me through my study by their articles, views, dissertations or books. They have definitely paved the way to the present dissertation with their previous contributions in the area of improving reading comprehension.

Finally, I do not know how to thank my colleagues – specially, *Mohammed Shalabi* – who willingly offered to review the whole dissertation and double-check it for any typos. These people have been generous enough to devote a part of their private time for the proofreading and review.

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Abstract

This study seeks to investigate the effectiveness of strategy-based instruction in improving the reading comprehension proficiency of the UAE grade twelve students in school-based tests and university admission exams like IELTS, TOEFL and CEPA after serious problems regarding reading comprehension have been reported, and many reform procedures have been taken to rectify these problems at university and pre-university levels. In addition, the study attempts to find any correlation between students' gender and language proficiency in one side, and the acquisition of reading strategies in the other side. For this purpose, a mixed-method research with experimental design has been employed. Both quantitative and qualitative data have been collected by means of a set of instruments including pre and post-tests of reading comprehension with linked surveys to examine awareness of used strategies.

Moreover, think-aloud protocol has been utilized to collect data about the subjects' ability to verbalize their implementation and awareness of used strategies. A sample of about 82 male and female subjects has been randomly selected from two government schools for boys and girls and divided into two equal groups (control and experimental). After three weeks of treatment, the pre and post-test collected data are submitted to SPSS to conduct required test (t tests, ANOVA). The results of the study have indicated a statistically significant effect of strategy-based instruction in improving the learners' reading comprehension performance, and confirmed a significant correlation between language proficiency and learning the reading strategies. On the other hand, while female students outperformed the male students in the reading performance test, there was no statistically significant difference between both genders regarding awareness of used strategies or their ability to verbalize these strategies implementation. Furthermore, the semi-structured interviews with teachers and observations of conventional reading classes provided some insights into the real practice of reading instruction and material, which helped to form a clear picture that enabled the researcher to provide recommendations for those who are involved in the reading programs (teachers, students and parents as well as curriculum designers and decision-makers).

Keywords:

Reading Strategies / Reading Skills / Reading Comprehension / Strategy-based Instruction (SBI) / Reading Assessment / Cognition / Metacognition / Learner Autonomy

إن هذه الدراسة تهدف إلى قياس مدى فاعلية التعليم المستند إلى المهارات في تحسين قدرة طلاب الصف الثاني عشر بدولة الإمارات العربية المتحدة على القراءة والفهم بما ينعكس على الأداء في الاختبارات المدرسية و امتحانات القبول بالجامعات مثل امتحان التوفل، و الأيلتس، والسبيل. و ذلك بعد ظهور تقارير تؤكد على وجود مشكلات جدية متعلقة بمهارات القراءة والفهم، وأيضاً بعد اتخاذ العديد من الإجراءات الرسمية لحل هذه المشكلة في مرحلتي ما قبل وأثناء الدراسة الجامعية. بالإضافة لذلك، فإن الدراسة تهدف أيضاً إلى معرفة ما إذا كانت هناك علاقة بين جنس الطلاب و قدراتهم اللغوية من ناحية، و مدى استيعابهم لاستراتيجيات القراءة من ناحية أخرى.

من أجل ذلك الغرض، تم استخدام بحث مختلط الطريقة بمنهجية تجريبية؛ حيث تم جمع البيانات الكمية و النوعية من خلال مجموعة من الأدوات تشمل اختبارات القراءة القبلية و البعدية مع استبانات مرتبطة بها لقياس مدى الوعي والإدراك للمهارات المستخدمة. وعلاوة على ذلك، تم استخدام بروتوكول التفكير بصوت عال لجمع البيانات حول قدرة الطلاب على التلفظ بما قاموا به من عمليات عقلية ومعرفية ومدى وعيهم بالاستراتيجيات المستخدمة.

وقد تم اختيار عينة تتكون من 82 من الطلاب الذكور والإناث بشكل عشوائي من اثنين من المدارس الحكومية للبنين والبنات وتم تقسيمهم إلى مجموعتين متساويتين (الضابطة والتجريبية). وبعد ثلاثة أسابيع من التدريب، تم تجميع البيانات القبلية و البعدية ومن ثم تصديرها لبرنامج التحليل الإحصائي SPSS لإجراء الاختبارات المطلوب (اختبارات "ت"، واختبارات تحليل التباين ANOVA). وقد أشارت نتائج الدراسة إلى وجود تأثير ذو دلالة إحصائية للتعليم القائم على الاستراتيجيات في تحسين أداء القراءة والفهم لدى المتعلمين، وتم التأكد أيضاً من وجود علاقة ذات دلالة إحصائية بين مستويات إتقان اللغة من جهة، وتعلم استراتيجيات القراءة من جهة أخرى، و فيما يتعلق بمدى تأثير جنس الدارس على تعلم استراتيجيات القراءة، لم يكن هناك فروق ذات دلالة إحصائية بين الجنسين فيما يتعلق بوعيهم للاستراتيجيات المستخدمة أو قدرتهم على التعبير عن استخدام هذه الاستراتيجيات، وذلك رغم تفوق الطالبات على الطلاب الذكور في اختبارات أداء الفهم القرائي.

وعلاوة على ما سبق، فإن المقابلات مع المعلمين وملاحظات دروس القراءة التقليدية قدمت بعض الأفكار عن الممارسات الحقيقية لتعليم القراءة والمناهج المستخدمة لذلك؛ مما ساعد في تكوين صورة واضحة مكنت الباحث من تقديم العديد من الاقتراحات والتوصيات لجميع المعنيين ببرامج القراءة من معلمين وطلاب وأولياء أمور بالإضافة إلى مصممي المناهج و صانعي القرار.

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Acronyms

ADEC	:	Abu Dhabi Educational Council
CEPA	:	Common Educational Proficiency Assessment
EAP	:	English for Academic Purposes
EFL	:	English as a Foreign Language
ESL	:	English as a Second Language
IELTS	:	International English Language Testing System
L1	:	First Language
L2	:	Second Language
LA	:	Learner Autonomy
LLSs	:	Language Learning Strategies
MOE	:	Ministry of Education
SBI	:	Strategy-based Instruction
SRSA	:	Survey of Reading Strategies Awareness
TAP	:	Think Aloud Protocol
TOEFL	:	Test of English as a Foreign Language
UAE	:	United Arab Emirates
UAE MOHESR	:	UAE Ministry of Higher Education & Scientific Research

1 Chapter One: Introduction

1.1. Overview

Reading as a learning device in a student-centered era is fundamentally re-conceptualized to bring the learners to the center of its concentration. Furthermore, it aims at providing students with a variety of strategies and skills to provoke a kind of self-regulation and autonomous learning. The need for achieving this goal becomes more required than ever before and the educational authorities and policy makers become more keen on achieving real progress in that regard. However, research on students' performance in standardized exams like; TOEFL and IELTS, or school-based tests and local assessments like CEPA revealed that teaching and learning practices probably still require more attention to help achieve this end. The current study attempts to empirically examine aspects of reading comprehension instruction and learning, and to provide a kind of contribution to the development of more effective methods to teach reading so students become more independent in critical reading and obtaining knowledge as well. For this purpose, an experimental design has been implemented to investigate the effectiveness of strategy-based instruction and raising students' awareness of (Meta) cognitive strategies in improving comprehension and overall performance in reading, which could be interpreted in higher exam scores. These skills are important at a school level and highly required for successful university study and academic life.

1.2. Rationale of the Study

It is highly significant that language acquisition for general purposes, travel and for daily communications requires integration and natural interaction among the four skills; i.e. listening, speaking, reading and writing. However, the current researcher – like many others (Makni, 2006; Jafari and Ketabi, 2012) – believes that “...reading is probably the most important skill for second language learners in academic contexts” (Carrell, 1989; Lynch & Hudson, 1991 as cited by Grabe, 1991, P.375).

Like (Jafari and Ketabi, 2012), the present study suggests that reading comprehension is an essential component of any successful learning situation. This efficient comprehension does not automatically occur. On the contrary, it requires a kind of cognitive and metacognitive processing based on knowledge of relevant strategies and

ability to use, monitor, assess and adapt these strategies and skills in a more self-regulated way to acquire knowledge and achieve academic progress (Bazerman, 1985; Pressley and Afflerbach, 1995). These cognitive and metacognitive strategies cannot be inheritably transferred to the reader through traditional bottom-up reading lessons. Cohen (2010) believes that as long as the language aspects only are the focus of the teaching process and without students taking more responsibility and becoming more independent learners, the learning process will be blocked somewhere and students will frequently fail to communicate with the knowledge being conveyed through the text.

Similar to (Bazerman, 1985; Pressley and Afflerbach, 1995; Cohen, 2010) and very close to the UAE context, Makni (2006, p. 1) claims that “teachers of English in the UAE still use non-authentic reading passages accompanied by lower level, unvaried comprehension questions. As a result, [...] EFL learners still struggle with their readings in English after many years of instruction”. Furthermore, O’Sullivan (2014) agrees that Emirati secondary school students should be equipped with skills and strategies to cope with the requirements of the academic life, and Khoury and Düzgün (2005) argue that low reading proficiency among Higher College of Technology students is due to lack of efficient strategies and techniques. This unsatisfactory situation supported by my observations as an EFL instructor in the UAE for almost two decades encourage me to study reading comprehension performance of grade 12 students. These students – ideally speaking – should have been already exposed to all possible opportunities to learn and be ready to cope with higher education academic requirements. However, monitoring students’ performance in regular class reading tasks and school-based tests, working closely with EFL community for approximately 20 years and discussions with students and EFL instructors reveal that reading comprehension has been frequently reported as a serious challenge. In addition to that, score data analysis of TOEFL as published by Educational Testing Services (ETS) (2014), latest IELTS results as posted by Cambridge English Language Assessment (2013) and CEPA students’ performance as discussed by UAE Ministry of Higher Education and Scientific Research (MOHESR) (2014) implied a remarkable drop in reading comprehension proficiency compared to other test sections (see Table 1, p. 15) in the Arabic-speaking countries including the United Arab Emirates. This implies that more research contributions still need to be provided to discuss possible reasons for this problem and suggest empirical methods to rectify it, which adds much to the significance of the present study.

Based on	Test		Reading	Listening	Speaking	Writing
1st language (Arabic)	IELTS (out of 9)	General training	4.6	5.2	5.7	5.1
		Academic	4.9	5.1	5.7	4.9
	TOEFL (out of 30)	iBT	15	18	20	17
Country (UAE)	IELTS (out of 9)	General training	3.3	4.3	4.9	4.3
		Academic	4.6	4.8	5.3	4.7
	TOEFL (out of 30)	iBT	17	19	21	19

Table 1: IELTS (2012) & TOEFL (2013) Reading Score Means
(Retrieved from TOEFL & IELTS Official websites)

1.3. Statement of the Problem

EFL instruction in the UAE is ideally expected to provide students with sufficient knowledge and appropriate application of language rules and skills so they can gradually self-regulate their learning, communicatively use the language, and be qualified to continue their academic study at higher education institutes where English is mostly the medium of instruction. On top of these skills, comes reading comprehension as asserted in many studies (Carrell et al., 1998; Blachowicz and Ogle, 2008; Elhoweris et al., 2011). However, analysis of students' scores in CEPA, IELTS and TOEFL exams, beside teachers' reports reveal a noticeable weakness in students' reading comprehension performance, which adversely affects their study and academic progress as pointed out by Makni (2006) and O'Sullivan (2014). The current experimental study attempts to provide an empirical contribution to rectify that situation by examining the effectiveness of strategy-based instruction of reading and raising awareness of strategy-use (independent variable) in improving the UAE grade-12 students' reading comprehension performance (dependent variable).

1.4. The Scope of the Study

Broadly speaking, this research will hopefully assist in developing more effective methods for strategy-based instruction and learning of reading comprehension, which can help EFL learners be more autonomous and improve their performance in school-based tests, and standardized English exams. In addition, it aims at providing reading instructors and researchers with accessible data that can guide their planning and remedial work. However, this multi-method experimental study specifically concentrates on the UAE context, where serious reading comprehension problems have been

frequently reported (Makni, 2006; O’Sullivan, 2014). The target population of this study is Emirati grade twelve students both males and females in the government schools (see Appendix I: *Target Population Statistics*, p. 166). An experimental research design and both qualitative and quantitative methods are utilized to collect data from participating teachers and students.

In this study, a target list of eleven reading strategies has been carefully selected – as will be explained later in chapter three – after extensive discussions with expert teachers, two high school English supervisors and a colleague IELTS examiner, and after reviewing relevant literature. However, “reaching a consensus regarding a unified theoretical underpinning for learner strategies remains a challenge that has generated much debate” (Cohen, 2011; Cohen & Macaro, 2008; Macaro, 2006 as cited by Huang, 2013, p. 6). It is worth mentioning here that reading strategies are not limited to the selected list only. In other words, they are selectively opted for the purpose of this specific study as will be justified later. Reading strategies for test takers are numerous and manifold and they include management of time and anxiety, emotional and motivational aspects, social and affective elements and test-related features as well, however only selected list of cognitive and metacognitive strategies will be examined in this study.

1.5. The Research Questions and Hypotheses

Some studies attribute reading comprehension problems in most Arabic speaking countries to a culture that does not encourage reading at home (Khoury and Düzgün, 2005; Kiranmayi, 2012), and some others point out that low standards of teaching and learning and “... the ‘general deterioration’ in the English standards of UAE students” (O’Sullivan, 2014, p. 1) are probably strong reasons as well. On the other hand, other studies believe that direct or indirect influence of local culture and L1 practices on L2 skills learning cannot be ignored, however autonomy and ‘comprehension strategy training’ can play a significant role in resolving this problem (Grabe, 1991). Discussion of these reasons is not basically within the scope of this study, however they cannot be totally ignored. The present research is an attempt to study this problem and discuss possible suggestions to improve reading comprehension performance of grade 12 students in the UAE by answering the following research questions:

1. Will explicit strategy-based instruction (SBI) and raising awareness of metacognitive strategies help improve students' reading comprehension performance?
2. Are there any gender-based significant differences in reading comprehension performance in response to strategy-based training?
3. Can language proficiency influence (improve) the outcomes of reading strategy-based instruction?
4. What are the differences and/or similarities between the experimental and control groups?

Twenty-year experience in EFL teaching, working with all grades in the UAE, teaching CEPA and IELTS courses to adults (mostly Arabs) for almost a decade and reviewing a great number of relevant studies give a privilege to the current researcher to postulate the following hypotheses:

- There is a positive correlation between teaching reading strategies and raising the awareness of strategy use in one side, and improving reading comprehension quality of students in the other side.
- UAE Female students perform better than male students in reading comprehension tasks and can learn the strategies faster.
- Students of higher language proficiency level perform better than those of lower proficiency level in learning and practising the reading strategies.

This mixed-method research with experimental design will utilize a set of instruments including reading performance tasks (pre and post-tests) with linked reading strategy awareness questionnaires, think-aloud protocol, classroom observations and semi-structured interviews to test the above hypotheses and provide detailed empirical description of the differences and similarities between the participating groups (experimental and control).

1.6. The Significance of the Study

Generally speaking, research supporting reading comprehension is worthy because it provides the field with required information and suggestions to remedy the learners' access to knowledge problems and help create autonomy and self-regulation which are inevitably required for academic success and university study.

More specific to the UAE context, the Ministry of Education, educational councils and higher education institutes are endeavoring to fix the reported gap between the outcomes of K-12 education and the academic requirements of higher education in the United Arab Emirates. On top of reasons of this critical situation is the unsatisfying academic performance probably due to poor reading comprehension proficiency encountered by most freshmen who have recently graduated from grade 12 (O'Sullivan, 2014). This situation has definitely added much to the significance of this study and makes it more essential in the UAE where there is a noticeable reading comprehension dilemma as explained early in this chapter.

This study aims at providing an empirical evidence for how strategy-based instruction can remarkably assist in improving students' reading comprehension proficiency. The findings of this study will not only attract the attention of all educational field partners to the effectiveness of teaching reading strategies, but also provide them with practical methods to approach reading comprehension problems. For example, (1) textbook and curriculum developers will put more efforts to ensure that reading activities encourage critical thinking and guide students through gradual implementation of high-level thinking strategies, (2) teachers become more keen on adopting interactive and top-down reading models rather than only bottom-up and explicit grammar-translation methods, however it is important – here – to mention the need to provide teachers with effective training programs to develop their strategy-based instruction skills and encourage their job as 'facilitators' in a more student-centered environment (Campos, 2012), (3) and even students themselves and parents will conclude that good Emirati readers usually utilize 'comprehension monitoring strategies' and think-aloud techniques (Elhoweris et al., 2011) and that strategic reading can help improve reading scores in school tests and university admission exams.

On another hand, there is a common consensus among EFL instructors that

outstanding reading comprehension skills do not only support reading per se but also provide learners with ideas and knowledge of writing styles (Flower, 1990). This means that findings of such studies can provide indirect implications to improve writing as well; which increases the importance of reading comprehension research.

Beside all points mentioned above, the literature review reveals noticeable lack of studies discussing this research area in the Arab world and particularly in the United Arab Emirates as will be discussed later in chapter two. Studies on this area (Makni, 2006; Elhoweris et al., 2011; Alsamadani, 2012; O'Sullivan, 2014) mostly focus on either foundation year students or middle school and early years of secondary school students and insufficiently employ limited instruments for data collection. This present study attempts to fill that gap by focusing on grade 12 (top of the pre-university educational hierarchy in the UAE) and by utilizing a set of various instruments for collecting data to ensure reliability and display a closer picture of the reading comprehension problems in the whole K-12 stage in the UAE.

1.7. The Organization of the Dissertation

This dissertation consists of five chapters and a complete section of appendices. The first chapter is an introductory one including an overview of the research problem and how UAE grade 12 students are struggling with reading comprehension which results in noticeable low performance in school-based tests and university admission exams (CEPA, TOEFL & IELTS). In addition, this chapter states the research questions and hypotheses and defines the scope and significance of the study as well. Chapter two reviews the relevant studies which discuss the definitions of key concepts of reading theories and models, reading strategies compared to reading skills and the benefits of reading strategy-based instruction with more consideration to the UAE context. Chapter three represents a complete catalogue of the study methodology and research design. It provides demographic details of the participants and the grouping criteria. Moreover, it demonstrates the data collection procedures and justifies the use of the study instruments including the pre and post-tests with related questionnaires, interviews, class observations and think-aloud protocol. In addition, it provides details of the target reading strategies, treatment procedures and data analysis.

Chapter four explains and describes the results and findings derived from the

collected data and discusses the research questions and hypotheses. In other words, this chapter shows – with statistics and evidence – to what extent the students’ reading comprehension performance has been influenced by strategy-based instruction and how the language level affects the acceleration of that process. Furthermore, it clarifies similarities and differences between the experimental group and the control group, and highlights gender differences in acquiring the target strategies as well. Chapter five is the last one. It concludes the whole study with brief exploration of the key finding, hypotheses evaluation and summaries, as well as educational implications and recommendations to all parties of the reading instruction process; i.e. teachers, students, supervisors, parents, curriculum designers and even instructional leaders and educational decision makers. Moreover, it discusses the limitation of the study and possible future research.

The appendices section includes copies of all instruments and examples of reading training material and evidence as follows: appendix A displays a copy of pre and post-tests of reading comprehension performance, appendix B includes a copy of reading strategy awareness questionnaire, appendix C is a complete record of all think-aloud protocol documents (instructions, pre & post-tests with related transcripts), appendix D has a copy of the semi-structured interview questions and transcripts, appendix E includes a copy of classroom observation forms, appendix F demonstrates the reading strategy training course plan with an example lesson material. Appendix G includes a copy of learning feedback form, and appendix H contains a copy of UAE grade 12 official reading exams of term 1 and 2 of the 2013-14 academic year. In addition, appendix I shows statistics of target population, and finally appendix J includes a copy of official permissions and consent letters.

2 Chapter Two: Literature Review

2.1. Introduction

Research in reading has occupied a considerable portion of the overall research body of EFL and ESL teaching and learning methodology because reading has always been considered the main gate to access information and to acquire knowledge (McNamara, 2007). This interest in reading research becomes more obvious in the student-centered era when self-regulated learning and autonomous acquisition of the language becomes more required than ever before. Such research goes beyond exploration and diagnosis to serious attempts to find highly reliable techniques and strategies to help the learners optimize their reading habits and construct practical strategies to achieve the purpose of reading from the shortest – yet most efficient – way. As mentioned earlier in the first chapter, the current study attempts to investigate one aspect of this topic; i.e. improving comprehension by implementing effective reading strategies. For this reason, this section is devoted to critically shed some light on the related literature in order to find out what has been achieved so far, and how the current study will contribute by attempting to fill in the research gap(s) in this area particularly in the Arab world and very specifically in the UAE.

2.2. EFL Reading: History, Definitions, and Theories

Fischer (2003) argues that reading is the speaking of writing; i.e. if “Writing is expression, reading [is] impression” (p. 8). This might imply that when man first invented writing, he was already presenting a method to encode the spoken words and backup thoughts in form of characters, visuals, and signs. Then, in order to retrieve these words and thoughts, people need to decode and comprehend these visuals; the process method, which is later, called ‘reading’. Therefore, he believes that reading is as old as writing and its appearance is accordingly dated differently from a civilization to another according to the time people started their writing system in this civilization.

While researchers were trying to understand the historical progress of reading and how it works, two conflicting theories emerged. The first relates to the sound system supported by those who believe that reading is a ‘phonological process’ which occurs

letter by letter and word by word until the utterance constitutes meaning. While the second theory relates to graphic form (grapheme) and supported by those who see reading as a ‘visual semantic process’. Yet, Fischer (2003) believes that the two theories are correct as elementary reading requires phonological recognition of the written text, and then readers become fluent when they “minimize sound and maximize sense” (p. 14).

On the other hand, Lin (2011) approaches the concept of ‘reading’ by exploring and synthesizing the definitions suggested by other studies (Pressley and Afflerbach, 1995; Snow, 2002) providing such a more comprehensive definition “which characterizes reading as the interactions among three elements: the reader who is the *comprehender*, the *text* being read and the *activity* whereby the comprehension takes place” (p. 23). That definition puts obvious stress on the purpose of reading as an essential element of the whole process as highlighted by Grabe (2009) who – in his turn – stresses the necessity to adjust the reading process to meet the learning goals, and to achieve overall comprehension as asserted by Carroll (1971). More specific to the context of English as a foreign/ second language (EFL/ ESL), Anderson (1999) adds another element; that is the experience of the reader and his *background knowledge* which refers obviously to L1 as well as L2 reading capacity and practices. Moreover, McNamara (2007) asserts that reading should not be limited to the ability to decode words but – rather – should be conceptualized as a means of exchanging ideas; the process which requires sufficient and efficient interaction among the above-mentioned elements by employing the appropriate strategies and techniques to achieve comprehension.

In addition, literature review shows three main theories that are relevant to reading and comprehension. The first theory is called ‘schema theory’, which has been discussed by many scholars among whom is Carrell (1983) who highlights three main areas connected to reading in the schema theory. These are: (1) linguistic schemata, which focuses on the production of letters and sounds to enable encoding words, (2) formal schemata, which goes beyond that to text patterns arrangements to encourage faster reading, and finally (3) content schemata, which connects previous knowledge to the current content to stimulate comprehension. The second theory is called ‘information processing theory’, which considers the human mind like a computer that processes information in chunks, and initially stores it in the short-term memory, then in the long-

term memory (Maftoon and Esfandiari, 2015). Finally, the 'transactional theory' assumes that reading is a kind of transaction between the text the reader (Rosenblatt et al., 1988).

2.2.1 Models of Reading

Anderson (1999) and Grabe and Stoller (2011) argue that people – for long time – used to consider only the linguistic aspects of the text while reading and then gradually look for meaning usually by 'piece-by-piece mental translation'. This method of reading is called *bottom-up model* in which there is rare or no correspondence with the reader's background knowledge. On the other hand, in the *top-down model*, the reader gets more control and directly accesses the required information and activates his prior knowledge.

Anderson (1999) and Grabe and Stoller (2011) believe that the orthographic and lexical aspects of the text should be utilized fast to pave the way for other elements like background knowledge, prediction, and inference to contribute to text understanding. This view sounds like a kind of compromise of both models, which is called *interactive model*. That model was highly advocated by Kirby (2012) who believes that fluent readers should be able to interact with the text as in Figure 1 (next page). On the same line, Mattingly (1984) claims that reading has two distinctive modes; (1) the '*analytic*' reading in which the reader concentrates on the lexical form of the word and the grammatical function as well, which can assist in understanding the sentence, (2) and the '*impressionistic*' reading in which the reader focuses on the meaning of the sentence with less attention to the lexical or grammatical aspects.

Mattingly's (1984) *impressionistic mode* – similar to the '*interactive model*' – relies heavily on the prior knowledge and the familiarity of the orthographic patterns. Yet, there is a consensus that a person may not be considered as a reader if he/ she cannot analytically read.

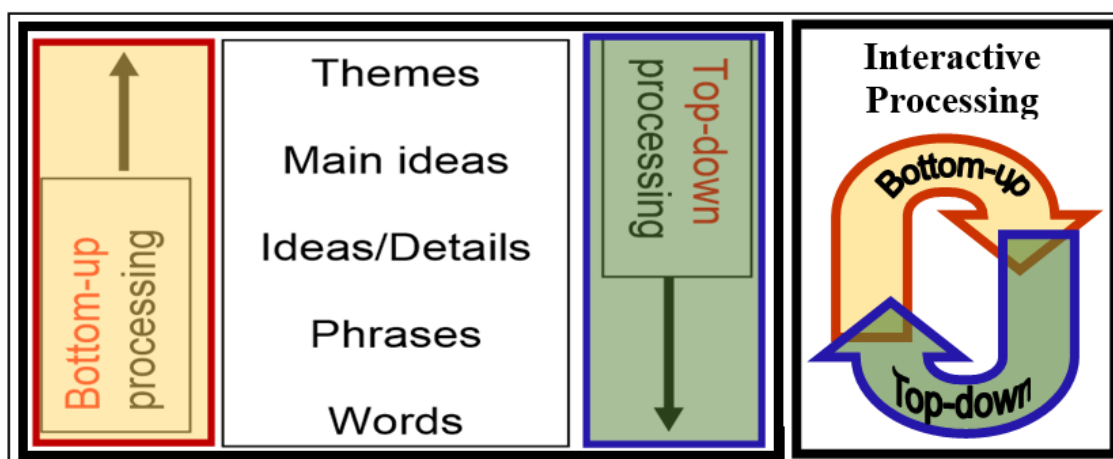


Figure 1: Levels of Processing in Reading
Adapted from (Kirby, 2012, p. 1)

2.2.2 Efficient Reading Comprehension

Tovani (2000) refers to the confusion between word decoding and real reading by showing great surprise of a parent who would say that his/ her child has comprehension problems but he/ she can read well. Similarly, Makni (2006) argues that for parents and teachers who would like to improve their children's reading skills, they need to teach them how to construct meaning from the printed text. In other words, research points out that efficient comprehension is basically what reading aims at and without this comprehension, reading becomes more like decoding.

Carroll (1971) shows that the term 'comprehension' is highly relevant to education and any basic educational system expects people to have a considerable body of knowledge and skills.

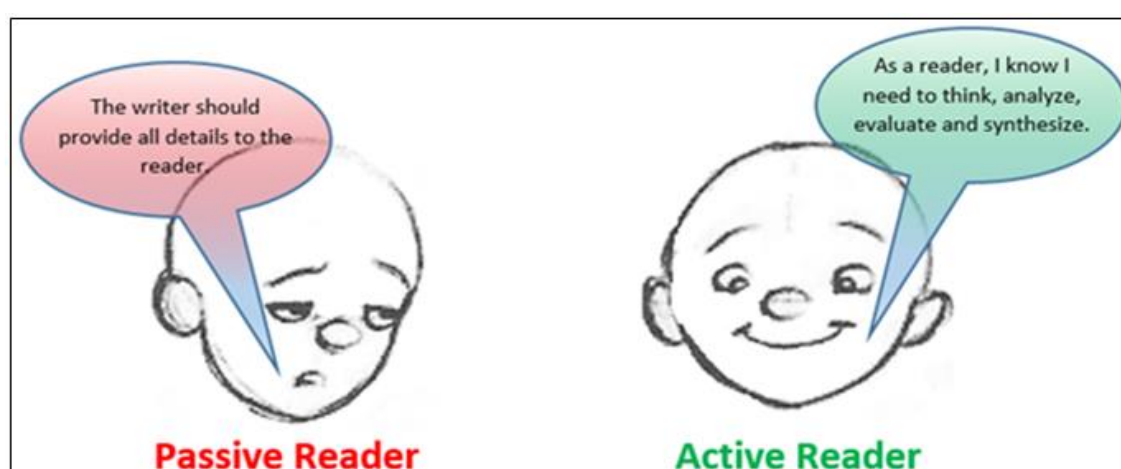


Figure 2: Types of Readers
Adapted from (Biggerton, 2012, p. 4)

In order to attract the IELTS candidates' attention to the necessity of employing effective skills and strategies to achieve success in reading and in their academic study, Biggerton (2012) differentiates between two types of readers (see Figure 2, p. 24); (1) *the passive reader* who expects the writer to do the whole work and provide the reader with required information to finish the reading task; the thing which consequently leads to insufficient understanding of the text, slow performance and failure to complete the tasks, while (2) *the active reader* interacts with the text by critically thinking, recalling his/ her relevant previous knowledge, practicing skills like skimming, scanning and making inference ...etc. and by showing the ability to automatically implement a variety of strategies to finish the required tasks. Moreover, Smith (1988) argues that a strategic reader should be able to constantly ask cognitive questions to let him interact with the content of the text.

In the same context, Baker and Brown (1984) could not ignore the essential role of all text-related lexical, fast decoding, semantic and phonemic features in developing efficient reading comprehension beside the intentional utilization of effective reading strategies.

2.3. Reading Skills Compared to Reading Strategies

Grabe (2009) asserts that reading is much more than learning the reading skills, and the reader should be strategic in order to achieve success. That assumption implies that reading skills and strategies are not equivalents and both of them are required for comprehension. Paris et al. (1996) supports this assumption and argues that skills are unconscious automatic information processing techniques, whereas strategies are deliberately selected to achieve specific goals before, during and after reading. However, according to (Afflerbach et al., 2008, p. 364), there is "a lack of consistency in the use of the terms skill and strategy" so that a considerable number of students and teachers still use them interchangeably without having clearly distinctive definitions. Moreover, Paris et al. (1996) believe that there is no consensus about a definition of 'strategies' and differentiating these strategies from other processes like thinking and reasoning still requires more efforts. Afflerbach et al. (2008) attribute this confusion to the extensive use of both terms in various disciplines to refer to developmental aspects of learning and knowledge acquisition, however their study stated that the term 'skill' has much to do with 'behavioral learning through practice' while the term 'strategy' implies constructive

and self-controlled processing of these practices. Resolving this issue becomes increasingly more important than ever before because such confusion could influence reading practices and applications. Therefore, Afflerbach et al. (2008, p. 368) suggest the following conceptualization:

Reading strategies are deliberate, goal-directed attempts to control and modify the reader's efforts to decode text, understand words, and construct meanings of text. [While,] reading skills are automatic actions that result in decoding and comprehension with speed, efficiency, and fluency and usually occur without awareness of the components or control involved.

On the other hand, some researchers (Paris et al., 1983; Grabe, 2009) argue that not all reading skills or strategies according to these definitions are correct and they would imply wrong understanding of what 'reading' means. An example of this is, when a young learner strategically attempts to finish reading a long story before his partner without comprehension (inappropriate skill) or when he guesses the meaning of a word according to first letter (wrong strategy). Moreover, they noted that both strategies (deliberately controlled) and skills (automatic processes) are not separable and the reader only can determine when and how to shift between them according to the reading task, context, linguistic aspects or reader's interactive background knowledge. It would be interesting here to add that as soon as the reader is able to – unconsciously – apply these strategies, they become skills and automatically integrate with his/ her overall comprehension competence (Grabe, 2009). That kind of distinction between the two concepts and the clarification of their role and functionality pave the way for studies aiming at investigating possible correlation between strategy-based instruction and effective reading comprehension levels.

2.3.1 Taxonomies of Reading Skills; What and How?

To make that "what and How?" question simple, we might need to consider how Alderson (2000) distinguishes between (1) the process of reading which means 'how' the reader interacts with the text and go beyond deciphering the words and phrases to make inferences, think of implications and to link existing information to his/ her prior knowledge and experience, and on the other hand (2) the product of reading which means 'what' the reader would like to achieve; for example, the comprehension of the text and may be completing any related tasks. It is significant here to note that Alderson (2000) criticizes reading assessment techniques which focuses only on the product. In

other words, he believes that reading assessment should measure not only the readers' literal comprehension of text but also check understanding of indirectly-stated information and comprehension of text implications. In order to assess these hierarchical levels of understanding, researchers need to identify the skills and strategies used by the reader to control the reading processes; thus a question testing the reader's ability to understand indirectly-stated information is per se a method of testing the ability to 'make inferences'. Therefore, it becomes essential for reading researchers to develop different lists and taxonomies of these skills and sub-skills. Alderson (2000) cited Lunzer and Gardener (1979) who identified thirty six strategies, Davis (1968) who suggested eight skills, Munby (1978) who defined a long taxonomy of 'micro-skills' and Grabe (1991) who stressed the significance of the metacognitive skills and their role in achieving self-regulation and autonomy.

These taxonomies were and still controversial and it seems that "reaching a consensus regarding a unified theoretical underpinning for learner strategies remains a challenge that has generated much debate" (Cohen, 2011; Cohen & Macaro, 2008; Macaro, 2006 as cited by Huang, 2013, p. 6). The most important characteristics as recognized by Brown (1978) are "[p]redicting, checking, monitoring, reality testing and coordination and control of deliberate attempts to learn or solve problems" (p. 1). In addition to those cognitive strategies, Forrest-Pressley and Waller (1984) suggest to assess metacognitive strategies by interviewing the readers and getting them to think aloud the different ways of reading and processing the text to achieve comprehension.

No	List of Target Strategies
1	Skimming for general ideas and topic sentences
2	Scanning for details and specific information
3	Classifying information
4	Recognizing cause and effect
5	Compare and contrast
6	Identifying references
7	Understanding inferences
8	Recognize Paraphrasing
9	Guessing meaning of words
10	Summarizing
11	Synthesis

Table 2: Taxonomy of Target Strategies

Table 2 (p. 27) displays a list of most common reading strategies as suggested by the present researcher after reviewing a considerable number of relevant studies. Justification and more calcification will be provided in chapter 3 under point (3.5.3.1).

2.3.2 Strategies for Test Takers

Although the majority of research on reading strategies is directed to cognitive and metacognitive domains, there are other strategy categories that should not be skipped when reading comprehension becomes part of a standardized test. These strategies are identified by Oxford (1990) as indirect strategies including affective and social domains that deal with motivation, emotions and social interactional aspects, while Paris et al. (1996) distinguishes them as control strategies that deal with management of time, attention and anxiety.

2.3.3 Can These Strategies be taught?

Tsai et al. (2010) have mentioned a number of studies (Brown & Palincsar, 1989; Carrell, 1985; Carrell, Pharis, & Liberto, 1989; Pearson & Fielding, 1991) which “determined that reading comprehension strategies are teachable, and when they are taught, such strategies may help to improve students’ performance on comprehension and recall tests” (p. 3). That notion has been supported by many researchers; for example Paris et al. (1996, p. 609) has argued that reading strategies are essential for improving comprehension and encouraging automaticity in the class and these strategies should be taught explicitly by the teachers.

Furthermore, other researchers have discussed how and why teach reading strategies. They argue that it is fundamental to transform from regular to guided and scaffold practice (NICHD, 2000 as cited by Afflerbach et al., 2008), and even more. In other words, explicit motivational and persuasive discussions should be well-employed by teachers to convince students that effective reading is cannot be achieved in the absence of these strategies (Grabe, 2009).

2.4. Cognition and Metacognition in Reading

Reading strategies are not exclusive to only cognitive and metacognitive. There are also compensation, memory, affective and social strategies as pointed out in (Oxford,

1990). However, the scope of the current study is only limited to cognitive strategies that are found to be the most popular among language learners and metacognitive strategies that enable the reader to control his/ her cognition as argued by Oxford (1990).

Since 1970s, enormous research has addressed reading (as the most essential educational task of learning) from its cognitive and metacognitive sides, although there were no obvious definitions of both terms until Forrest-Pressley and Waller (1984) put various views of many researchers (Flavell & Gordon 1977; and others) together and defined (1) cognition as; "...the actual processes and strategies that are used by a reader" (p. 6). While (2) metacognition is defined by Biggs (as cited in Landine and Stewart, 1998) as; "knowledge concerning one's own cognitive processes ...and the active monitoring and regulation of these processes" (p. 201). That definition indicates that 'metacognition' includes two major clusters; the first is related to the learner's understanding of the reading task including the linguistic features of the text and the steps he/ she needs to follow to comprehend that text. While the second cluster is concerned with the person's ability to regulate this process and monitor his/ her comprehension (Baker et al., 1980). Mattingly (1984) argue that research in these areas first started in psychology, linguistics and psycholinguistics then taken over to education to add more dimensions to the learning of reading.

Forrest-Pressley and Waller (1984) confirmed that they were not alone in 1976 when they and their co-workers discussed the 'metacognitive aspects' of reading and – on the other hand – criticized approaches to reading as only a decoding process. Furthermore, they referred to the early influential views of researchers and developmental psychologists like Flavell and Gordon (1977) who argued the notions of what children know about their own memory, and Brown (1978) who discussed things like; 'knowing, knowing about knowing and how to know'.

Brown (1978) has declared his bias to metacognition as an important 'aspect of knowledge', however, he underlines the incident part of learning by clarifying that not all kinds of learning happen consciously. He added that any isolation is definitely 'artificial' and the separation takes place for diagnosis and studying similarities and ways of integration between cognitive and metacognitive learning. In order to clarify that he referred to Holt's "*How Children Fail*" (1964 & 1995) where the later presented real examples from his classroom visits which reflect a huge gap between the learners'

comprehension and meta-comprehension. In other words, while the pupils understand the instructions, they neither have a strategy to follow these instructions nor an ability to know why they do not. This is simply because they do not constantly check their understanding.

Yet, Forrest-Pressley and Waller (1984) believe that their study represents the first empirical investigation to ‘metacognition’ in reading or at least reenergized that area of concern. They did not only reject ‘decoding words’ as a unique concept of reading, but also implied that skilled readers do comprehend what they read and monitor their comprehension as well.

Unfortunately, this clear bias – at that time – to the correlation between cognition and metacognition was not empirically supported and still one of the major concerns to metacognition is “the role of metacognitive processes in reading and the relationship between cognitive and metacognitive aspects of reading [which] have not been adequately examined” (Forrest-Pressley and Waller, 1984, p. 4).

In order to introduce almost the first empirical evidence of possible correlation between cognition and metacognition in reading, Forrest-Pressley and Waller (1984) conducted a huge study including 227 children from 3rd and 6th grades both boys and girls. They designed a battery including performance and verbalization tests to measure the cognitive and metacognitive aspects of reading. The study showed a significant correlation between cognitive and metacognitive aspects, however there was a cautious approach toward implications.

(Landine and Stewart, 1998) is another study that investigates the correlation between academic success and many other variables of personality on top of which is ‘metacognition’. The study sample consists of 108 grade 12 students from two high schools and the results reflect “a significant positive correlation between metacognition, motivation, locus of control, self-efficacy and academic average” (p. 205).

Unlike the above studies, (Mehrdad et al., 2012) is a recent study conducted on 180 undergraduate students who have been grouped according to their language proficiency levels into elementary, intermediate and advanced groups with each group including two sub groups; experimental and control. That study found no significant correlation between cognitive and metacognitive strategies on one side and students’

comprehension on the other side.

2.5. Language Problem or Reading Problem

Reading as a life skill is very popular and it is globally acknowledged as a main gate to knowledge and education, however that global concept is not within the scope of the present study. In other words, 'reading' in another language could be differently perceived when the language challenge blocks or weakens the readers' interaction with the text.

A good number of researchers (Flavell and Gordon, 1977; Forrest-Pressley and Waller, 1984; Grabe, 2004; and others) have mentioned a set of variables that could affect the learners' acquisition of cognitive and metacognitive reading strategies; among which are age, culture, motivation, and – most importantly – language proficiency level. This suggests an interesting question to EFL and ESL reading instructors and researchers: is reading in L2 a language matter or a reading problem? Alderson (2000) argues that language and reading knowledge are important factors, however without the learner's access to L2 knowledge, reading skills acquisition will not be possible.

Mehrdad et al. (2012) claimed that students can only benefit from these strategies if they are linguistically competent, otherwise they would be distracted by any language difficulty they might face in their readings. He added that the readers would be blinded by difficult vocabulary and they might lose connection with the meaning of the text due to word-by-word interpretation. However, the results of the study do not support that conclusion because even advanced students who are linguistically more competent failed to show improvement in their reading comprehension after the treatment.

2.6. Strategy-based Instruction (SBI) (Implicit & Explicit)

Pearson and Fielding (1996) advocate direct explicit instruction of reading comprehension strategies, however they believe that such method requires more research evaluation as a teaching tool. On the other hand, Paris et al. (1983) cited a big number of reading strategies researchers (Kintsch & Dijk, 1978; Brown and Day, 1983; Brown and Day, 1983; Taylor, 1986) who agree that explicit and direct methods or implicit and indirect teaching of reading strategies can show significant improvement in reading

comprehension than ‘regular basal instruction’, however the results of their studies on primary and middle school students give more credit to explicit and direct techniques as long as the teacher raises his students’ awareness to metacognitive strategies.

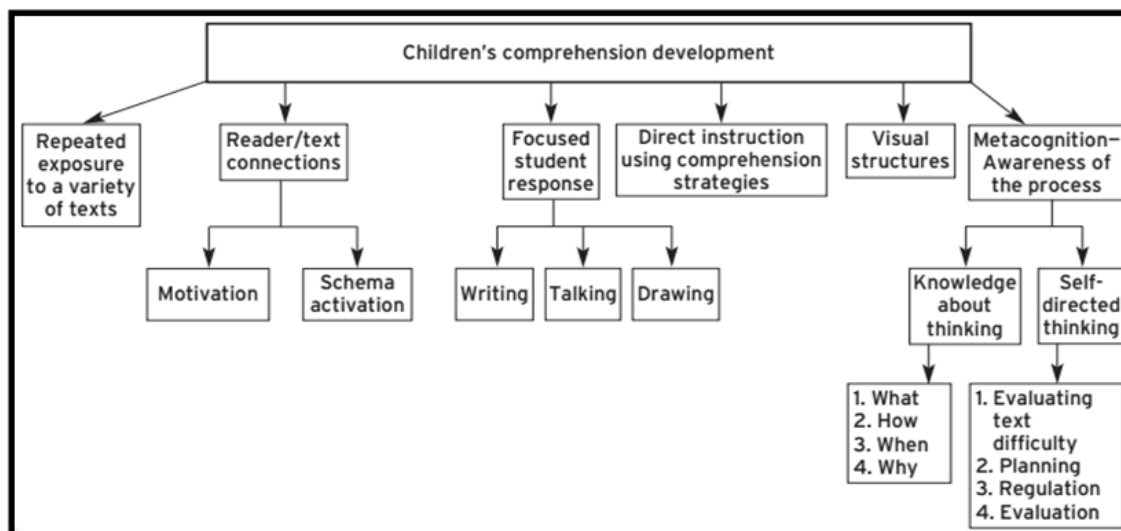


Figure 3: Comprehension Instructions
(Barton and Sawyer, 2003, p. 335)

As displayed in Figure 3 (above) Barton and Sawyer (2003) have provided a complete suggestion for direct (explicit) strategy-based instruction to develop comprehension performance of children. Cohen (2010) does not only supported that explicit strategy-based instruction, but also added another dimension. This dimension is related to the learners’ learning style. Therefore, he believes that ‘styles- and strategy-based instruction’ (SSBI) is essential to achieve real progress in the quality of learning and reading instruction. On the same track, Paris et al. (1983) confirmed that the circumstances of instruction can noticeably influence the quality of the learners cognitive development. This view has been clarified later by Forrest-Pressley and Waller (1984) who pointed out that instruction should be so explicit that teachers could confirm that their students have gone through very clear step-by-step procedures to cope with specific situations (for example, figuring out word meanings). They believe that such method ensures the learners’ ability to “optimize performance by choosing the most efficient strategy or approach for the specific situation” (p, 22).

2.7. Assessment of Reading Strategies

Lin (2011) suggests that reading assessment should be developed to go beyond

the linguistic aspects of the text to systematically examine the learners strategies and employed skills to interact with details and argumentations presented in the text.

Researchers and learning assessors use a variety of techniques to find out what strategies language learners use. Oxford (1990) has listed a very important set of these techniques as follows; interviews, observations, note taking, think-aloud procedures, diaries or journals and self-report surveys.

McNamara (2007) convincingly discusses the essentiality of reading strategies deliberate employment for successful comprehension, and demonstrates how traditional comprehension assessment tools can be insufficient for measuring real comprehension; and how think-aloud techniques should be standardized and approved for effective measurement and formative assessment of reading comprehension.

2.8. L1 Transfer, L2 Access or mutual benefit

Many EFL teachers believe that reading problems in L2 are mostly due to lack of reading proficiency in L1, however Traish (2012) concludes that there is a considerable amount of knowledge about L2 that the learner needs to know before reading capabilities can transfer from L1 to L2. This argument obviously assumes that reading skills and strategies can be interchangeably utilized across languages (Alderson, 2000), which means – on the other hand – that progress in L2 reading skills can support L1 reading as well.

Grabe (1991) has noted that L2 reading research has remarkably evolved over the past 25 years, and a considerable part of that research body has been attributed to reading strategies and the huge experience transferred from L1.

Generally speaking, the core purpose of reading in any language is to extract the meaning from the written text or furthermore, critically think of the content and interact with the information included. This basic understanding of reading suggests an assumption that language learning strategies and skills are transferable between languages. In other words, L1 instruction can spur or halt L2 learning, which has been asserted by Grabe (2009) who points out that “L2 reading instruction is based on applying what has been learned from L1” (p. XI).

Koda and Zehler (2008) argue that L1 reading knowledge cannot effectively influence L2 reading skills unless it is well-learned and automatically processed. Moreover, they believe that mutual benefit and transferability will continue to develop as long as there is close association between L1 and L2 resources and processes.

2.9. Reading Strategies: self-regulation and autonomous learning

There is a common consensus among educators and researchers that self-regulation is a basic characteristic of strategic learners. Young and Fry (2008) argue that the employment of reading strategies facilitates learning and memory processing. They have clarified that metacognitive regulation – unlike metacognitive knowledge – includes three components; i.e. planning, monitoring and evaluation. That assumption is supported by (Bruning et al., 1999) which adds that *planning* helps select the appropriate cognitive strategies and resources to accomplish a given task, *monitoring* tends to watch the progress of that task and the effectiveness of the adopted strategies, and finally *evaluation* judges the success of the planning and suggests alternative and compensating steps to achieve more progress or any required amendment. In other words, reading instruction should develop the “regulative mechanisms that readers consciously use to enhance comprehension” (Memiş and Bozkurt, 2013, p. 1243).

In addition to that, Makni (2006) – who conducted a similar study on the UAE students – concludes that autonomous learning is interestingly one of the most invaluable outcomes of successful strategy-based instruction, and such autonomy of knowledge acquisition is basically what university students need particularly in the UAE context.

2.10. Gender and Reading Comprehension

Research on male and female performance differences in response to language training has stimulated the interest of a big number of researchers from different backgrounds (Swann, 1992; Rieger, 2009). For instance, Memiş and Bozkurt (2013, p. 1244) argue that “Reading comprehension level of female students is higher than that of male students”. On the contrary, Young and Oxford (1997) conclude that male and female students generally use similar reading strategies with a few particular ones for each gender and there is no significant performance difference based on the gender. These two studies are only examples of the conflicting results of this research area.

Very specific to the context of the UAE and generally speaking, there is a common notion that the academic performance of female students is somehow better than that of the male students. However, discussing such notion requires more research efforts. (Alsheikh and Elhoweris, 2011) is one of a very few number of studies focusing on the gender differences of reading performance of high school UAE students. The focus of that study is to investigate the gender differences in motivation to reading in L2 among UAE high school students. It concludes that the female students are more motivated than the male students to read in EFL, and they respond faster to instruction. This conclusion supports the female performance superiority in academic attainment in the UAE, which provides indirect support implications to the gender-related hypothesis of the current study. However, such studies – again – are not enough to generalize the female academic domination concept. The shortage of such studies adds more significance to the current study.

3 Chapter Three: Methodology

3.1. Introduction and Research Purpose

Again, the purpose of the present study is to investigate the effectiveness of strategy-based instruction (SBI) and raising the (meta) cognitive awareness in improving the reading comprehension proficiency of the UAE grade twelve students who will soon take their first step toward a more academically-demanding life in the university where reading competence is highly required to obtain knowledge and achieve academic success. To make it clear, the study focuses on (meta)cognitive strategies not only because of their popularity among language learners as noted by Oxford (1990) but also because whenever research is conducted on the language proficiency and self-regulated language acquisition, the concept cognition always emerges (O'Malley and Chamot, 1990).

3.2. Research Variables

An analytic look into the research questions can show that the dependent variable of the study is the reading comprehension performance while the independent variables are (1) strategy-based instruction and raising awareness of metacognitive reading strategies, (2) students' gender, and (3) language proficiency level. In order to study the correlation between the independent variables and the dependent one, a mixed-method experimental design approach has been adopted.

In order to reduce or avoid any indirect effect on the study results and to support the validity of these results, the researcher listed possible intervening variables and attempted to control them as possible (see 3.5.1, p. 40). Age, gender, language level, study majors, socio-cultural and economic features, background knowledge, L1 reading proficiency, learning environment and timing,...etc. are examples of these intervening variables. Moreover, it is intriguingly interesting to mention that the training and all the study procedures of the control and experimental groups (in both schools) have been conducted in the resource center and the English language dedicated classroom which identically have the same setting, furniture, facilities, light and air-ventilation systems, IT devices and teaching aids. Moreover, the training days and timing were almost similar

except some uncontrollable incidents that required flexibility. Due to the strong personal and professional relationship and previous work cooperation, the researcher received exceptional support and dedication from the school administrations, which could assist in controlling the intervening variables as possible.

3.3. The Target Population and Study Sample

The target population of the study is all grade 12 Emirati students – both males and females – in the UAE government schools including Abu Dhabi Educational Council (ADEC) students who follow a different K-12 educational system, yet they sit to the same general secondary certificate Exams in the whole country. These students encounter the same reading comprehension challenge and need to meet the same university-admission language requirements (CEPA, IELTS & TOEFL). According to the latest school statistics of the academic year 2013-14 of the UAE ministry of education (MOE), the total number of Grade twelve students is approximately (20648) aged between 17 and 18 and divided as follows: 9537 students in ADEC schools and 11111 students in the rest of the educational zones (Ministry of Education, 2014) (see Appendix I: *Target Population Statistics*, p. 166). These students belong to fairly similar sociocultural and economic backgrounds and they all speak Arabic as first language.

The sample of the study has been randomly selected from two government secondary schools (one for boys and another for girls). After a consent letter has been circulated in both schools (see Appendix J: *Official Permissions and Consent Letters*, p. 167), the researcher received a big number of students who are ready to participate in the study and their parents have no objection, however only 82 students were randomly selected for easy management and accessibility. These students were divided into two almost equal groups, i.e. experimental and control. Table 3 (next page) displays information about the selection and grouping criteria and the numbers of subjects in both groups who are distributed according to gender, language level and major (science or art). Each group similarly has 41 students (20 males and 21 females). Moreover, the three language levels (low, average & high) and majors are represented almost equally in both groups.

Variables		Experimental		Control	
Numbers per Gender	Male	20		20	
	Female	21		21	
	Total	41		41	
Lang. Level	Low	12		12	
	Average	20		19	
	High	9		10	
	Total	41		41	
Grade and Numbers per Major		Grade 12			
		Science	Art	Science	Art
		25	16	26	15
		41		41	

Table 3: Grouping and Selection Criteria

Data of the students' language proficiency levels has been retrieved from the school records and verified by English teachers who provided the researcher with more test results and follow-up records to reflect a more realistic picture of the students' language level. The average of the test scores of term one and term two has been calculated and utilized for leveling students as well. These term exams follow the assessment rules and standards of the ministry of education and they are administered country-wide by the end of the term (see Appendix H: *UAE Grade12 Standard En. Term Exams*, p. 152). The average scores have been ranked and coded as low, average and high. Then, students have been accordingly distributed equally between the two groups.

3.4. Ethical Issues

When doing research with living things like students and teachers as in the case of the present study, privacy, honesty, fairness, transparency, confidentiality, frankness and other ethical issues should be taken into account (Walliman, 2006). With obvious transparency and clarity, the researcher – supported with a letter from the university (Appendix J1, p.167) – requested permission of the ministry and the educational zone who in their turn forwarded a no-objection letter to the selected schools for their information and to take action (Appendix J 2, 3 & 4). The researcher then briefed the selected schools administrations about the purpose of the study and honestly answered their questions about the timeline and procedures. After that, a consent letter has been circulated in both schools with complete details about the purpose of the study, timeline, and the procedures with very strict confirmation of privacy and confidentiality and that

the collected data will only be used for research purposes and will not be passed to any other parties under any circumstances (Appendix J 5). The schools have arranged for a meeting with the researcher early before the study starts to answer the teachers' and students' questions and to give them a presentation about their expected role and the steps of the study. Moreover, the researcher made it clear to all participants that taking part in that study is solely their own decision and they have the complete right to continue or quit at any time without consequences, and this will not affect their regular study or influence their academic grades in any way.

3.5. Research Design and Data Collection

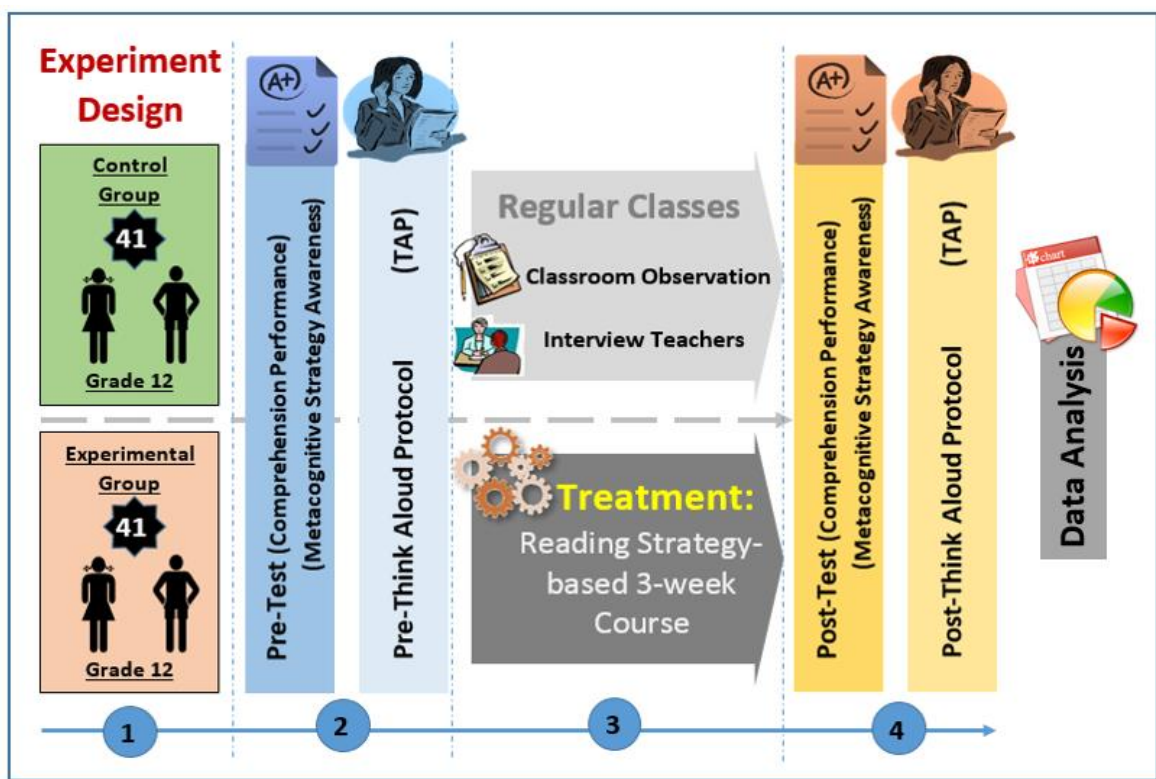


Figure 4: Instruments and Study Design
(Figure designed by the present researcher)

Howitt and Cramer (2000) argue that there is no research method better than experiments to explore the causal relationships between independent variables and independent ones. Building on that ground, the researcher adopts an experimental design with mixed methods in his attempt to answer the research questions. Both quantitative and qualitative data are collected before and after treatment by means of a variety of instruments as will be explained in details below. Figure 4(above) shows the experimental structure of the study and demonstrates the instruments and procedures

exploited for the data collection and analysis process in four consecutive steps. These four steps will be explored in details in the following sections (3.5.1 to 3.5.3).

3.5.1 The Study Groups: selection criteria and equality

The Subjects of the study are randomly selected and then set into two equally heterogeneous groups according to their gender, age, language level and their study majors. As mentioned before in Table 3, the basic selection and grouping criteria were gender, language proficiency level according to the average grades of final exams of terms one and two, and study major, however the researcher requested to meet with other subject teachers and the social worker in an attempt to collect more information about these students' background knowledge, their socio-cultural and economic status which could provide the study with clearer demographic information in order to ensure equality and homogeneity. To statistically measure this equality and homogeneity, an independent-samples *t*-test has been calculated.

Variables		Control	Experimental
Gender (Male / Female)	Mean	1.51	1.51
	Std. Deviation	0.51	0.51
	Mean Difference	0.00	
	t	.000	
	df	80	
	Sig (2-tailed)	1.000	
Lang. Proficiency (Low/Average/High)	Mean	1.95	1.93
	Std. Deviation	0.74	0.72
	Mean Difference	0.02	
	t	-.151	
	df	80	
	Sig (2- tailed)	0.880	
Pre-Test Score (Comprehension Performance)	Mean	12.49	12.56
	Std. Deviation	4.26	4.42
	Mean Difference	0.07	
	t	.076	
	df	80	
	Sig (2- tailed)	0.939	
Pre-Survey of meta(cognitive) Strategy use awareness	Mean	2.59	2.67
	Std. Deviation	0.63	0.67
	Mean Difference	0.08	
	t	.553	
	df	80	
	Sig (2- tailed)	0.582	

[*t*. values .000, -.151, .076 & .553 with 80 *df* and *p*. value > .05]

Table 4: Evidence of Equality (*t* test of independent groups)

It is worth mentioning here that this *t*-test was calculated early at the beginning of the study, and then – later after the pre-test – the results of the pretest and survey were inserted to ensure such equality of the groups. As Table 4 (on page 40) shows, no significant difference was found (all *p*. values > .05) which means accepting the *H*₀ (null hypothesis) and confirms equality of the groups.

A Levene test was conducted also to check and verify homogeneity of variances. All *p*. values > .05, which means there is no statistically significant difference and confirms homogeneity of variances (See Table 5 below).

Test of Homogeneity of Variances	Levene Statistic	df1	df2	Sig.
Gender	.000	1	80	1.000
Lang. Proficiency Level	.019	1	80	.892
Pre-Test Score (Comprehension Performance)	.113	1	80	.737
Pre-Survey overall mean	.071	1	80	.790

Table 5: Levene Test (Equality and Homogeneity)

3.5.2 Instruments

Providing training and effective intervention to improve learners' use of strategies is a sound purpose for assessing these strategies not only because the collected data will guide the training process, but also because future research can benefit from these data (Oxford, 1990). Selecting the appropriate devices and instruments for the assessment process is directly connected to the purpose of the study and the researcher's plan to utilize the collected data. A reading comprehension performance test and a highly-structured type questionnaire with "likert-type scale" (linked to the test so students need to verbalize what they have already done in the test) were exploited to collect quantitative data of students' understanding and application of cognitive and metacognitive reading strategies pre and post treatment.

In addition to that, the students' language proficiency levels have been determined by calculating the average grades in term one and two summative exams which are administered at the ministry level according to the assessment department standards. These grades have been further verified by discussion with students and teachers who provided more formative assessment scores and reports of the participating students.

On the other hand, valuable qualitative data has been collected by means of a think aloud technique – to let students verbalize their understanding and application of reading strategies –, class observations and semi-structured interviews with participating teachers to get information about the traditional reading instruction practices of the control group. These instruments and data collection techniques will be explored in details in the following sections.

3.5.2.1 Reading Comprehension Performance Test

In order to measure the dependent variable (reading comprehension competence) before and after treatment, a reading comprehension test is exploited. This test includes adapted parts from CEPA (Common Educational Proficiency Assessment), IELTS and TOEFL and consists of about 30 questions of various types (See appendix A1: *Pre-Test*, p. 90 & appendix A2: *Post-Test*, p. 97). This performance test is adapted from (Makni, 2006) and modified carefully to align the questions and task requirements with the target skills and strategies. Table 6 (below) displays the target eleven strategies aligned with the questions of the pre and post-tests.

Aligning Questions to Target Skills/Strategies		
Pre-test Qs	<== Skills/Strategies ==>	Post-test Qs
6, 10	Skimming for general ideas and topic sentences	6,10
1,4,8,11,16	Scanning for details and specific information	3,5,9,11,12
22-26	Classifying information	20-25
2	Recognizing cause and effect	7, 19
18-21	Compare and contrast	1, 16
3,5,15	Identifying references	2,8
9, 13	Understanding inferences	14,17
14	Recognize Paraphrasing	15
12,17	Guessing meaning of words	13, 18
27- 30	Summarizing	26-30
7	Synthesis	4

Table 6: Target strategies aligned with pre & post-test questions

As mentioned early in the literature review section, there is no consensus on one unified taxonomy of reading strategies that would be prescribed for course developers and reading instructors so their students benefit from and thus improve their strategic reading. In other words, course developers should address their course users' needs and

on the other hand, reading instructors should teach to their students' real needs rather than following prescribed plans and materials. Extensive discussions with high school English language teachers, instructional coordinators, EAP course trainers and students, and after reviewing detailed reports (Huang, 2013; Educational Testing Services (ETS), 2014) of IELTS, TOEFL and CEPA results of Arabic speaking candidates in general and Emirati students in particular, the researcher – guided by other studies (Alhaqbani and Riazi, 2012; Makni, 2006; O'Sullivan, 2014; O'Sullivan, 2012) – has suggested the above-mentioned key strategies (Table 6) as required for test takers in general and essential to support students in the UAE context.

3.5.2.2 Survey of Reading Strategies Awareness (SRSA)

Forrest-Pressley and Waller (1984) argue that even high scores of the reading comprehension tests are not enough to depict the learners' strategic reading ability and they should verbalize their understanding and awareness of using the related reading strategies. For investigating the students' awareness of reading strategies before and after the treatment, a survey of reading strategies awareness (SRSA) – with 'likert-type scale' – is attached to the pre and post comprehension performance test. This survey is linked to the performance test and students are requested to complete it according to what they actually did, not what they should do.

To ensure students' understanding of the survey items, Arabic translation for each item is provided side by side with the English statement. The items of this survey are adapted from (Mokhtari and Reichard, 2002; Lin, 2011; Zhang et al., 2014) with minor modifications to go with the performance test and the purpose of the study. The researcher was constantly clarifying the connection between the test and the survey and was keen to answer the students' questions about the test procedures and instructions. In this survey, the students are requested to tick one of five points on a scale from 0 (never) to 4 (always) (see *Appendix B: Survey of Reading Strategy Awareness*, p. 105). In order to analyze the survey data, the researcher – guided by (Koda and Zehler, 2008) – grouped and classified the survey 20 items as displayed in Table 7 (on page 44) to reflect the actual macro and micro strategies these items are intended to measure.

Macro Strategy	Survey Item	Micro Strategy
Planning	1	Task analysis
	2	Understanding goals
	4	Identify a reading purpose
	7	Skim for gist of information in the text
	8	Skim by reading pictures and illustrations
	14	Scan for specific information
Comprehension Monitoring	12	Critical thinking and analysis
	16	Re-read and double check ideas
	17	Recognize important and less important information
Problem Solving	5	Making connections
	6	Infer from contextual clues
	9	Paraphrase to ideas
	10	Visualization
	11	Recognize references
	13	Perceive inferences
	15	Summarizing
	18	Guessing contextual meaning
	19	Guessing meaning of difficult words (use word roots)
Evaluation/ Modification	3	Strategic approach (use alternative plans)
	20	Evaluate overall understanding

Table 7: Survey Items aligned with metacognitive strategies
Guided by (Koda and Zehler, 2008)

Score means of the overall response to the survey as well as classified scores are collected and submitted to SPSS for analysis and discussions.

3.5.2.3 Think Aloud Protocol (TAP)

The think aloud protocol is a technique of monitoring how individuals process the text comprehension and use related reading strategies (Cohen, 1988). It is not only a research method, but also one way of helping the learners and test takers to improve their comprehension proficiency (Lin, 2011). While, the survey of reading strategies awareness (SRSA) seems to retrieve self-reflected information about how the subjects actually process the reading comprehension test and which cognitive and metacognitive strategies they employed to achieve that goal, the think aloud technique enables the researcher to monitor the process by himself which adds more significance and validity to the collected data. The ‘think aloud’ instrument and the related documents are partially adapted from (Lin, 2011) and modified to be more suitable to the purpose of the current

study and the UAE context (see Appendix C: *Think Aloud Protocol (TAP) _Practice and Tool.* and sub-sections, P. 107).

After the researcher had introduced the ‘think-aloud’ technique and gave a brief presentation about what it aims at and how it might support the research, a considerable number of students showed interest to participate. However, the researcher selected only eight students (4 from the experimental group and 4 from the control group). These students represent multiple language proficiency levels and do not mind video-recording the sessions. The only restriction was – for cultural reasons – not to capture the female students’ faces and delete their records as soon as they are transcribed which was respected and accepted by the researcher.

As soon as the subjects have been selected and they accepted to participate in these individual think-aloud sessions, the researcher – like in similar studies (Lin, 2011) and guided by Rankin’s (1977) approach of think-aloud procedures – started a training programme to familiarize the participating students with the ‘think aloud’ technique and ensure their understanding to its procedures and instructions. The researcher briefly explains the framework of the protocol and gives a presentation to teach students the adopted steps, then he models a complete session and displays a relevant video from the internet. After that, the researcher answers the students’ questions and finally gave them individual opportunities to practice the ‘think aloud’ technique with a short text (see Appendix C1: *Instructions & Training TAP*, p. 107). It is interesting to mention that the students were curious about the technique, but feeling a bit shy and worried about vocabulary. While the students were doing their practice sessions, the researcher was providing feedback and giving advice until they felt confident.

The real ‘think aloud’ sessions were conducted pre and post treatment. They were based on a reading passage (CEPA level) and a comprehension task consisting of eight multiple choice questions. The two texts (of pre and post sessions) were divided into propositional units that were marked with red stars to remind the students that they need to stop and speak out their thoughts which could be a question, a remark or whatever is going on in their minds while they read (see appendix C2: *Think Aloud Protocol (Pre-test).* & C3: *Think Aloud Protocol (Post-test)*, pp. 108-112).

All pre and post sessions were recorded and transcribed in a unique way as

explained in Figure 5 (below) to provide easy access to the qualitative data included for later comparative and analytical description of the employed strategies and techniques. (for complete version, see appendix C4: *TAP Transcripts of the Control Group (Pre/Post-Test)*, p.115 and appendix C5: *TAP Transcripts of the Experimental Group (Pre/Post-Test)*, p. 125).

ST: Ok I read now/ "Have you ever heard... more than 17 years." **PU#1-3** واضح من الصورة والكلام إن الموضوع عن الفيل وكان اسمه جمبو (I could see from text and the picture this is going to be about an elephant called 'Jumbo') / "Jumbo was so large... something very large." **PU#4-5**/ok, this is easy teacher/ I will read this now/ this eheh second paragraph/ I hope easy also/ "Elephants are the largest animals ... they are also the second tallest of all animals." **PU#6-10** [Student struggles with the word 'approximately'] بس هذي الكلمة ما اعرف معناها

() Students' utterances in English, Arabic or Translations

" " includes exact quotations in **GREEN** colour

PU# refers to prepositional Unit number

[] includes descriptions and comments in italic font

Figure 5: Transcription system keys
Snapshot from (Student 01 transcript, p. 115)

To quantify the data collected by 'think-aloud protocol', a coding and classifying system has been adapted from (Lin, 2011; Schellings et al., 2006) with required changes to go with the current study context and purpose. All transcripts have been carefully scanned by two coders to form an inventory of all employed strategies to help generate a coding system. The research body of reading strategies includes many studies with varied coding system e.g. (Abbott, 2013; Elhilali and Omer, 2012; Jafari and Ketabi, 2012; Lin, 2011; Martin; Oxford, 1994; Pressley and Afflerbach, 1995; Schellings et al., 2006). Although there is a big similarity in the way they build a coding system for their data, each of these systems is tailored to work better for their specific contexts and purposes. The current study adapts a coding system from (Lin, 2011) and (Schellings et al., 2006) with minor changes to better represent the transcribed verbalization of the study subjects. That coding system has two categories; (1) *Comprehension strategies* which are coded as C strategies, and (2) *Metacognitive Strategies* which are coded as M strategies. For reliability purposes a colleague Ph.D. student who is interested in reading research and an IELTS expert trainer have been invited to review and discuss the coding

system, and accordingly required adjustments have been done (see **Error! Reference source not found. Error! Bookmark not defined.** for final version of the system).

Code	Categories	Strategies
C	Comprehension (cognitive)	C1. Using translation
		C2. Guessing the meaning
		C3. Skim for main idea
		C4. Skim for topic sentences
		C5. Scan for specific information
		C6. Identify references
		C7. Make inference
		C8. Classify and group related items
		C9. Paraphrase
		C10. Summarize
		C11. Synthesize
		C12. Compare and contrast
		C13. Recognize cause and effect
		C14. Locate Keywords
		C15. Use context clues
M	Metacognitive	M1. Monitoring comprehension
		M2. Questioning
		M3. Making connections
		M4. Visualizing
		M5. Re-reading
		M6. Check understanding
		M7. Use alternative plans
		M8. Analyze task
		M9. Activate prior knowledge

Table 8: Strategy Coding System and Categories

To measure the quality of strategy use, the researcher – guided by (Lin, 2011) – developed a scoring tool (See appendix *C6: TAP Strategy Coding System & Scoring Tool*, p. 136) that works in three steps: (1) count the quantity and frequencies of each employed strategy, (2) score the quality of these strategies as follows; 1 point for surface level use of strategy with no obvious efforts to achieve the goal, and 2 points for in depth utilization with clear intention and verbalization, and finally (3) a more sophisticated quality indicator – as suggested by Lin (2011) – is calculated by dividing the *total quality score* by the *total quantity score*. In addition to these indicators, the students’ scores of the comprehension task attached to the ‘think-aloud’ text will be compared and tested for correlation with these indicators. It is essential at this point to mention that the scoring system focuses on the ‘thought units’ produced by the subjects rather than the utterance whether it is in perfect or poor language, in English or Arabic. For consistency and

reliability reasons, the scoring process has been carried out by three raters, then inter-rater reliability coefficient has been calculated as will be explained later.

3.5.2.4 Teachers' interviews and Class Observations

While the current study aims mainly at finding out the effectiveness of teaching reading strategies in improving the comprehension proficiency of the students, it is fundamentally important to collect information about reading instruction, which the control group is receiving in their regular classes. Such information will enable the researcher to compare and discuss the differences and/or similarities between the control and experimental groups and to analyze the reality of reading instruction and practices. This will probably assist in getting useful pedagogical implications and providing useful recommendations. For that purpose, the researcher employed semi-structured interviews with two EFL teachers who accepted to participate in the study. Each of these teachers is teaching for more than 15 years and specialized in grade twelve curriculum for more than 5 years. In addition to these interviews, it was essential to verify the teachers' views with classroom visitation and real teaching sessions observations as suggested by Rieger (2009).

The interview form (see Appendix D: *Semi-Structured Interviews*, p. 137) includes ten open-ended questions that try to gradually elicit information about the reading comprehension lessons including; the material, methodology, planning, evaluation, remedial work and response to common reading problems if any...,etc. The researcher explains the purpose of the interview, and then he confirms confidentiality and gets the interviewees' consent to audio-record the interviews. The interviews are transcribed later (see appendix *D1: Interview Transcripts*, p. 139) and got ready for analysis and discussion.

Beside the valuable data collected from the interviews, it was essential to verify such data by observing real class practices. The researcher visited the control group twice while they were receiving their regular reading lessons for observation and collecting relevant data. A form has been developed (see Appendix E: *Classroom Observation (Form and Checklist)*, p. 144) for collecting specific data during the class visits because recording was not permitted by school policy as the teachers explained.

3.5.3 Treatment: Strategy-based Instruction

Quality training does not only teach but also encourages the learner to take more responsibility toward self-regulation and immediate implementation of successful strategies. The actual treatment lasts for about three weeks. The purpose of this treatment was to provide the experimental group with explicit reading strategy-based instruction to measure the effect of such training on the subjects' reading comprehension performance. McClelland and Rumelhart (1988) suggest a training model in which the teacher initiates the learning process by giving explicit instructions, then modeling and encouraging students to start guided practice and finally free practice and application. This model is developed later by Cohen (1969). It is called 'gradual release of responsibility', which is demonstrated in Figure 6 (below).

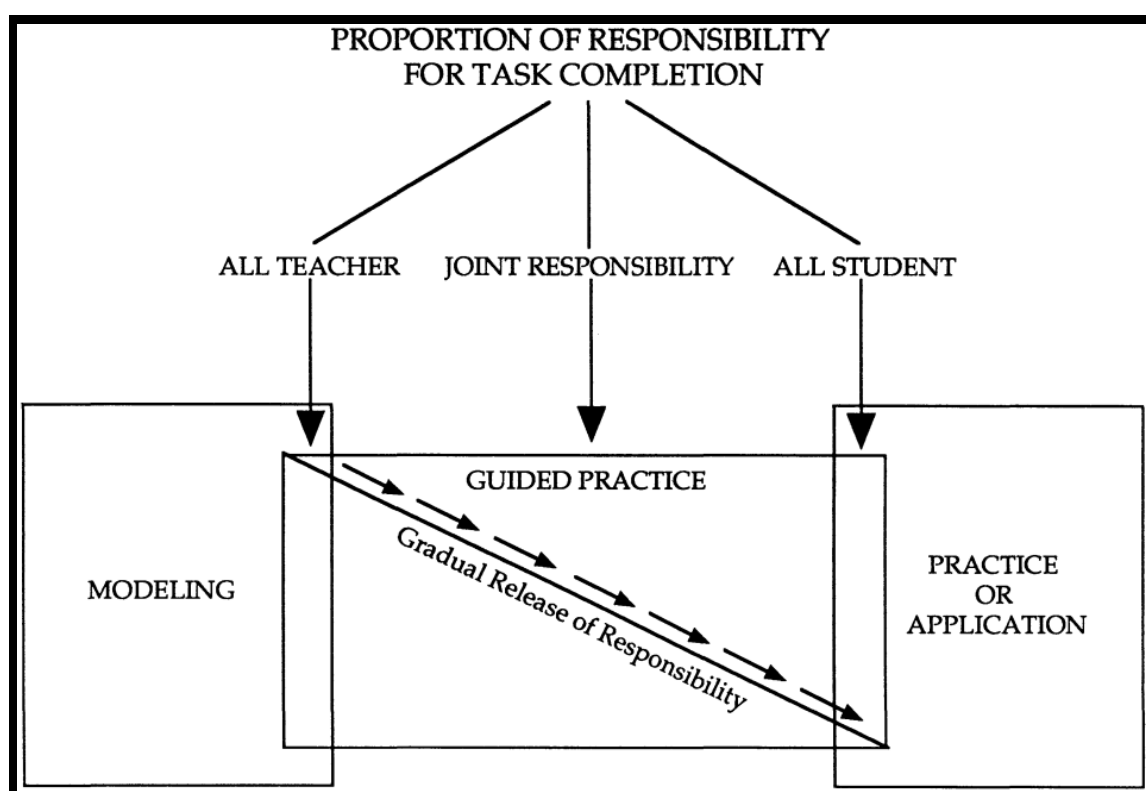


Figure 6: Explicit instruction model
(Pearson & Gallagher, 1983 as cited by Pearson and Fielding, 1996, p. 818)

On the other hand, Oxford (1990) distinguishes three types of strategy training. These are (1) "*awareness training*", which aims at raising learners awareness of the importance of such strategies for improving various language skills, (2) *one-time strategy training*, which focuses on learning and practicing one or more strategies that are required in particular situations, and finally (3) *long-term strategy training*, which – like

the one-time training – deals with learning and practice, yet it lasts for longer time and covers a bigger variety of strategies.

Because the ‘gradual responsibility release’ model lacks the follow-up and feedback which – by experience – are essential for the UAE students, the researcher adopts a method that combines both approaches – as demonstrated in Figure 7 (below) – where steps 5 and 6 could ensure better training and understanding. The researcher encourages the students evaluate and monitor their learning by filling in a feedback form (see Appendix G: *Learning Feedback Form*, p. 151) after each class. In response to these forms, the researcher flexibly provides more feedback and support – if needed – and encourages the students to do more activities in class and/or online (see Appendix F: *Reading Strategies Course: Plan and Material*, p. 145).

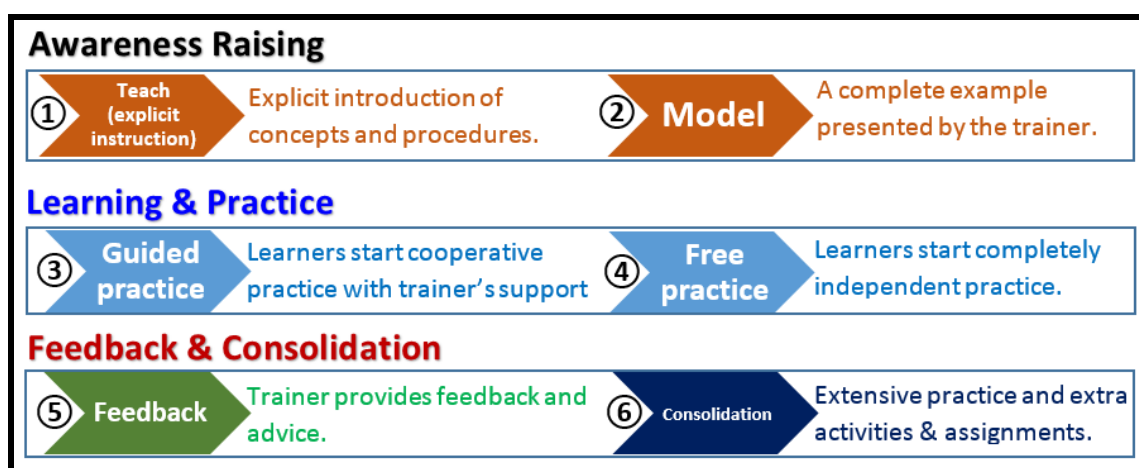


Figure 7: Adopted Strategy Training Approach
Guided by (Paris et al., 1996; Oxford, 1990)

3.5.3.1 Target Strategies

It was fundamentally important before the researcher begins the study to identify a target taxonomy of reading strategies. As discussed earlier in the literature review section, there might be no consensus about a unified taxonomy of strategies that would be prescribed to support poor readers (Huang, 2013). For this reason, the researcher attempted to approach the study in a practical way by investigating the most needed strategies that would help improve the UAE students' reading comprehension performance. In addition to the results of the pilot study that has been conducted in April, looking into the students' previous test records, discussions with teachers and colleague IELTS experts, talking with students, and my experience in teaching EAP courses to

UAE adults revealed that students depend heavily on linguistics and they mostly fail to apply basic reading strategies; most importantly the list displayed and defined in Table 9 (below). It was important for all participating parties of the study to have one unified definition for each of the strategies they will work together on.

No	List of Target Strategies	Definitions
01	Skimming for general ideas and topic sentences	To seek general information that is clearly stated in the text.
02	Scanning for details and specific information	To define specific information and details that is explicitly mentioned in the text.
03	Classifying information	To arrange things into groups that have similar characteristics.
04	Recognizing cause and effect	To understand and find why things happen.
05	Compare and contrast	To identify and highlight similar and different things.
06	Identifying references	To understand and find out how text items are related.
07	Understanding inferences	To elicit the implications of a certain linguistic body based on prior knowledge or experience.
08	Recognize Paraphrasing	To reproduce the text, especially to make it easier to understand.
09	Guessing meaning of words	To get the meaning of words, phrases, or sentences through linguistic and/or paralinguistic hints.
10	Summarizing	To produce a short and condensed version of the text.
11	Synthesis	To combine separate ideas from different sources.

Table 9: Definitions of Target Strategies
Definitions retrieved from (Ghuma, 2011; Makni, 2006)

3.5.3.2 Training Course (Material, Planning and Methods)

Once the target strategies are identified, the researcher started to develop a suitable strategy-based reading course to teach the above-mentioned list and help the students practice them. To build up that course, the researcher has benefited from a list of resources and course books (see Appendix F: *Reading Strategies Course: Plan and Material*, p. 145) particularly (Gough, 2010) which includes step-by-step lessons with

extra – gradually difficult – activities that assisted the trainer in applying the ‘gradual responsibility release model’ (see sample material on page 147; appendix F2: *Sample Material*). The trainer used to plan for the training sessions individually, in a way that enabled him to reflect, provide feedback and flexibly do concurrent required changes (to see a model lesson plan, go to appendix F1: *Example Lesson Plan*, p. 146). Side by side with this planning, students were taught to fill in a feedback form after each session for self-evaluation and reflection (see Appendix G: *Learning Feedback Form*, p. 151). These feedback forms were exceptionally useful for the trainer and students as well. Table 10 (below) displays a synoptic view of the training schedule which continues along the second, third and fourth weeks with considerable flexibility to cope with the schools schedule.

Time	Content		Teaching Methods
Week 01	Pre-Test (CEPA, IELTS & TOEFL) Think aloud sessions (TAP)		
Week 02	Target Strategies and Skills	1. Skimming for general ideas and topic sentences. 2. Guessing meaning of unknown words. 3. Scanning for details and specific information. 4. Recognizing cause and effect.	# Process-oriented strategy-based explicit instruction. # Teach – Model –
Week 03		1. Compare and contrast. 2. Identifying references. 3. Understanding inferences. 4. Recognize Paraphrasing.	Practice (guided/free) – Feedback – Consolidation (HW & Extra online activities
Week 04		1. Classifying information. 2. Summarizing. 3. Synthesis.	http://www.rihanonline.com/home/Students/regular-class)
Week 05	Post-Test (CEPA, IELTS & TOEFL) Think aloud sessions (TAP)		

Table 10: Schedule of the training Course

As mentioned in Table 10 and discussed earlier in this chapter, the course trainer followed a process-oriented approach with clear steps and goals; (1) *warming-up and setting the scene*: explicit introduction to the target strategy and explaining how it could be useful, (2) *presentation*: modeling and giving examples, (3) *practice*: collaborative controlled, and then free practice, and (4) *consolidation*: with feedback and extra activities. Along these steps, the responsibility is gradually transferred from the trainer to the students.

3.6. Validity and Reliability

Validity determines to what extent an instrument measures what it is designed for (Al-Noursi, 2014), while reliability refers to the consistency of the measure over time or with multiple samples (Manguel, 1996). The research quality is much influenced by its validity and reliability evidence. The Pre and post-reading comprehension tests are mostly adapted from real CEPA, IELTS, and TOEFL tests. These tests' validity has already been verified by the testing companies and developers, so validity of such tests is not an issue. However, because the researcher needed to make minor modifications to align the questions with the list of target strategies, it was a good idea to request two expert teachers, a colleague IELTS examiner, and an EAP (English for Academic Purposes) trainer to review these reading tests and the attached survey of reading strategies awareness (SRSA).

In addition to that and for 'feasibility and efficiency', a pilot study has been conducted in a neighboring boys' school along the third and fourth weeks of April. Two colleague teachers and about thirty students participated in that study. After the pilot study and extensive discussions with teachers and a colleague Ph.D. student who is interested in reading strategies in L1 (Arabic), the tests and survey have been accordingly adjusted to better reflect the purpose they are designed for.

Moreover, because the items of the pre and post-survey are identical, they have been shuffled for the post-test to ensure they reflect the students' real views and to reduce the influence of the pre-survey experience.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.945	.948	20

Table 11: Reliability Statistics of SRSA

Furthermore, Cronbach's Alpha is calculated to check the internal consistency of the survey of reading strategies awareness (SRSA). Table 11 (above) shows the calculated reliability coefficient as (0.945) which is satisfactory. In addition, to verify consistency of 'think-aloud' scores and rating, two-way mixed intraclass correlation has been calculated by ICC (Intraclass Correlation Coefficient) for the *sophistication of strategy use* as an overall quality indicator (three raters). As Table 12 (on page 54)

shows, both single and average measures are above 0.90, which indicates high consistency and reliability

	Intraclass Correlation ^b	95% Confidence Interval		Cronbach's Alpha	N of Items
		Lower Bound	Upper Bound		
Single Measures	.919 ^a	.808	.967	.957	3
Average Measures	.958 ^c	.894	.983		

Table 12: Rater Reliability by ICC (Intraclass Correlation Coefficient)

Finally, the current study attempts to answer the research questions and test the same findings by using several methods. Such multi-method technique is called ‘triangulation’ which is recommended by many researchers and scholars like Cohen (1988) because of the value it adds to data reliability (see Figure 8 below).

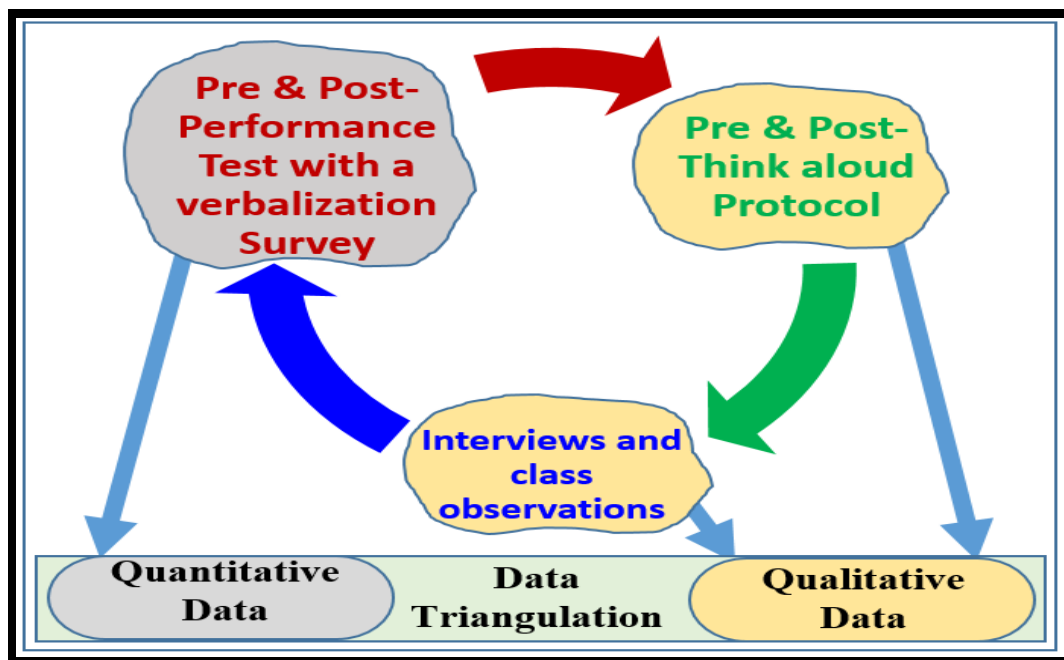


Figure 8: Data collection and Triangulation
(Figure designed by the present researcher)

3.7. Data Analysis Approach

Rigorous analysis is the next step after collecting data. Such analysis paves the way to the interpretation of the collected data to help discuss the research questions and test the study hypotheses. The analysis techniques depend on the type of the collected data and the research questions (Al-Noursi, 2014). The results of such analysis will be discussed, compared with and linked to similar studies in the literature review section.

To answer the first research question, both quantitative and qualitative data collected from pre and post-tests, survey and think-aloud protocol will be submitted to SPSS to generate required descriptive and frequency tables and calculate both independent sample and paired sample *t*-tests to find mean differences and correlations. Likewise similar calculations will be carried out to answer questions two and three by utilizing the above mentioned data sources in addition to the quantitative data of the students' grades as indicators of their language proficiency levels. The last research question will exploit all data sources particularly the qualitative data collected from the interviews and class observations.

4 Chapter Four: Findings and Discussions

4.1. Introduction

Oxford (1990, p. 201) confirms that "...learners who receive strategy training generally learn better than those who don't". On the contrary, Cohen (1986) claims that the benefits of such strategies cannot be completely confirmed because of the noted conflicts between the results of the studies since 1970. He adds that teaching these strategies may or may not promote comprehension depending on a set of elements like the type of the text, its context and language difficulty level, as well as the readers' motivation and interest. Park (2010) believes that such conflict of the results could be due to the "different methodological approaches" and perspectives.

The present study assumes that the learners, in test situations, need to learn and practice various methods and techniques so that they can cope with the test requirements. However, interesting reading texts would get them more motivated and probably accelerate and improve the comprehension process as suggested by Cohen (1986). Moreover, teachers' attitudes toward reading and their real practices in the classrooms can influence the reading comprehension learning process (Alsamadani, 2012).

This chapter aims at discussing the research questions and hypotheses according to the interpretations of the statistical results and findings extracted from the collected data of the study.

4.2. The Effect of Strategy-based Teaching on Reading Proficiency

The central and first research question in this study seeks to find out the effect of cognitive and metacognitive strategies in improving reading comprehension. For this purpose, the statistical results of the collected data of the pre and post-tests and surveys, as well as the think-aloud sessions will be discussed below.

The initial indications of the analysis of the pre and post-tests of comprehension performance, and surveys of awareness of metacognitive strategies imply that the performance mean of the experimental group in the posttest and survey is higher than that of the control group, which predictably suggests a correlation between the strategy-

based teaching and the learners' reading comprehension (See Figure 9 below).

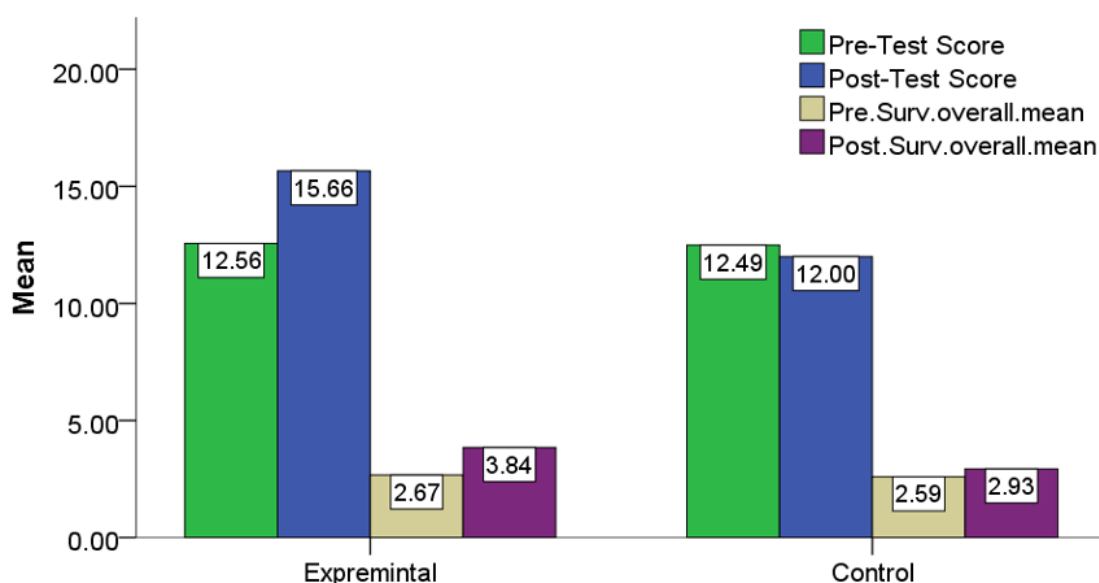


Figure 9: Pre & Post-tests Mean differences of control VS experimental group

For further analysis, and to verify the initial implications, an independent-samples t test has been conducted as displayed in Table 13 (below). The post-test and survey mean differences between the experimental and control groups are 3.66 & 0.91, with the following t values (3.178 & 5.782), while p values = .002 & 0.000 < 0.05 which means rejecting the null hypothesis (H_0) and accepting the alternative hypothesis (H_1); there is a statistically significant difference between the experimental and control group.

Variables		Control	Experimental
Post-Test Score (Comprehension Performance)	Mean	12.00	15.66
	Std. Deviation	4.71	5.67
	Mean Difference	3.66	
	t	3.178	
	df	80	
	Sig (2- tailed)	0.002*	
Post-Survey of meta(cognitive) Strategy use awareness	Mean	2.93	3.84
	Std. Deviation	0.62	0.80
	Mean Difference	0.91	
	t	5.782	
	df	80	
	Sig (2- tailed)	0.000*	

Table 13: Independent-samples t test (control & experimental groups)

Moreover, a paired-samples t test of the pre and post-tests of comprehension performance and metacognitive awareness of the experimental group has been calculated

as displayed in Table 14 (below). The results show the following values: MDs (3.10 & 1.17), t values = 8.243 & 18.519 and p values = (.000 & .000) < (.05), which refutes the null hypothesis (H_0) and again confirms a statistically significant difference between the pre and post-performance tests and metacognitive awareness surveys.

Variables		Pre-Test	Post-Test
Comprehension Performance Test (Cognitive)	Mean	12.56	15.66
	Std. Deviation	4.42	5.67
	Mean Difference	3.10	
	t	-8.243	
	df	40	
	Sig (2- tailed)	.000	
Awareness of Strategy use Survey (Meta-cognitive)	Mean	2.67	3.84
	Std. Deviation	0.67	0.80
	Mean Difference	1.17	
	t	-18.519	
	df	40	
	Sig (2- tailed)	.000	

Table 14: Paired-samples t test of pre & posttests (cognitive & meta-cognitive)

Becker (2000) argues that such significant differences might not be sufficient, and the ‘magnitude of the treatment effect’ should be measured by calculating the effect size (ES) which can reflect the strength of correlation. For this purpose, both Cohen’s (d) and Pearson’s (r) are calculated using t and df values. Table 15 (below) shows a medium effect size (0.70 & 0.33) of the cognitive aspects of the treatment, and an obviously large effect size of the metacognitive ones ($d > 0.8$ and $r > 0.50$).

	Effect Size (ES)	
	Cohen’s d	Pearson r
Pre-performance test * Post-performance test (Cognition)	0.70	0.33
Pre-awareness survey * Post- awareness survey (Metacognition)	1.27	0.54

Table 15: Pre * Post treatment Effect Size (ES)

In other words, it could be concluded that strategy-based teaching can improve the learners’ cognitive and metacognitive skills. However, Forrest-Pressley and Waller (1984) convincingly argue that learners could be blindly repeating what the teacher said during treatment sessions without real awareness of what it means, which implies that “mature metacognition should be attributed to a child only when both performance and verbalization scores were high” (p. 18). Due to this argument, it was essential for the

present study to examine the subjects' ability to verbalize how they implement cognitive and metacognitive strategies to improve their reading comprehension performance. The think-aloud protocol (TAP) has been utilized to investigate the subjects' ability to verbalize the process of comprehending a text. The qualitative data of the think-aloud sessions has been quantified as explained and justified earlier in chapter 3. The frequency and quality of used strategies for each subject have been calculated and verified and then, a sophistication indicator has been generated as well (See 3.5.2.3 on page 44).

TAP (Post-Test)		Control	Experimental
Strategy use frequency	Mean	23.75	28.25
	Std. Deviation	8.62	10.91
	Mean Difference	4.50	
Strategy use quality	Mean	31.75	50.25
	Std. Deviation	13.45	24.19
	Mean Difference	18.50	
Strategy use sophisticated indicator	Mean	1.31	1.69
	Std. Deviation	0.14	0.32
	Mean Difference	0.38	

Table 16: Mean differences: Control VS Experimental (TAP Post results)

Mean differences (*Mds*) in Table 16 (above) imply a noticeable difference between the performance of the subjects from the control group and those from the experimental group. Furthermore, a paired-samples *t* test (See Table 17 below) has been conducted on the pre and post results of the experimental subjects.

Variables		Pre	Post
Strategy use frequency	Mean	21.75	28.25
	Std. Deviation	7.93	10.90
	Mean Difference	6.50	
	t	4.333	
	df	3	
	Sig (2- tailed)	.023	
Strategy use quality	Mean	31.25	50.25
	Std. Deviation	13.10	24.19
	Mean Difference	19.00	
	t	4.403	
	df	3	
	Sig (2- tailed)	.042	
Strategy use sophisticated indicator	Mean	1.31	1.69
	Std. Deviation	0.09	0.31
	Mean Difference	0.38	
	t	3.302	
	df	3	
	Sig (2- tailed)	.046	

Table 17: Paired-samples *t* test (TAP – Experimental subjects)

All p values (.023, .042, and .046) are smaller than (.05) which means rejecting the null hypothesis (H_0) and accepting the alternative one (H_1). Therefore, it could be confirmed that there is a statistically significant difference between pre and post-performance. In addition, the effect size (ES) of frequency, quality and sophistication indicator has been calculated as displayed in Table 18 (below). The effect size – as reflected by the frequency of the used strategies – is considerably medium, while that implied by the values of the quality and sophistication indicator is obviously large (d value > 0.8 and r value > 0.50).

	Effect Size (ES)	
	Cohen's d	Pearson r
Pre * Post TAP: Strategy use (Frequency)	0.68	0.32
Pre * Post TAP: Strategy use (Quality)	1.34	0.56
Pre * Post TAP: Strategy use (Sophistication)	1.66	0.64

Table 18: Think-aloud Protocol (TAP) Effect Size (ES)

On another hand, it was interesting to investigate the effect of each individual strategy of the target list (see Table 6 on page 42) by looking into more detailed results. The discussions of these results could provide valuable pedagogical feedback for trainers and strategy instructors. All target strategies were given considerably equal concentration during teaching sessions, yet the students' feedback (see Appendix G: *Learning Feedback Form*) has indicated different response degrees and some strategies were more accessible and simpler to learn than others. A paired-samples t test has been conducted to measure the difference in performance for each strategy between the pre and post-tests. All Md values imply a sort of progress in performance of each strategy. However, looking into p values (all smaller than 0.05 except two strategies) reveal that pre and post-performance of all strategies (except '*compare & contrast*' and '*synthesis*') are statistically different (see Table 19, next page).

Further analysis with more consideration to qualitative data collected from the learning feedback form beside the Md and p values in Table 19 would imply that not all strategies are equally learnable and accessible. In other words, such findings can provide foundations for better planning of teaching strategies, which will be discussed later in chapter five under 'implications and recommendations for education'.

Weighted Average PRE & POST- Comprehension Test (Experimental Group)	Pre		Post	
	MEAN	Std. Deviation	MEAN	Std. Deviation
Skimming	.488	.285	.732	.276
	md(.244)	t (-6.172)	df (40)	Sig[2-tailed] (.000)
Scanning	.498	.215	.683	.241
	md(.185)	t (-6.364)	df (40)	Sig[2-tailed] (.000)
Classifying information	.361	.242	.398	.258
	md(.037)	t (-2.427)	df (40)	Sig[2-tailed] (.020)
Recognizing Cause & Effect	.463	.504	.561	.450
	md(.098)	t (-2.080)	df (40)	Sig[2-tailed] (.044)
Compare & Contrast	.396	.230	.415	.352
	md(.019)	t (-.462)	df (40)	Sig[2-tailed] (.645)
Identifying References	.529	.298	.695	.351
	md(.166)	t (-3.398)	df (40)	Sig[2-tailed] (.002)
Understanding Inferences	.317	.311	.537	.343
	md(.220)	t (-4.735)	df (40)	Sig[2-tailed] (.000)
Recognize Paraphrasing	.390	.494	.488	.506
	md(.098)	t (-2.080)	df (40)	Sig[2-tailed] (.044)
Guessing	.402	.340	.524	.335
	md(.122)	t (-3.194)	df (40)	Sig[2-tailed] (.003)
Summarizing	.378	.269	.410	.306
	md(.032)	t (-2.174)	df (40)	Sig[2-tailed] (.036)
Synthesis	.317	.471	.390	.494
	md(.073)	t (-1.177)	df (40)	Sig[2-tailed] (.083)

Table 19: Paired-samples *t* test of cognitive strategies (pre & posttests)

Similar to this analysis, another paired-samples *t* test has been conducted to measure the significance of progress in the subjects' awareness of metacognitive strategies as classified into planning (PL), comprehension monitoring (CM), problem solving (PS) and evaluation. There is a statistically significant difference between pre and post survey; with all *p* values = .000 < 0.05 and considerably high *MDs* (0.88 – 1.36) (see Table 20, next page). Yet, attention is required to comprehension monitoring (CM) which records the least mean difference (*md* = 0.88) between pre and post survey. Undoubtedly, '*comprehension monitoring*' is essential for tracking the reader's real understanding and interpretation of the text, and – intentionally – shifting to more successful strategies according to the faced circumstances (Oxford, 1994).

Weighted Average PRE & POST-SURVEY (Experimental Group)	Pre			Post		
	MEAN	Std. Deviation	RESULTS	MEAN	Std. Deviation	RESULTS
Planning (PL)	2.60	.720	Sometimes	3.96	0.793	Usually
	md (1.36) t (-16.30) df (40) Sig (2- tailed) (.000)					
Comprehension Monitoring (CM)	2.80	.846	Sometimes	3.68	0.985	Usually
	md (0.88) t (-11.15) df (40) Sig (2- tailed) (.000)					
Problem Solving (PS)	2.63	.707	Sometimes	3.81	0.753	Usually
	md (1.18) t (-14.84) df (40) Sig (2- tailed) (.000)					
Evaluation & Modification	2.84	.794	Sometimes	3.88	1.017	Usually
	md (1.04) t (-12.55) df (40) Sig (2- tailed) (.000)					

Table 20: Paired-samples *t* test of metacognitive strategies (pre & post survey)

Putting all findings together – and referring back to the argument of Forrest-Pressley and Waller (1984) – the null hypothesis (H_0) would be rejected, and it could be concluded that the subjects’ overall reading comprehension skills and awareness of metacognitive strategies have been significantly improved after the explicit strategy-based teaching sessions and training. This conclusion implies “[...] that learners who receive strategy training generally learn better than those who don’t...” (Oxford, 1990, p. 201).

4.3. Gender-based Differences in Learning Reading Strategies

Although there is a common supposition among Emirati people and teachers that female students often perform better than boys, the current study has attempted to empirically investigate that claim by comparing and analyzing the quantitative data – related to both genders – which are collected from the pre and post-performance tests and surveys, and the think-aloud sessions as well. Prior to that analysis, it was essential to conduct a test of equality and homogeneity of the language proficiency variable. Therefore, a Levene test has been conducted. The *p*. value = .977 > (.05) which means accepting the null hypothesis and confirms equality of male and female subjects’ language proficiency (see Table 21, next page).

Equality & Homogeneity of Variances	Levene Statistic	df1	df2	Sig.
Lang. Proficiency Level	.001	1	39	.977

Table 21: Levene Test of lang. proficiency (male VS female)

Once equality of language proficiency has been verified, an independent-samples *t* test is conducted to measure and compare performance means in the pre and post-tests and surveys (see Table 22 below).

Male VS Female Participants' Performance & Response to Treatment		Male		Female	
		MEAN	Std. Deviation	MEAN	Std. Deviation
Experimental	Pre-Test	10.50	4.07	14.52	3.88
		<i>md</i> (4.02) <i>t</i> (3.24) <i>df</i> (39) <i>Sig</i> (2- tailed)(.002)			
	Post-Test	13.15	5.20	18.05	5.13
		<i>md</i> (4.90) <i>t</i> (3.03) <i>df</i> (39) <i>Sig</i> (2- tailed)(.004)			
	Pre-Survey	2.66	.590	2.68	.756
		<i>md</i> (.02) <i>t</i> (.099) <i>df</i> (39) <i>Sig</i> (2- tailed)(.922)			
	Post-Survey	3.81	.689	3.87	.901
		<i>md</i> (.06) <i>t</i> (.234) <i>df</i> (39) <i>Sig</i> (2- tailed)(.816)			

Table 22: Independent-samples *t* test (Male VS Female Performance)

The *t* test calculations reveal that female students have noticeably outperformed male students not only in the performance post-test and survey but also in the pretest and survey. However, that difference is statistically significant only in performance pre and post-tests with *p* values (.002 & .004) < (.05). In addition, the performance mean difference (*md*) between pre and posttests of female students (18.05 – 14.52 = **3.53**) is greater than that of male students (13.15 – 10.50 = **2.65**) which means rejecting the null hypothesis (*H*₀) and confirms that Emirati female students will probably perform better than male students in reading comprehension tasks and in response to explicit reading strategy-based training. On the other hand, the *p* values of pre and post survey calculations (.922 & .816) are bigger than (.05), which means there is no statistically significant difference between male and female students regarding their awareness of metacognitive strategies use and implementation.

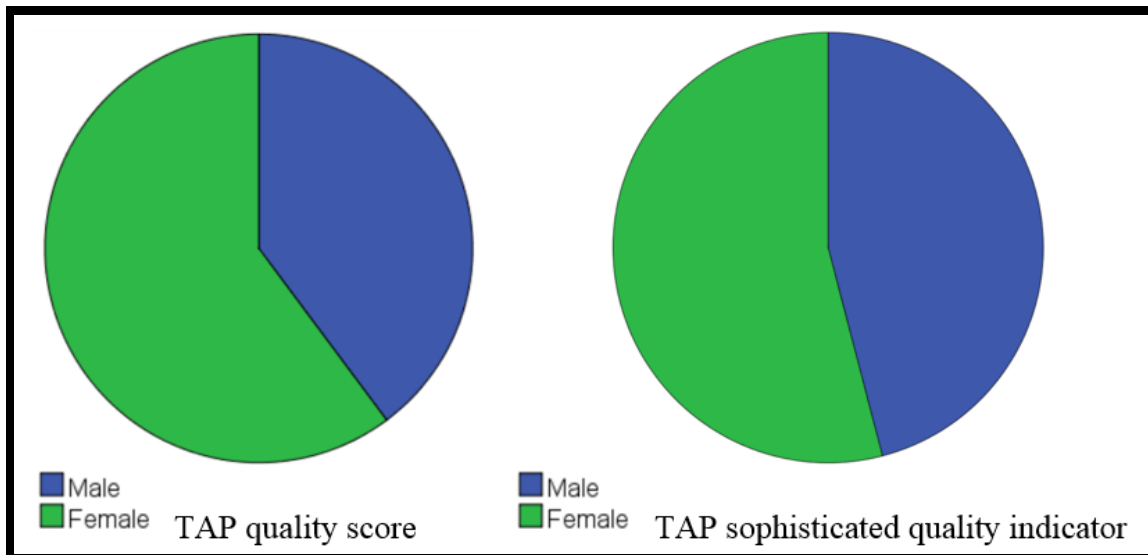


Figure 10: Male VS Female (Think Aloud Protocol)

Further analysis of gender-based differences is performed by investigating the quantitative data of think-aloud sessions. Figure 10 (above) shows a noticeable difference between male and female students with focus on quality score and sophistication value. Moreover, the analysis in Table 23 (below) shows that female students have outperformed male students in the amount of used strategies, the quality and the sophistication level with reference to means difference in the pre and post sessions.

Male VS Female Performance in TAP sessions (Experimental)		Male		Female	
		MEAN	Std. Deviation	MEAN	Std. Deviation
Strategy use frequency	Pre	18.50	12.02	25.00	1.14
		<i>md (6.50) t (.759) df (2) Sig (2- tailed)(.527)</i>			
	Post	23.50	16.26	33.00	1.41
		<i>md (9.50) t (.823) df (2) Sig (2- tailed)(.497)</i>			
Quality Score	Pre	26.00	19.80	36.50	3.54
		<i>md (10.50) t (.738) df (2) Sig (2- tailed)(.537)</i>			
	Post	40.00	35.35	60.50	9.19
		<i>md (20.50) t (.794) df (2) Sig (2- tailed)(.511)</i>			
Sophistication indicator	Pre	1.29	.127	1.32	.084
		<i>md (.03) t (.277) df (2) Sig (2- tailed)(.808)</i>			
	Post	1.55	.431	1.83	.198
		<i>md (.28) t (.819) df (2) Sig (2- tailed)(.499)</i>			

Table 23: Male VS Female (Think Aloud Protocol) - Mean differences

However, with all p values greater than (.05), the null hypothesis will be accepted and thus there is no statistically significant difference between male and female students in their ability to verbalize their use of reading strategies.

Putting all findings together, it could be concluded that Emirati female students will probably perform better than boys in real reading comprehension tasks, however there is no empirical evidence that they would outperform the male students regarding the awareness of metacognitive strategies or their ability to verbalize the implementation of used strategies. This conclusion matches what Oxford (1994) reported about females' overall greater strategy use than males although the males sometimes surpass them in some particular strategies.

4.4. Language Proficiency and Strategic Reading

There is a common consensus among language tutors that mastering a language will evidently enhance the learners' ability to work strategically around the content of that language. Alderson (2000) and Willis (2008) argue that language proficiency and vocabulary acquisition are key elements to achieve reading fluency and comprehension. The third research question of this study seeks to find any relationship between language proficiency and learning strategic reading. The chart in Figure 11 (below) displays an increasing difference of mean performance between the pre and post-tests related to the three levels of language proficiency of the experimental subjects.

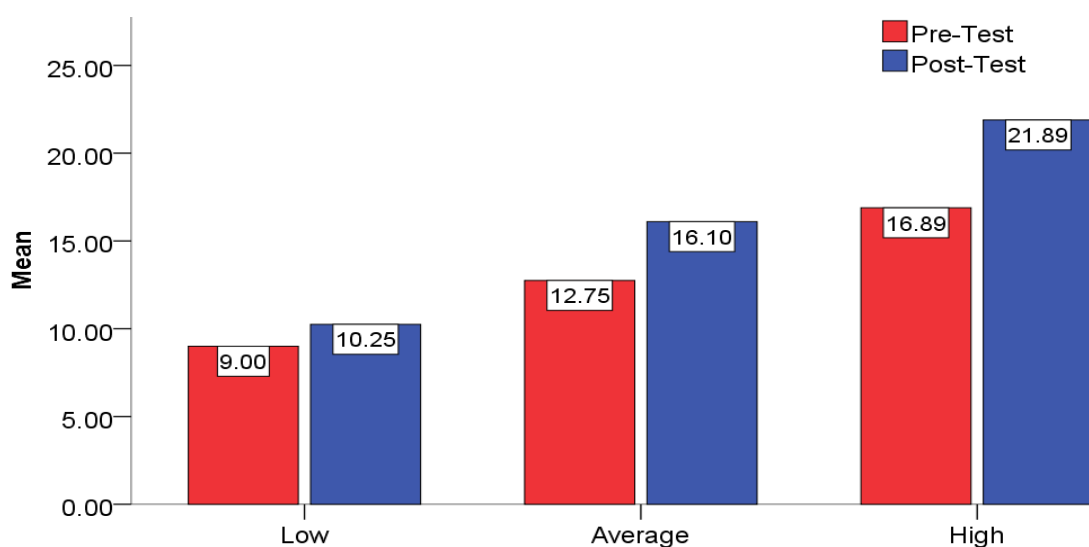


Figure 11: Pre & Post-Tests mean differences based on language prof. Levels

In addition, Table 24 (p. 66) provides detailed statistics about the difference of

comprehension performance means in the pre and post-tests. It is obvious that there is a kind of correlation between the language proficiency level and the comprehension performance score. In other words, the performance mean noticeably increases along the three language levels in the pre-test ($L = 9 < Av = 12.75 < H = 16.89$) and the post-test ($L = 10.25 < Av = 16.10 < H = 21.89$), which again indicates such correlation. In order to measure the response rate to the strategy-based treatment, the difference between pre and post-test means is calculated ($L = 1.25 < Av = 3.25 < H = 5.0$). That increasing difference confirms the relationship between the response rate and the language proficiency level.

Language Prof. Level		Pre-Test score	Post-Test score
Low N (12)	Mean	9.00	10.25
	Std. Deviation	3.67	3.74
	Mean Difference	1.25	
Average N (20)	Mean	12.75	16.10
	Std. Deviation	3.40	3.95
	Mean Difference	3.25	
High N (9)	Mean	16.89	21.89
	Std. Deviation	3.41	4.08
	Mean Difference	5.00	

Table 24: Mean differences of Language Prof. Levels in Pre & Post Tests

In order to measure the significance of that relation, an ANOVA test has been conducted (see Table 25).

		Sum of Squares	df	Mean Square	F	Sig.	Measures of Association	
Pre-Test* Lang. Prof. Level	Between Groups	321.459	2	160.73	.000	.000	.641	.411
	Within Groups	460.639	38	12.12				
	Total	782.098	40					
Post-Test Score*Lang. Prof. Level	Between Groups	704.281	2	352.14	.000	.000	.740	.547
	Within Groups	582.939	38	15.34				
	Total	1287.220	40					

Table 25: ANOVA of Language Proficiency Levels in Pre & Post Tests

The results of that ANOVA test show a considerable increase in the mean square

between and within groups (160.73 & 12.12 in the pretest vs. 352.14 & 15.35 in the posttest) with p values = .000 < .001, which indicates a statistically significant effect of language proficiency on comprehension performance and in response to strategy-based training. Moreover, the Eta Sq. value (.547) reflects a considerably large effect size, which confirms the same conclusion.

4.5. Interaction between Language Proficiency and Gender

It was interesting at this stage to find out whether there is any possible interaction between gender and language proficiency (independent variables), which would affect the students' response to strategy-based instruction and thus improving comprehension performance (dependent variable). For this purpose, a two-way ANOVA test has been conducted. Figure 12 (below) shows the generated plots of gender and language proficiency variable. It is obvious that the two lines are approximately parallel, which indicates minor or no interaction between the two variables.

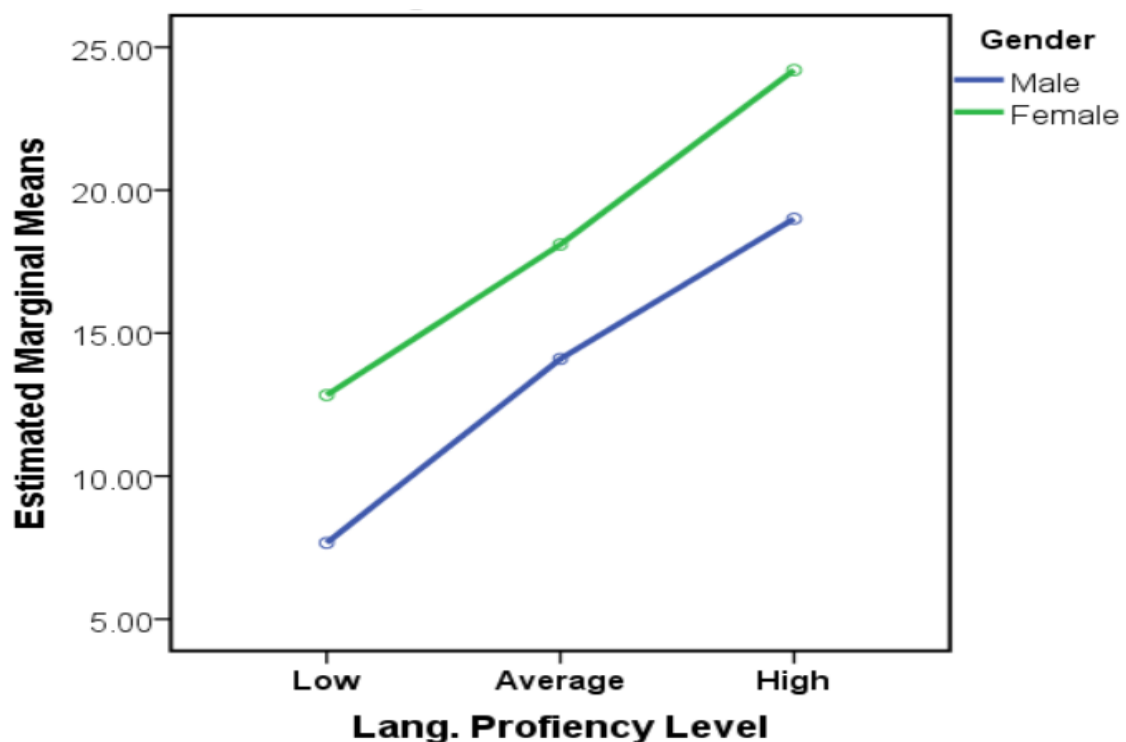


Figure 12: Estimated Marginal means of Post-test Score

Further details are displayed in Table 26, which shows the mean square for the post comprehension test separately for the language proficiency and the two genders.

Tests of Between-Subjects Effects

Dependent Variable: Post-Test Score

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	924.453 ^a	5	184.89	17.84	.000	.718 ^a
Intercept	9352.688	1	9352.69	902.35	.000	.963
Lang. Level	668.452	2	334.23	32.25	.000	.648
Gender	209.899	1	209.90	20.25	.000	.367
Lang. Level * Gender	3.563	2	1.78	.172	.843	.010
Error	362.767	35	10.37			
Total	11340.000	41				
Corrected Total	1287.220	40				

a. R Squared = .718 (Adjusted R Squared = .678)

Table 26: Two-way ANOVA: Univariate Analysis of Variance

While the results of the two-way ANOVA test confirm the significant effect of both variables as discussed earlier, it provides the following values for the interaction between them (F value = .172, P value = .843 > .05 and Eta = .010), which means there is no significant effect for the interaction between the two variables.

4.6. Insights into the Control and Experimental Groups

Qualitative data collected from the interviews, class observations and learning feedback, beside the indications of the quantitative data collected from the pre and post-tests with linked surveys and think-aloud sessions will be employed to answer the fourth research question. In other words, investigating the differences and/ or similarities between experimental and control groups would probably provide real insights into the causes of the reading comprehension problems, invaluable indications of the best practices and pedagogical implications that would assist in possible reform procedures. The following sub-points (4.6.1 : 4.6.4) summarize the most essential points as classified by the researcher.

4.6.1 The Challenge in Reading

It has been reported in various occasions that the challenge in reading in the Arab world particularly the Gulf region is not exclusive to L2. “[S]tudents don’t learn how to read well and they don’t love reading even in Arabic” (Teacher 01: *appendix D1*:

Interview Transcripts). In other words, it seems that students have the same challenge in L1(O’Sullivan, 2012). The present study attempted to find out the reasons behind this problem. The interviews with the teachers have implied that, there is noticeable awareness of reading problems and considerable knowledge of the significance of strategy-based instruction; however, class observations reveal that the education system still focuses on the textbook content that should be covered according to the schedule rather than standard-based outcome. That is why students still expect their teachers to teach them long lists of vocabulary and grammar rules as mentioned by teacher 02 who remarks that “...students like to learn new vocabulary every class” (appendix D1: Interview Transcripts). The same teacher adds that most students do not attempt to guess the meaning of difficult words and always prefer to ask for direct translations.

Moreover, class observations revealed that there is rare or no strategy-based instruction and that reading comprehension tasks are processed linguistically rather than strategically. In other words, bottom-up reading model is mostly employed in response to students’ request or most probably due to teachers’ little experience. Furthermore, non-authentic text with over simplification to vocabulary and writing style is used without giving much attention to comprehension strategies. All of a sudden, students find themselves sitting for standardized exams with authentic texts and style. In addition to this, when they join the university they discover that reading is not just for comprehension tasks of L2 classes but – far beyond that – a life skill that should have been developed like a repertoire of abilities and strategies to make inference, synthesize, evaluate, classify, ...etc. (Lin, 2011).

On the contrary, when the experimental subjects are exposed to considerable explicit strategy-based instruction with much focus on metacognitive techniques and comprehension monitoring, they were able to demonstrate a noticeable ability to verbalize their use and awareness of such (meta) cognitive strategies. In addition to the statistically significant effect of strategy-based instruction, the experimental students were involved in the progress assessment process and the text selection procedures by filling in a learning feedback form after each training session.

4.6.2 Language Deficiency or Reading Disorder

Traish (2012) and Alderson (2000) argue that access to L2 reading strategies

requires obtaining a considerable amount of L2 linguistic ability including grammar and vocabulary, otherwise learning reading skills in L2 will be blocked behind any language deficiency. The interviewed teachers were interested and quite aware of the positive effect of learning the strategies, however the class observations revealed that students' lack of language competence enforced not only a kind of 'compensating' intervention of L1 in the form of explicit translations or providing examples in Arabic, but also complete or partial disregard of comprehension strategies.

As discussed earlier in this chapter (point 4.4), language efficiency would accelerate the process of learning the reading strategies and facilitate the interaction with the written text, which would probably encourage top-down and interactive reading modes, and thereby results in smooth processing and implementation of comprehension strategies. This conclusion is in line with what Fischer (2003) argues about the ability of readers with high language competence to employ more strategies providing that they have already received adequate training. Therefore, while language competence is required for quick access to text comprehension, effective training of strategy-based reading is essential for the success and improvement of comprehension proficiency.

4.6.3 Effect of Culture and L1 Learning

Strategic reading does not suddenly emerge in L2 classes. It develops and evolves through years of life and it is remarkably influenced by culture, parents, peers, teachers, classmates and L1 acquisition and learning. These elements function like a "... bridge or scaffold from other-regulated to self-regulated learning" (Paris et al., 1996, p. 628).

In response to question 10, Teacher 01 remarks that reading problems do not belong to school only and the whole educational system is responsible for it. The same teacher adds that "reading should receive more attention from KG to grade twelve [and] teachers need to update their teaching method".

Some English language teachers believe that code switching and direct translations into L1 (Arabic) can help students overcome the reading problems by skipping any language barriers. Yet, Traish (2012) who has investigated the role of L1 (Arabic) as a teaching medium to facilitate the acquisition and learning of L2 (English) reading skills, found that the students who received training in Arabic did not show any

significant progress over those who received the training in English. Furthermore, she concluded that the notion of integration and skill transferability between L1 and L2 is what curriculum designers and instructors need to consider. In other words, once the students receive strategy-based training of reading in L1 and L2 classes, this can help achieve fast progress and ensure mutual support.

4.6.4 Students' Motivation and Autonomy

Lin (2011) argues that while there is a big body of research conducted on reading comprehension, very few studies have approached the affective domain of reading and how the readers' interest can stimulate or hinder the interaction with the text. It is intriguingly interesting as well to mention that in real instruction situations, it might not be possible to completely isolate the effect of social and affective domains.

That is why it was important for the experimental training course to be flexible enough to cope with the students' interest as reported in the learning feedback form. On the contrary, there was no chance in the traditional classes to listen to the students' feedback or to consider any changes according to the students' interest, which makes the reading sessions boring and the students less motivated. Therefore, Tovani (2000, p. 55) claims that "[c]ognitive and metacognitive strategic behaviour appears devoid of effect and is aimless if it is not framed by motivation". In other words, it can be argued that the motivated learners can be more responsive to strategy-based instruction.

Moreover, the implementation of the gradual release of responsibility techniques in the training course enhances the notion of autonomous learning, so the students were expected to be more self-regulated and able to utilize the reading cognitive and metacognitive strategies without the teacher's support. On the contrary, the students of the control group are noticeably dependent on their teacher who is expected to provide meaning, explain vague ideas and provide extended support to answer the comprehension questions. Tovani (2011, p. 66) remarks that "self-regulated and autonomous learning is a dynamic inter-relational construct that needs to be initiated by the learner's motivation and developed by the teacher's instructional capacity. And Grabe (2009) discusses a set of factors that influence the common motivation level toward reading. This range of factors includes instructional techniques, home environment, parents' education, community values, and socioeconomic and sociocultural trends...etc.

5 Chapter Five: Conclusions and Limitations

5.1. Introduction

According to the study of (Forrest-Pressley and Waller, 1984) there is a big agenda of factors affecting reading; most importantly (language – attention – memory), and they cannot be totally isolated during any investigation of any or all of the components of reading (decoding – comprehension – strategies). In other words, it is not only the cognitive and metacognitive aspects that would influence the learning and teaching of strategic reading, but also there are other affective, linguistic, memory-related...etc. components that would probably play an important role as well.

As suggested by Fischer (2003) strategic readers are proficient enough to get the most of the written text and they are able to wisely employ more sophisticated techniques to cope with various difficulty levels of the text. In this final chapter, the researcher attempts to summarize the key findings and conclusions of the study and explore the possible implications and pedagogical recommendations for education in general and the instruction of reading as a long-life skill and essential utility for academic success and problem solving.

5.2. Key Findings and Summary

In conclusion, the present study focuses on some major aspects of the reading comprehension problems in the Arab world, particularly in the UAE and most specifically for grade twelve students as reflected in the school-based tests and university admission exams like CEPA, TOEFL and IELTS. In other words, the current study seeks to find out whether cognitive and meta-cognitive strategy-based instruction can improve the students' reading comprehension performance. Moreover, it attempts to find any gender-based differences in response to the treatment, and if language proficiency can accelerate strategic reading process. Mixed method research with experimental design has been employed. A set of instruments (including pre/ post-performance tests with linked surveys to measure awareness of used strategies and think aloud sessions, as well as semi-structured interviews and class observations) have been employed to collect quantitative and qualitative data.

Data analysis revealed a significant correlation between (meta)cognitive strategy-based instruction and the improvement of the students' reading comprehension. In addition to this, female students outperformed the male students in the reading comprehension tasks but there was no evidence for any gender differences regarding the awareness of used strategies or the ability to verbalize their implementation of such strategies. Moreover, it was concluded that students with high language proficiency can learn the reading strategies faster and consequently have their reading comprehension improved.

5.3. Implications and Recommendations for Education

Forrest-Pressley and Waller (1984) point out that implications of strategic reading studies should be considered carefully and "it would not be wise to leap quickly from the [...] findings to practical applications" (p. 123). However, Anderson et al. (1985) argue that the results of such studies support educational reform efforts that aim at educating confident and competent learners who are capable to independently pursue their personal and professional development with more self-control and self-regulation. In other words, reform efforts strive to push the educational system toward this end which strategic reading has much to contribute to. Earlier research and studies agree that strategic reading can evidently help accomplish many objectives of long-term educational reform particularly in the areas of curriculum development, instruction and assessment of strategies (Paris et al., 1996).

The results of the current study imply that reading strategies are essential for academic success and problem solving, which probably means that no serious educational reform programme may ignore reading comprehension skills. The following sections will summarize the key implications and recommendations for all education partners, curriculum development and reading assessment techniques.

5.3.1 What Course Developers Need to Know

For learners to become successful strategic readers, not only the teaching methodology and students' and teachers' perceptions that need to be reconsidered, but also the reading material and curriculum. That is why course developers need to be aware of the results and recommendations of reading research. They need to

continuously develop reading courses to go up with the latest research results. There are argues that commercial courses reduce teachers' and students' opportunity to implement individual reading strategies and control the reading process (Paris et al., 1996; O'Malley and Chamot, 1990; Blachowicz and Ogle, 2008; Grabe, 2009; Grabe and Stoller, 2011). That is why the current study recommends getting teachers flexibly involved in the material selection process to enable them to wisely and rationally diversify and select the lesson material from various resources according to the learning situation requirements; not forgetting to continuously measure the students' motivation and interest through learning feedback forms and discussion sessions.

Reading is a master knowledge-acquiring skill that needs to be enhanced and integrated with all subjects. Furthermore, many studies assert that strategic reading is woven with strategic writing, listening and speaking as well as motivation and metacognition (Paris et al., 1996; Larson, 2009). For that reason, curriculum developers must construct and develop strategy-wise courses to stimulate the students' self-controlled learning and let teachers enjoy directing their students toward independent knowledge acquisition. An evidence of such strategic aspects of integration in the curriculum is the ability of the included tasks to encourage all dimensions of critical thinking as a major component of strategic reading.

Although mutual support and transferability between L1 and L2 are controversial, there is much in common between L1 and L2 classes, which could be employed to accomplish a kind of integration with L1 (Arabic) reading activities and other school subjects (content-based integrated approach) (Grabe, 1991). Such mutual support will probably save time and efforts. In addition to this, it will not only expose students to more practice and learning opportunities, but also helps attack reading comprehension problems by teachers of other school subjects.

5.3.2 What Parents and Teachers Need to Know

The global purpose of reading is to help readers solve problems through getting required knowledge in a strategically flexible way with complete readiness to employ compensating techniques in order to cope with text difficulty or context ambiguity.

As AL-Brashdi (2002) points out that the readers should be provided with critical thinking tools so they do not unconsciously take what they read for granted but

analyze, synthesis and criticize. As mentioned earlier in this study, this goal cannot be achieved as long as reading instruction sessions and resources focus only on the linguistic features of the text, which prevents the learners from practising the *top-down* techniques.

It is interesting at this stage to draw parents' attention to the probability that kids' early experiences and family culture play a remarkable role in shaping the attitude toward reading as a life skill in general and a learning device in particular. Therefore, the maturity of the reading skills employment, and the awareness and ability to verbalize the cognitive and metacognitive reading strategies is the responsibility of both parents and teachers as implied by Forrest-Pressley and Waller (1984). Therefore, it is not fair to blame the school alone for poor reading proficiency.

For teachers to be effective strategy trainers, they need to seek more professional development opportunities to increase their knowledge about language strategy instruction both theoretically and practically, as well as reconsider their roles in the classroom to be more facilitators than directors (Oxford, 1990). In addition, they have to know that consistent teaching and continuous practice are essential for the reading strategies acquisition.

The current researcher believes that the role of instruction should even go beyond facilitation and modeling to useful discussions with students about effective strategies, and a 'Socratic method' should immediately replace rote instruction in order to bring-up a generation of strategic readers who learn and practice the 'procedural knowledge' as argued by Paris et al. (1996). In addition to that, major reform in the way parents and teachers develop the kids' strategic reading should exceed the limits of the reading material to focus on the active cooperative role of the family and the school. This suggests a kind of training programmes and professional development sessions for parents and teachers as recommended by Anderson et al. (1985).

As displayed in Table 27 (next page), Oxford (1990) suggests a set of sequential steps for explicit strategy-based instruction, which seems practical and reasonable, however the results of the present study would stress that scaffolding and guided practice are essential for learning reading strategies particularly the metacognitive ones as argued by Afflerbach et al. (2008).

#	Steps
01	Determine the learners' needs and the time available.
02	Select strategies well.
03	Consider integration of strategy training.
04	Consider motivational issues.
05	Prepare material and activities.
06	Conduct "completely informed training."
07	Evaluate the strategy training.
08	Revise the strategy training.

Table 27: Suggested Steps for Strategy Training
(Oxford, 1990, p. 204)

Moreover, due to the students' multi-levels of linguistic proficiency, motivation and interest, reading teachers should consider a set of principles while teaching comprehension strategies; most importantly: to vary the text genre, find interesting topics, use modeling and think-aloud techniques, teach to the students' ZPD (zone of proximal development) and provide effective feed-back (McIntyre et al., 2011). Another essential point to consider is that not all reading strategies are equally accessible, which means that some specific strategies (as discussed early in chapter four, point 4.2) require more work, feedback and consolidation through practice and discussions.

5.3.3 What Students Need to Know

While a big number of students in the Arab world still consider English "as another fact-based school subject to memorize and learn for test" (Kiranmayi, 2012, p. 24), contemporary reading theories point out that comprehension in L1 and L2 is not exclusive to only linguistic and textual aspects. It is rather a complicated process of interaction between the reader and the text (Silberstein, 1994). In others words, it is not a kind of passive transmission of meaning from the writer to the reader through the text. Autonomy and making strategic decisions while reading are essential learning devices that should be developed to create a dependent and more efficient reader.

The findings of the present study confirm that students of higher language proficiency would learn the strategies and interact with the text faster, however students need not to worry because language proficiency level is expected to increase along school grades. As a result, the comprehension skills will probably get better and their ability to implement more complicated strategies (for figuring out the meaning

of a sentence) will increase as well, providing that these students receive the adequate language and strategy-based training (Forrest-Pressley and Waller, 1984).

For effective learning of reading strategies and efficient implementation, students need to know that their role and their teachers' role is equally important and the success of the inter-relational instruction depends seriously on their self-perception and motivation as well as their controlled and free participation. Paris et al. (1996) identifies four elements that are critical for the learners to achieve progress in learning the reading strategies: (1) students should believe they are active agents and responsible to achieve the target task, (2) they must believe they are independent learners and it is they who can better choose the most appropriate techniques or strategies and follow a specific plan, (3) they must believe in the operational and instrumental effect of the reading strategies and techniques and (4) they must realize the link between their decisions and the outcomes, and as they continue practising and learning they will get more task control, self-regulated learning and high self-esteem.

Again, students need to know that the ability to read does not necessarily mean the ability to comprehend, and the essential purpose of reading is acquiring knowledge and information with complete control of the reading process and self-regulation. This end obviously requires strategic interaction with the text and going far beyond decoding words. In order to be a strategic reader, you should have the will and the skill to equally learn, discuss and practise all necessary strategies and work interactively with your teacher (Layne, 2009)

Furthermore, students need to practice reading strategies for learning other subjects, not just in the reading comprehension lessons. Moreover, identification of the reading purpose is per se an efficient utility as it formulates the way the reader will read, and which strategies can support the pre-determined purpose(s). For example, if they read for general information, they will not give much attention to the details and will consequently use more appropriate strategies like skimming. In order to find the purpose successfully, students need to practise task analysis techniques and be careful when they read the task instruction.

5.3.4 Reading Assessment Reconsideration

Once the results of strategic reading research are verified and adopted, the

transformation to strategy-based instruction should be holistic and balanced. It is not fair to encourage strategy-based instruction and develop appropriate courses and materials for that purpose without a clear vision of how the assessment in that context should be. In other words, although students are taught to integrate prior knowledge, think critically to reflect on the text and use appropriate direct and indirect strategies so that they acquire new knowledge, reading tests still focus on multiple choice, true or false and short answer questions which do not basically assess strategic reading. Many scholars recommend the use of a portfolio for that purpose where teachers keep records of students' achievements and track their progress in strategic reading, awareness of metacognitive strategies and their level of motivation.

Alderson (2000) has listed a set of implications for reading assessment, most importantly are the following points that go with the results of the present study: (1) a 'content-focused battery' should be implemented in reading assessment to ensure the learners' interest in the content and the connection with their prior knowledge, (2) assessment should be related to a range of strategies, (3) a portfolio is recommended to track students' progress and understanding, (4) longer texts should be encouraged to avail a variety of strategies and reflections, (5) assessment tasks should be open to multiple interpretations as long as there is evidence and justification, which definitely can encourage critical thinking, (6) timed tasks are effective tools for stimulating students to use related strategies to cope with time limitations and to develop automaticity, (7) integrating reading with writing tasks is generally good, however when the main intension is to measure reading, integration is not recommended and (8) finally test developers need to take latest research results into their account to ensure the reading process development not only the reading product.

Another intriguingly interesting point is the possibility of using dictionaries in the reading test to eliminate worries about any vocabulary problems and to focus on measuring comprehension. However, Alderson (2000) believes that such procedure could invalidate the results of that reading test because dictionaries provide part of the knowledge being tested. On the other hand, and to cope with any validity concerns, the current study suggests adding a glossary of uncommon words so it helps students overcome vocabulary problems and focus on comprehension without violating the test validity. Moreover, the present researcher believes that the development of reading strategies should be formatively assessed and it is highly recommended to integrate

think-aloud techniques.

5.4. Hypotheses Evaluation

The present study attempts to confirm or refute the following hypotheses:

(1) Explicit strategy-based instruction can significantly improve UAE grade 12 students' reading comprehension performance.

(2) UAE female students will outperform male students in response to reading strategy-based training.

(3) Language proficiency levels can influence the outcome of the reading strategy-based training.

(4) The practices of the experimental group versus the observations of the conventional methods will reflect noticeable failures in the traditional reading classes.

The first hypothesis has been confirmed and explicit cognitive and metacognitive strategy-based training has been found significantly effective in improving grade 12 students' reading comprehension performance. The second hypothesis has not been completely confirmed because although the female students outperformed the male students in the comprehension performance test, there was no significant evidence that they would be more aware of the strategies used or even be able to verbalize the implementation process better, which matches what has been reported in (Young and Oxford, 1997). The results of the study have indicated a significant influence of the language proficiency on learning the reading strategy with a considerably large effect size, which confirmed the third hypothesis. Moreover, the analysis of the semi-structured interviews and the class observations compared to the practices of the experimental training revealed that conventional reading classes require immediate attention and research-based intervention for reconsideration and serious reform.

5.5. Limitations of the Study

Although the total number of the participating students in the study is considerably appropriate, it would be more useful to involve more students in the think-aloud sessions for better feasibility, which was not possible due to personal and cultural

reasons. In addition to this, informal assessment of reading may reflect more dependable indications rather than formal tests as argued by Alderson (2000). In other words, although the researcher usually does his best to simulate the real world, it is not true that the results will be identical to what informal test situations can reveal where the learners read for their purpose and interact independently with the text.

5.6. Future Research

While the present study has mainly focused on the effect of cognitive and metacognitive explicit reading strategy-based instruction on the reading comprehension performance and skills, it has revealed some other potential aspects worthy of studying and investigation. As mentioned earlier in this study, there is a long list of factors that would affect the reading comprehension; including motivation, interest and emotional engagement (Lin, 2011). Therefore, future research would probe into these areas and – further – investigate any possible interaction or integration among them that would influence reading comprehension in any way.

In addition, the study has also drawn the attention to how higher language proficiency levels would accelerate the process of learning and acquiring the target strategies. The researcher believes this area needs to be investigated thoroughly to introduce a balanced vision for language and strategy-based instruction.

Another area that could be of great contribution to the field of reading comprehension is the possible compensatory role that L1 would play to support L2. The researcher suggests a joint study to be conducted by an Arabic-based researcher (L1) and another English-based researcher (L2) to study the mutual support and transferability between L1 and L2 reading strategies.

Building on the observations of the researcher during the stages of the treatment, the discussions with teachers and visits to conventional classes, not only the appropriate methodology can enhance the reading instructions, but also the process and criteria of selecting the appropriate material and resources. Such process requires a kind of empirical investigation to find out how careful adjustment of text readability to suit the learners' grade is so important that it would influence the process of reading instruction as well.

5.7. Final Thought and Conclusion

In the conclusion of the present research, it would be interesting to highlight the overall objective of the study and how it would contribute to the improvement of the reading comprehension. Like many other studies (Al-Noursi, 2014; Morris, 2009), the present study highlighted several reading comprehension problems encountered by the Arab learners and particularly the UAE students due to – most probably – cultural reasons and poor reading instruction. These problems have been reflected in the official reports of standardized exams like IELTS, TOEFL and CEPA, and admitted by school teachers and the ministry supervisors. The official authorities have taken huge reform procedures to rectify such problems because everyone believes that reading is the gateway to knowledge, research and the academic life. The present study attempted to provide a research-based contribution that would empirically highlight some reasons of these problems, provide pedagogical implications, and suggest practical recommendations to achieve any progress toward improving the learners' reading comprehension performance. It has been statistically confirmed that cognitive and metacognitive strategy-based instruction would improve the learners' reading comprehension performance. In addition to the results of this study, future research as suggested in the previous section would also lead to guiding insights into the reading problem and contribute to the reform process with practical recommendations and suggestions.

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Appendices (List of Attachments)

Appendix A (P. 90)

This Appendix includes reading comprehension tasks for **pre-test** (p.90) and **post-test** (p.97).

Appendix B (P. 105)

This appendix includes a Test Takers' Survey of Reading Strategies Awareness (SRSA) – attached with pre and post-comprehension performance tests.

Appendix C (P. 107)

This appendix includes 'Think Aloud Protocol' (TAP) practice and real task texts for pre and post-treatment sessions: **C1_ Instructions & Training TAP** (p.107), **C2_TAP: pre-test** (p.108), **C3_TAP: post-test** (p.112), **C4_ Transcripts control-group students (1-4)** (p.115), **C5_Transcripts of experimental-group students (5-8)** (p.125) and **C6_Strategy coding system and scoring tool** (p. 136).

Appendix D (P. 137)

This appendix includes 'Semi-Structured Interviews', D1_transcripts. (P. 139)

Appendix E (P. 144)

This appendix includes Classroom Observation (Form and Checklist).

Appendix F (P. 145)

This appendix includes Reading Strategies Course: Plan & Material: **F1_ Example Lesson Plan** (P. 146), **F2_Sample Material** (P. 147).

Appendix G (P. 151)

This appendix includes a learning feedback form (to be filled by students after each class)

Appendix H (P. 152)

This appendix includes a copy of the 'UAE Grade 12 Official Term Exam': **H1** (Term 01, P. 152) & **H2** (Term 02, P. 159)

Appendix I (P. 166)

This appendix includes a table of the 'Target population Statistics'.

Appendix J (P. 167)

This appendix includes a copy of the 'official permissions & consent letters'.

Appendix A: Reading Comprehension (Performance Test)

Adapted from (Makni, 2006)

A1: Pre-Test

CEPA: Questions 1-9

Many people today have heard of Botox. It is a popular chemical substance, that treatment centers around the world use to make people look younger and less tired by temporarily removing lines from their faces.

(B) However, few people know that Botox is one of the most poisonous natural substances in the world, and in large quantities, it can kill people. Commercially called Botox or Dysport today, its official name is “botulinum toxin.” In the early 1800s, a German doctor, Justinus Kerner, named botulinum “sausage poison” and “fatty poison” because it often appears in meat.

Although botulinum is a poison, when injected under the skin in small doses it relaxes muscles and makes faces appear younger. It is often used to lessen the lines around people’s eyes (called crow’s feet), between their eyebrows, and on their foreheads. In 1988, the Allergan Company gave this substance the name Botox and began to sell it as a beauty product. Now there are thousands of treatment centers around the world, where you can go to get a Botox treatment. The Dubai Cosmetic Surgery Center, for example, offers these treatments, and says that they will make you look younger and less tired, and make you feel better about yourself. (D)

Some people, however, are not so sure about Botox treatments. For example, Botox is now approved for use in Canada, yet some Canadians want more research done on it. They worry that because Botox is a poison, if it spreads from the face to other parts of the body it could cause injury or even death. Other people, however, say this is not true. The Allergan Company claims that no one has ever died from Botox treatments, and treatment centers say that Botox is very safe.

Because Botox is a poison, it’s very likely that people will continue to argue about how safe it is to use for beauty treatments. (C) But it appears that many people around the world, both men and women, are willing to risk possible harm from Botox in order to achieve a more youthful look. (A)

- 1. What is Botox's official name?**
 - A) Dysport
 - B) Botulinum toxin
 - C) fatty poison
 - D) Allergan
- 2. Botox makes the face look younger by _____.**
 - A) energizing the face
 - B) tightening the skin
 - C) clearing the color
 - D) relaxing muscles
- 3. The phrase 'crow's feet' in paragraph 3 refers to lines _____.**
 - A) near the eyes
 - B) on the forehead
 - C) under the nose
 - D) between the eyebrows
- 4. Who gave this chemical the name Botox?**
 - A) Canadian researchers
 - B) the Allergan Company
 - C) the Dubai Cosmetic Surgery Company
 - D) Justinus Kerner
- 5. The word they in paragraph 3 refers to _____.**
 - A) Canadians
 - B) offers
 - C) surgery
 - D) treatments
- 6. What is the main topic of paragraph 4?**
 - A) the Allergan Company
 - B) Botox injuries in Dubai
 - C) Canadian Botox research
 - D) possible dangers of Botox
- 7. Where in the text is the best place for the sentence, "They say that people will be very happy with their Botox treatment"?**
 - A) end of paragraph 5
 - B) beginning of paragraph 2
 - C) middle of paragraph 5
 - D) end of paragraph 3
- 8. From the text, which of the following is true?**
 - A) Botox treatments are perfectly safe.
 - B) The safety of Botox is still being debated.
 - C) A few people have been injured by Botox treatments.
 - D) Botox is not allowed in Canada.
- 9. Where would you be most likely to find this text?**
 - A) a geography book
 - B) a travel magazine
 - C) a health magazine
 - D) an English novel

TOEFL: Questions 10-17

Probably the most famous film commenting on twentieth-century technology is *Modern Times*, made in 1936. Charlie Chaplin was motivated to make the film by a reporter who, while interviewing him, happened to describe working conditions in industrial Detroit. Chaplin was told that healthy young farm boys were lured to the city to work on automotive assembly lines. Within four or five years, these young men's health was destroyed by the stress of work in the factories.

The film opens with a shot of a mass of sheep making their way down a crowded ramp. **Abruptly** the scene shifts to a scene of factory workers jostling one another on their way to a factory. However, the rather bitter note of criticism in the implied comparison is not sustained. It is replaced by a gentler note of satire. Chaplin prefers to entertain rather than lecture.

Scenes of factory interiors account for only about one third of the footage of *Modern Times*, but they contain some of the most pointed social commentary as well as the most comic situations. No one who has seen the film can ever forget Chaplin vainly trying to keep pace with the fast moving conveyor belt, almost **losing his mind** in the process. Another popular scene involves an automatic feeding machine brought to the assembly line so that workers need not interrupt their labor to eat. The feeding machine malfunctions, hurling food at Chaplin who is strapped into his position on the assembly line and cannot escape. **This** serves to illustrate people's **utter** helplessness in the face of machines that are meant to serve their basic needs.

Clearly, *Modern Times* has its faults, but it remains the best film treating technology within a social context. It does not offer a radical social message, but it does accurately reflect the sentiments of many who feel they are victims of an over-mechanized world.

TOEFL: Questions 10 - 17

10. The author's main purpose in writing this passage is to

- A) criticize the factory system of the 1930s
- B) analyze an important film
- C) explain Chaplin's style of acting
- D) discuss how film reveals the benefits of technology

11. According to the passage, Chaplin got the idea for the film Modern Times from

- A) a newspaper article
- B) a scene in a movie
- C) a job he had once held
- D) a conversation with a reporter

12. The word “abruptly” in Paragraph 2 is closest in meaning to

- A) suddenly
- B) mysteriously
- C) finally
- D) predictably

13. It can be inferred from the passage that two thirds of the film ‘Modern Times’

- A) is extremely unforgettable
- B) takes place outside a factory
- C) is more critical than the other third
- D) entertains the audience more than the other third

14. Which of the following could best replace the phrase “losing his mind” in paragraph 3?

- A) getting fired
- B) doing his job
- C) going insane
- D) falling behind

15. The word "This" – in paragraph 4 – refers to which of the following?

- A) the machine
- B) the food
- C) the assembly line
- D) the scene

16. According to the passage, the purpose of the scene involving the feeding machine is to show people's

- A) ingenuity
- B) adaptability
- C) helplessness
- D) independence

17. The word "utter" – in paragraph 4 – is closest in meaning to which of the following?

- A) notable
- B) complete
- C) regrettable
- D) necessary

IELTS: Questions 18-30

In a study titled *Male and Female Drivers: How different are they?* Professor Frank McKenna of the University of Reading looked at the accident risk between men and women. He found that men drive faster, commit more driving violations, and are more inclined to drink and drive. They look for thrills behind the wheel, while women seek independence. And, although anecdotal evidence might suggest otherwise, women are not starting to drive as aggressively as men.



The question of whether, as drivers, women differ from men is important, because it could affect insurance premiums, which are closely geared to accident statistics. Despite the increase in women drivers, McKenna's researchers found no evidence that this is changing accident patterns. It seems that age is far more important than gender in the car. It is the biggest single factor in accident patterns, and, while inexperienced new drivers of both sexes are more likely to be involved in accidents, the study found striking new evidence to confirm that young men drive less safely than any other group. The survey shows that men and women aged 17 to 20 are most likely to be involved in bend accidents – men almost twice as often – but the difference decreases as drivers mature. Nearly half of all accidents involving young men and one-third of those involving young women take place when it is dark.

Again, there is a steady decrease in such accidents as drivers grow older, but gender differences remain significant until drivers reach the age of 155. Although there is little difference between men and women in the distance they keep from the car in front, there are differences across age groups. Young drivers show less regard for the danger of following more closely, and young men are likely to 'close the gap' as an aggressive signal to the driver in front to speed up or get out of the way. Men consistently choose higher speeds than women of the same age and driving experience. "This could be because men seek a thrill when they drive," says McKenna. "Speed choice is one of the most important causes of accidents. But breaking the speed limits is regarded by men as a minor offence." Contrary to public belief, young drivers, as a group, are more likely to avoid drinking alcohol if they are driving, while men in the 30 to 50 age group admitted to drinking the most alcohol before driving. Men are most likely to nod off, probably because they are willing to drive for longer periods without a break - driver fatigue is a significant factor in accidents. According to Andrew Howard, of the Automobile

Association, "We have to combat the group that speeds for thrills. The key is how men are brought up to look at the car. It is this which needs to be addressed."

IELTS: Questions 18 - 30

Questions 18-21

Answer the following questions. Write NO MORE THAN THREE WORDS for each answer.

18. What is women's motivation for driving? _____
19. Which group of drivers has grown in number in recent years? _____
20. What is the most significant factor in accident patterns? _____
21. After what age do men and women drive equally safely at night? _____

Questions 22-26

Classify the following statements (22-26) as applying to

- A (men in general)
- B (young men in particular)
- C (both young men and young women)

Example: They are the most likely to have accidents while driving. Answer B

22. They may follow another car closely to make the driver go faster. _____
23. They are more likely to have accidents due to tiredness. _____
24. They are the least likely to drink and drive. _____
25. Driving gives them a feeling of excitement. _____
26. They are the most likely to have accidents on bends. _____

Questions 27-30

Complete the following summary of paragraph 2 by inserting the correct text (from A to D) in the correct place.

It has been reported that ____ (27) _____, which implies that gender is not a strong factor in that crisis. On the other hand, age and ____ (28) _____. Research found that _____ (29) _____, and most ____ (30) _____.

- A) accidents take place in dark places
- B) inexperience stand behind most accidents
- C) accident patterns did not change despite the increase in women drivers
- D) young men are involved in bend accidents more than young women

PRE-TEST

Name: _____ Grade 12 Section: _____

Answer Sheet**CEPA: Questions 1 - 9**

	A	B	C	D
01	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
02	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
03	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
04	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
05	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
06	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
07	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
08	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
09	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

TOEFL: Questions 10 - 17

	A	B	C	D
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IELTS: Questions 18 - 30

18	_____
19	_____
20	_____
21	_____

Write **A, B or C**

22	_____
23	_____
24	_____
25	_____
26	_____

Write **A, B, C, or D**

27	_____
28	_____
29	_____
30	_____

*Thank
You*

ملحوظة:

أرجو مراعاة الدقة عند نقل الإجابات إلى الأماكن المخصصة في ورقة الإجابة
أرجو عدم تظليل أكثر من دائرة وإلا سيتم خصم الدرجة كاملة
النقاط 18 وحتى 21: الإجابة ينبغي ألا تتعدى ثلاث كلمات
النقاط 22 وحتى 26: بالطبع يمكن تكرار أحد أو بعض الإجابات

A2: Post-Test

CEPA: Questions 1-9

A vegan, pronounced 'VEE-gun', is a person who does not eat animal products. Neither vegetarians nor vegans eat meat, but vegans are stricter because, in addition to not eating meat, they also do not eat any other animal products, such as eggs, milk, and cheese. There are basically two types of vegans, strict and non-strict. A strict vegan will not eat animal products, and he will not even use animal products like as leather, wool, and feathers either. Though some people might not have heard of vegans, **they** have actually been around for a long time; Donald Watson started the first Vegan Society in the UK in 1944. He has been a vegan for more than 60 years.

There are several reasons why people become vegan. One is health. People who do not eat animal products tend to weigh less, have lower blood pressure and cholesterol, and are less likely to become sick from illnesses such as heart disease and cancer. Also, vegans say that eating animal products is both cruel to animals and bad for the environment. Each year about 50 billion animals are killed for meat, and it requires very large amounts of resources, such as land, water, and grain, to raise these billions of animals. There are also people who are vegan for religious reasons; for example, young Japanese Buddhist monks are not permitted to eat any animal products during their years in training.

Sometimes people who eat meat are surprised to hear about the vegan diet because **they** do not think that it is possible to live without eating animal products. However, most vegans live a very healthy life. They eat foods such as pasta, rice, bread, vegetables, fruits, beans, and nuts, and often have fewer health problems than meat eaters and vegetarians. In fact, there are millions of people around the world who have adopted the vegan diet, and there is now even a World Vegan Day, celebrated each year on 1 November. If you ever have the chance to attend a World Vegan Day celebration, there will definitely be lots of fruit and vegetables around, but you certainly won't see any meat on the tables!

CEPA: Questions 1 - 9

1. What is the difference between a vegan and a vegetarian?

- A) Vegans are an ancient type of vegetarian.
- B) Vegetarians have a stricter diet than vegans.
- C) The two are exactly the same thing.
- D) Vegans do not eat any animal products.

2. The word they in paragraph 1 refers to _____.

- A) vegans
- B) vegetarians
- C) products
- D) eggs

3. Which of the following is a product a strict vegan will not use?

- A) wood
- B) shoes
- C) feathers
- D) nylon

4. Where in the text is the best place for the sentence, "One question that many meat eaters ask is 'Why become a vegan?'"

- A) beginning of paragraph 1
- B) end of paragraph 1
- C) beginning of paragraph 2
- D) end of paragraph 2

5. According to the text, what is one benefit of the vegan diet?

- A) increased energy
- B) fewer stomach problems
- C) lower cholesterol
- D) healthier teeth and bones

6. What is the topic of paragraph 2?

- A) why people become vegans
- B) why the vegan diet is healthy
- C) why a meat diet is bad for the planet
- D) why many meat-eaters become sick

7. According to the text, what are four reasons why somebody might become a vegan?

- A) health, environment, cruelty to animals, religion
- B) religion, love, environment, health
- C) cruelty to animals, health, environment, family
- D) health, environment, cruelty to animals, money

8. The word they in paragraph 3 refers to _____.

- A) vegans and vegetarians
- B) products from animals
- C) people who eat meat
- D) food and drink

9. From the text, which of the following is true?

- A) There are many more strict vegans than vegetarians.
- B) Vegans often have some health problems.
- C) Vegans are often healthier than meat eaters.
- D) Most people are vegans because of religion.

TOEFL: Questions 10-19

Rachel Carson was born in 1907 in Springsdale, Pennsylvania. She studied biology at college and zoology at Johns Hopkins University, where she received her master's degree in 1933. In 1936, she was hired by the U.S. Fish and Wildlife Service, where she worked most of her life. Carson's first book, *Under the Sea Wind*, was published in 1941. It received excellent reviews, but sales were poor until it was reissued in 1952. In that year she published *The Sea Around Us*, which provided a fascinating look beneath the ocean's surface, emphasizing human history as well as geology and marine biology. Her imagery and language had a poetic quality. Carson consulted no less than 1,000 printed sources. She had voluminous correspondence and frequent discussions with experts in the field. However, she always realized the limitations of her non-technical readers.

In 1962, Carson published *Silent Spring*, a book that sparked considerable controversy. It proved how much harm was done by the uncontrolled, **reckless** use of insecticides. She detailed how they poison the food supply of animals, kill birds and fish, and contaminate human food. At the time, spokesmen for the chemical industry mounted personal attacks against Carson and issued propaganda to indicate that her findings were **flawed**. However, her work was vindicated by a 1963 report of the President's Science Advisory Committee.

TOEFL: Questions 10 - 19

10. The passage mainly discusses Rachel Carson's work

- (A) as a researcher
- (B) at college
- (C) at the U.S. Fish and Wildlife Service
- (D) as a writer

11. According to the passage, what did Carson. primarily study at Johns Hopkins University?

- (A) oceanography
- (B) history
- (C) literature
- (D) zoology

12. When she published her first book, Carson was

- (A) 26
- (B) 29
- (C) 34
- (D) 45

13. The word "reckless" in paragraph 2 is closest in meaning to

- (A) unnecessary
- (B) limited
- (C) continuous
- (D) irresponsible

14. It can be inferred from the passage that in 1952, Carson's book Under the Sea Wind

- (A) was outdated
- (B) became more popular than her other books
- (C) was praised by critics
- (D) sold many copies

15. Which of the following words or phrases is LEAST accurate in describing The Sea Around Us?

- (A) highly technical
- (B) poetic
- (C) fascinating
- (D) well-researche

16. Which of the following was NOT mentioned in the passage as a source of information for The Sea Around Us?

- (A) printed matter
- (B) talks with experts
- (C) a research expedition
- (D) letters from scientists

17. According to the passage, Silent Spring is Primarily

- (A) an attack on the use of chemical preservatives in food
- (B) a discussion of the hazards insects pose to the food supply
- (C) a warning about the dangers of misusing insecticides
- (D) an illustration of the benefits of the chemical industry

18. The word "flawed" in paragraph 2 is closest in meaning to

- (A) faulty
- (B) deceptive
- (C) logical
- (D) offensive

19. Why does the author of the passage mention the report of the President's Science Advisory Committee (lines 14-15)?

- (A) To provide an example of government propaganda.
- (B) To support Carson's ideas.
- (C) To indicate a growing government concern with the environment.
- (D) To validate the chemical industry's claims.

IELTS: Questions 20-30

THE BIG CATS AT THE SHARJAH BREEDING CENTRE

It is one of the few places where you will be able to spot them all at the same time... the Arabian wolf, an African cheetah, an Arabian leopard, an oryx, a gazelle. These are just some of the animals, which, on the brink of extinction, are now getting a new lease of life thanks to the exemplary work being done at the Breeding Centre for Endangered Arabian Wildlife in Sharjah.



Sharjah is one of the seven emirates that make up the United Arab Emirates. The Breeding Centre's expertise and facilities have made it a prime destination for illegally imported animals confiscated by UAE and Sharjah authorities. In the last four years, more than 900 mammals and reptiles and 969 birds have arrived at the centre, including 25 North African cheetahs, Houbara bustard and falcons, lions, a baby Nile crocodile and a Burmese python that was left in a rental car at the airport.

The 25 cheetahs were all imported illegally into the UAE and were intercepted at the UAE harbour and airport entry points. They nearly all arrived malnourished, dehydrated and highly stressed after long voyages stuffed into boxes, crates and suitcases. Now they are bright and full of energy. The Centre's efforts have also been rewarded when the first cheetah mating took place at the end of 2002. Playing matchmaker with these beautiful creatures is no easy task – successful breeding requires considerable patience and intimate knowledge of each animal's personality, and it is the result of intensive and expert management of each animal within the group as well as of the group as a whole.

Because this group was still young and inexperienced in courtship matters, the keepers had to make the introductions only after careful planning and management, much like the lead role in a Jane Austen novel. The female cheetahs were initially intimidated by the presence of the male; however, as they advance to oestrus, the roles are reversed and the male cheetah becomes too wary to approach during the female's most receptive phase of the cycle. It is the responsibility of the keeper therefore to monitor each individual and to be able to respond to any indication from the cheetahs that the time is right for introducing a pair. The close bond that invariably develops between the keeper and the cheetahs enables the keeper to

The Breeding Centre's cheetahs are also participants in the European breeding programme, which aims to ensure that the genetic diversity of this endangered species is maintained and expanded by breeding as many founder animals as possible to introduce new bloodlines into the captive population. In this way, the group held at the centre plays a very important role in the future health of the international captive population, as they are potentially all new founders.

In the 1980s, a captive breeding programme was established near Muscat with the capture of three leopards in southwestern Oman. The breeding programme in the UAE was initiated by the Arabian Leopard Trust and started with the arrival of two mature specimens: a male Arabian leopard from Yemen and a female on breeding loan from Oman in 1995. The arrival of these two animals led to the construction of the Breeding Centre in which the leopard has played the role of flagship species.

The bond is particularly important during breeding season, when keepers decide to introduce pairs to each other. Male leopards are known to have killed their partners on introduction, so it is essential for the keeper to understand the leopards' behaviour to decide when it is safe to do so. The trust is also important if keepers need to enter dens to check on and monitor the cub's growth. Leopard females have been known to kill their cubs if the dens have been disturbed, but the centre's leopards are quite comfortable with the staff handling the new generation of cubs.

Questions 20- 25

Write the appropriate letter (A – D) in boxes 20 – 25 on your answer sheet.

A If the statement refers to cheetahs at the Breeding Centre.
B If the statement refers to leopards at the Breeding Centre.
C If the statement refers to both cheetahs and leopards at the Breeding Centre.
D If the statement refers to neither cheetahs nor leopards at the Breeding Centre.

20. These animals were smuggled into the UAE. _____

21 At first these animals did not adapt to life at the Sharjah Breeding Centre _____

22 Half of these animals were born at the Breeding centre _____

23 These animals can be dangerous to one another _____

24 The role of the keeper is vital in the breeding programme of these animals. _____

25 The first of these animals at the breeding centre were relatively young. _____

Questions 26 – 30

Complete the summary below.

Choose your answers from the box below the summary and write them in boxes 26 – 30 on your answer sheet.

NB: There are more words than spaces, so you will not use them all.

Example

The Sharjah Breeding Centre now has a _____ of animals including birds...

Answer variety

SUMMARY

The Sharjah Breeding Centre now has a variety of animals including birds, mammals and (26) _____. As its name suggests, the Centre is primarily involved in breeding and (27) _____ the numbers of the species housed there whilst still maintaining the (28) _____ of bloodlines in order to retain genetic health. In spite of problems involving the complex (29) _____ of the animals, a fair amount of (30) _____ has been achieved with North African cheetahs and Arabian leopards.

reptiles
diversity
change

variety
season
success

behavior
working
expanding

POST-TEST

Name: _____ Grade 12 Section: _____

Answer Sheet**CEPA: Questions 1 - 9**

	A	B	C	D
01	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
02	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
03	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
04	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
05	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
06	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
07	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
08	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
09	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

TOEFL: Questions 10 - 19

	A	B	C	D
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IELTS: Questions 20 - 30

Write	A, B, C or D
20	_____
21	_____
22	_____
23	_____
24	_____
25	_____
Write the correct word	
26	_____
27	_____
28	_____
29	_____
30	_____

Thank
you

ملحوظة:

أرجو مراعاة الدقة عند نقل الإجابات إلى الأماكن المخصصة في ورقة الإجابة
أرجو عدم تظليل أكثر من دائرة وإلا سيتم خصم الدرجة كاملة
النقاط 20 وحتى 25: بالطبع يمكن تكرار أحد أو بعض الإجابات
النقاط 26 وحتى 30: الإجابة كلمة واحدة فقط

Appendix B: Survey of Reading Strategy Awareness

Test Takers' Survey of Reading Strategies Awareness (SRSA)

Adapted from ((Zhang et al., 2014; Mokhtari and Reichard, 2002)

Instruction

The purpose of this questionnaire is to understand what strategies you have used to read the three articles of the pre/post-test. It is important to answer the item **based on what you actually did, not what you should do**. Please read every item carefully and check one number that can best characterize how often you use that strategy from (0) to (4), where “0” means “never” and “4” means “always”. There are no right or wrong answers to these statements. Your answers will not affect your grades.

الغرض من هذه الاستبانة هو التعرف على الاستراتيجيات المستخدمة بالفعل أثناء قراءة نصوص الامتحان وليس ما ينبغي فعله. أرجو قراءتها جيدا قبل اختيار الرقم المناسب كما هو موضح في الشكل. هذه الاستبانة لا تؤثر على درجات الامتحان وليس هناك إجابة صحيحة وأخرى خاطئة.

0	1	2	3	4
Never	Rarely	Sometimes	Usually	Always
أبدا	نادرا	أحيانا	عادة	دائما
1. I planned what to do before I began to read this text.				
لقد كانت لدي خطة واضحة لما سأقوم به قبل قراءة النص				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
2. I made sure I clarified the goals of the reading task.				
تأكدت من استيضاح المطلوب تماما قبل الشروع في الإجابة				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
3. I knew what to do if my intended plans did not work efficiently while completing this reading task				
لدي خطط وطرق بديلة لاستكمال مهام القراءة (إجابة الأسئلة) إذا أخفقت طريقة ما				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
4. I flipped through the reading task before I actually started to complete it.				
غالبا ما كنت أتصفح الأسئلة (مهام القراءة) قبل الشروع في الإجابة عليها كاملة				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
5. I tried to understand the relationships between ideas in the text and tasks.				
حاولت أن أفهم العلاقة بين النص والأفكار والمهام المطلوبة				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
6. I tried to understand the content of the text without looking up every word.				
كنت أحاول فهم محتوى النص دون الحاجة إلى قاموس				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

7. I skimmed the text first by noting characteristics like length and organization. قمت بعملية مسح للنص قبل القراءة للتعرف على هيكله التنظيمي وخصائصه.				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
8. I used tables, figures, and pictures in text to increase my understanding. ولمزيد من الفهم، استعنت بالجدول والرسوم والأشكال ان وجدت.				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
9. I paraphrased (restate ideas in my own words) to better understand what I read. كنت أعيد صياغة بعض العبارات والأفكار حتى أتمكن من فهمها أثناء القراءة.				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
10. I tried to picture or visualize information to help remember what I read كنت أحاول أن أتصور وأتخيل ما يحتويه النص من معلومات ليسهل تذكرها				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
11. I used to stop at reference marks and find out what they refer to. كنت أقف عند الإشارات المرجعية للتعرف على ما تشير له في النص				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
12. I critically analyzed what the author meant or tried to say in the text. كنت أحلل وأفكر فيما أراد الكاتب أن ينقله عبر النص				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
13. I tried to interpret hidden ideas/meanings in the text. حاولت أن أتوصل للأفكار والمعاني الغير مباشرة في النص				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
14. I used to highlight keywords, proper nouns, dates, abbreviations and other important clues. اعتدت على تحديد الكلمات الرئيسية، أسماء الأعلام والتواريخ والاختصارات والقرائن الهامة الأخرى.				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
15. I summarized the main information in the text. كنت أقوم بتلخيص النقاط الهامة في النص.				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
16. I reread texts or tasks several times when I felt I did not understand them. كنت أعاد القراءة عندما أشعر بأنني لا زلت لم أفهم النصوص أو الأسئلة				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
17. I know which information was more or less important. كنت أميز بين المعلومة الهامة والأقل أهمية				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
18. I identified or guessed meanings of unknown words using context clues. كنت أستعين بدلالات السياق لتخمين معاني بعض الكلمات				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
19. I guessed meanings of unknown words using prefixes, suffixes and root words. وأيضا كنت أستعين بالكواسع واللواحق وجذور الكلمات للتعرف على معاني الكلمات				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
20. I double-checked my reading comprehension. كنت أتأكد مرارا من فهمي أثناء القراءة				
0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

End of Questionnaire

Thank you

Appendix C: Think Aloud Protocol (TAP) _Practice and Tool

Adapted from (Lin, 2011)

C1: Instructions & Training TAP

THINK ALOUD PROTOCOL (TAP)

Below is the instruction I give to participants both orally and verbally.

“In this task, you will read an English text and then say aloud what you think, feel or want to do in your mind during reading. I am interested in your thoughts, feelings and actions when you try to comprehend this text. It does not matter what you say is correct or wrong. Please read the text as you naturally read an English text. You can read it aloud or read it silently. In case you forget to do the think-aloud, the red stars in the text are to remind you of speaking out any ideas in your mind when you see them. You can also stop at any time if anything comes to your mind during reading and say it to me. On the other hand, if nothing is on your mind for the sentence, it is okay for you to pass the sentence and keep reading.

Now, I am going to show you how to perform the think-aloud activity with a short text. Remember, the way I read a text might be different from how you are used to reading a text. You do not need to follow my reading behaviours.”

(TAP) Practice Text

Animal’s different ways to show their feelings

Different animals have different ways of showing their feelings or thoughts.★ let’s take dogs and cats for example. ★ A dog barks to scare us and to show someone is at the door of your house. ★ But a cat meows only to show it feels hungry. ★ Both cats and dogs wag their tails, but it means different feelings.★ A dog wags its tail to show its happiness when its owner comes back.★ But, a cat wags its tail to show it is angry.★ Dogs show their love to their owners by licking them.★ But cats lick your hand only because they want to eat the salt on your hand.★ When cats love you, they may sit on your hand.★ Besides, dogs run after your bicycle for fun, but cats never do that.★ In short, to raise different animals, you should be familiar with the ways animals express their feelings.★

C2: Think Aloud Protocol (**Pre-test**)

Let's enjoy chocolate!

Chocolate is a food made from the seeds of a tropical tree called the cacao.★ The word, chocolate comes from *chocolatl*. This is a Spanish word, meaning “hot water”.★ There are several kinds of chocolate. Pure, unsweetened chocolate only has cocoa solids and cocoa butter.★ Much of the chocolate which we eat today is sweet chocolate, combining chocolate with sugar. ★ White chocolate has cocoa butter, sugar, and milk but no cocoa solids.★



The best kind of chocolate is **dark chocolate** with 70% of cocoa. The higher the percentage, the darker the chocolate.★ Cocoa has a lot of antioxidants.★ Antioxidants can lower the cholesterol in our blood.★ We know high cholesterol can cause heart diseases.★ The antioxidants in chocolate can lower the cholesterol in our blood, so eating some chocolate can prevent heart diseases.★ Eating chocolate can also make us feel happy, because dark chocolate has caffeine. Caffeine can help us have good feelings, such as happiness and attentiveness.★

Antioxidant

مضاد للأكسدة

White chocolate is different from dark chocolate because it is made from cocoa butter, not the cocoa.★ Therefore, it does not have the good antioxidants in dark chocolate.★ Cocoa butter has very little caffeine, so white chocolate doesn't have as much caffeine as dark chocolate.★ Eating white chocolate cannot make us feel happy as eating dark chocolate. ★

There are some bad things about chocolate. ★ Chocolate has calories and fat—about 150 calories for one ounce. ★ Too many calories will make people fat. ★ A good news is that little chocolate every day is beneficial for our health. ★ Eating 30 calories a day will not make us become fat (30 calories is the same as a chocolate candy kiss. ★

Propositional Units in the Text

1. Chocolate is a food made from the seeds of a tropical tree,
2. called the cacao.
3. The word, chocolate comes from *chocolatl*.
4. This is a Spanish word.
5. meaning “hot water”.
6. There are several kinds of chocolate.
7. Pure, unsweetened chocolate only has cocoa solids.
8. and cocoa butter.
9. Much of the chocolate which we eat today is sweet chocolate,
10. combining chocolate with sugar.
11. White chocolate has cocoa butter,
12. White chocolate has sugar,
13. and milk
14. but no cocoa solids.
15. The best kind of chocolate is dark chocolate,
16. with 70% of cocoa.
17. The higher the percentage, the darker the chocolate.
18. Cocoa has a lot of antioxidants.
19. Antioxidants can lower the cholesterol in our blood.
20. We know high cholesterol can cause heart diseases.
21. The antioxidants in chocolate can lower the cholesterol in our blood,
22. so eating some chocolate can prevent heart diseases.
23. Eating chocolate can also make us feel happy,
24. ,because dark chocolate has caffeine.
25. Caffeine can help us have good feelings,
26. such as happiness,
27. and attentiveness.
28. White chocolate is different from dark chocolate,
29. because it is made from cocoa butter,
30. ,not the cocoa.
31. Therefore, it does not have the good antioxidants in dark chocolate.
32. Cocoa butter has very little caffeine,
33. so white chocolate doesn't have as much caffeine as dark chocolate.
34. Eating white chocolate cannot make us feel happy as eating dark chocolate.
35. There are some bad things about chocolate.
36. Chocolate has calories
37. and fat.
38. about 150 calories for one ounce.
39. Too many calories will make people fat.
40. A good news is that little chocolate every day is beneficial for our health.
41. Eating 30 calories a day will not make us become fat.
42. 30 calories is the same as a chocolate candy kiss.

Reading Comprehension Questions

1. Originally, the word, chocolate, means
 - A). Maya and Aztec
 - B). Spanish
 - C). cacaco
 - D). hot water

2. Pure chocolate does NOT have
 - A). sugar
 - B). calories
 - C). cocoa solids
 - D) cocoa butter

3. Which of the following chocolate is darker?
 - A). Chocolate has 50% cocoa
 - B). Chocolate has 60% cocoa
 - C). Chocolate has 70% cocoa
 - D).Chocolate has 80% cocoa

4. Dark chocolate is good for our health because of ____
 - A). cholesterol
 - B). flavonoids
 - C). sugar
 - D). smoke

5. Eating dark chocolate can help us have many good feelings because of
 - A). cholesterol
 - B). antioxidants
 - C). caffeine
 - D). flavonoids

6. Heart diseases happen because ____
 - A). we eat too much dark chocolate.
 - B). the cholesterol is too high
 - C). the cholesterol is too low.
 - D). we have too much caffeine.

7. White chocolate is different from dark chocolate because_____

- A) it will make us fat.
- B) it doesn't have flavonoids.
- C) it has too much caffeine.
- D) it has too much cocoa.

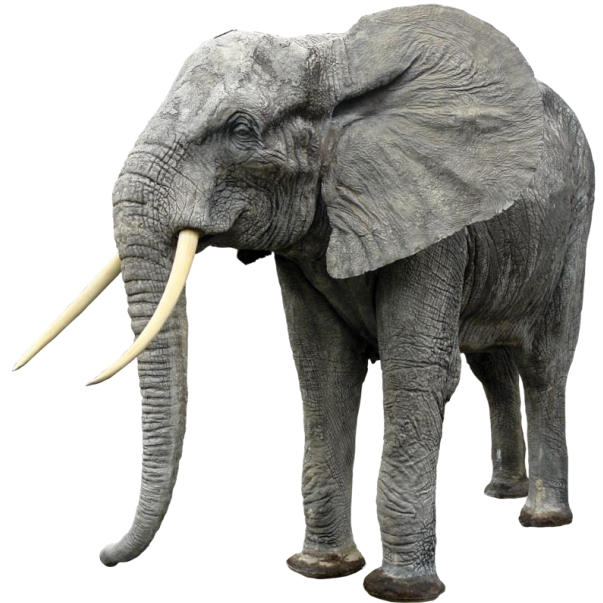
8. From this article, how much chocolate a day is good for our health?

- A) one once
- B) 150 calories
- C) 30 calories
- D) 2 chocolate candy kisses

C3: Think Aloud Protocol (**Post-test**)

????????????

Have you ever heard about the elephant called Jumbo? ☆ Jumbo was an African Elephant that lived in the London Zoo for more than 17 years. ☆ Jumbo was so large that even today, the word ‘jumbo’ refers to something very large. ☆



Elephants are the largest animals that live on land. ☆ An adult African elephant is approximately 3 meters tall and weighs about 5,400 kilograms. ☆ **They** live anywhere from the wet forest to the dry deserts. ☆ They are also the second-tallest of all animals. ☆

The elephant is well known for its long trunk which has over 100000 muscles. ☆ The elephant uses its trunk to handle anything. ☆ The elephant also uses its trunk to drink water by spraying it into its mouth. ☆ The elephant's skin is dark grey, wrinkled, and about 3 centimeters thick. ☆ Although the skin is thick, it is very tender and needs protection from the hot sun and insects. ☆ An elephant usually takes a mud bath to help keep cool. ☆ The mud protects the animal's skin. ☆

The African elephant has a number of interesting **features**. ☆ It is strong and very intelligent. ☆ Elephants are sensitive and can cry, play, laugh, and even have incredible memories. ☆ They can remember places and people that they only saw once. ☆

Young elephants learn by copying older elephants. ☆ This comes naturally because the mothers, aunts, sisters, and cousins all take care of the young. ☆ As with humans, the young are so important that all the family, or herd, of elephants protect them from predators. ☆

Propositional Units in the Text

1. Have you ever heard about the elephant called Jumbo?
2. Jumbo was an African Elephant that lived in the London Zoo
3. for more than 17 years.
4. Jumbo was so large that even today,
5. the word 'jumbo' refers to something very large.
6. Elephants are the largest animals that live on land.
7. An adult African elephant is approximately 3 meters tall
8. and weighs about 5,400 kilograms.
9. They live anywhere from the wet forest to the dry deserts.
10. They are also the second-tallest of all animals.
11. The elephant is well known for its long trunk
12. which has over 100000 muscles.
13. The elephant uses its trunk as a hand.
14. The elephant also uses its trunk to drink water by spraying it into its mouth.
15. The elephant's skin is dark grey,
16. wrinkled,
17. and about 3 centimeters thick.
18. Although the skin is thick,
19. it is very tender and needs protection from the hot sun and insects.
20. An elephant usually takes a mud bath to help keep cool.
21. The mud protects the animal's skin.
22. The African elephant has a number of interesting features.
23. It is strong and very intelligent.
24. Elephants are sensitive and can cry,
25. play,
26. laugh,
27. and even have incredible memories.
28. They can remember places
29. and people that they only saw once.
30. Young elephants learn by copying older elephants.
31. This comes naturally because the mothers,
32. aunts,
33. sisters,
34. and cousins all take care of the young.
35. As with humans,
36. the young are so important that all the family,
37. or herd,
38. of elephants protect them from predators.

Reading Comprehension Questions

- 1. 'Jumbo' is a word that people use now to mean _____.**
 - A) London Zoo
 - B) African Elephant
 - C) something huge
 - D) large elephant
- 2. In paragraph 2, the word 'they' refers to _____.**
 - A) elephants
 - B) animals
 - C) Africans
 - D) zoos
- 3. Elephants take a mud bath to _____.**
 - A) make their skin soft
 - B) help them drink
 - C) play and laugh
 - D) protect themselves
- 4. The elephant's trunk is like a _____.**
 - A) nose
 - B) mouth
 - C) hand
 - D) foot
- 5. African elephants are _____.**
 - A) strong with tender skin
 - B) very intelligent and sensitive
 - C) predators with thick skin
 - D) short and wrinkled
- 6. Young elephants learn by _____.**
 - A) playing with their friends
 - B) doing the same things as their parents
 - C) protecting the herd from predators
 - D) remembering people and places
- 7. Elephants need to see anything _____ in order to remember it again.**
 - A) one time
 - B) three times
 - C) many times
 - D) a number of times
- 8. The best title for the passage is _____.**
 - A) Jumbo the Elephant
 - B) African Elephants
 - C) Elephants Around the World
 - D) An Intelligent Animal

C4: **TAP** Transcripts of the Control Group (Pre/Post-Test)

() includes English translation of non-English utterances. “ ” includes exact quotations from the reading passage. [] includes descriptions and comments. **PU#** Prepositional Unit number.

Control Group	
Pre-Test	Post-Test
Student 01 (Female) Lang. Pro. Level (average)	
<p>Performance Score (4/8 marks)</p> <p>T: Hello ____ [<i>student's name</i>]. Are you ready for the think aloud session?</p> <p>ST: Yes, but nervous much.</p> <p>T: Please don't panic and just follow the instructions.</p> <p>ST: زين (Ok) أبداً الحين؟ (Shall I start now?)</p> <p>T: Yes, Go ahead please.</p> <p>[<i>ST watches the paper for a moment. She looks a little bit shy</i>]</p> <p>ST: [<i>After looking at the picture</i>] This reading is about chocolate/ I need to read and answer the questions/ إذا في كلمات صعبة (Would you translate difficult words for me?)</p> <p>T: Sorry! But you need to demonstrate the task in your own way without any support.</p> <p>ST: Ok/ I will try/ Mmmmm! [<i>Reading</i>]. This is about chocolate/ I will read and later answer the questions/ [<i>ST keeps reading the 1st paragraph PU#1-14. She struggles with some words like "unsweetened" and "combining" and ignores the Tr's prompts to stop for reflection</i>] زين هذه المقدمة (Ok! This is the introduction) and now I will read this [<i>looking at Tr. in an attempt to get an approval sign of what she is doing</i>] “The best kind of chocolate is dark with 70% of cocoa...and attentiveness. PU#15-27” و هذي الفقرة الثانية (and this is the 2nd paragraph) I understand dark chocolate is good than other/ and and and heart disease will not happen/ OK? أكمل يا أستاذ (Shall I complete?) / زين بقري البرجراف اللي بعده (Ok, I will read next paragraph PU#28-34) “White chocolate” Ahhh, الحين فهمت هذا مقارنة بين الشيكولاتا البيضاء و الداكنة (Now, I got it. This is a comparison between dark and white chocolate) [<i>ST keeps reading, she looks more comfortable</i>]</p> <p>Mmmmmm “.... Chocolate has PU#35-42” what? What is this word? / I cannot read/ [<i>trying to read 'calories'</i>]ok ok ok [<i>looks like</i></p>	<p>Performance Score (5/8 marks)</p> <p>T: Hello again. Are you ready for the second session?</p> <p>ST: Yes, teacher</p> <p>T: Thank you for helping with this.</p> <p>ST: No problem</p> <p>T: You can start</p> <p>ST: Ok teacher/ I read this but but I don't answer good because eheheheh many words difficult/</p> <p>T: أنا عارف ان الكلمات الصعبة هي ما يزج كثير (I know that students' first concern is meaning of difficult words) لكن من أغراض الدراسة هو مساعدة الطلاب على تخمين هذه الكلمات (This study aims at helping students guess these words) Let's see what you can do. Just remember; this is not a test and you have to be natural.</p> <p>ST: Ok I read now/ “Have you ever heard... more than 17 years.” PU#1-3 واضح من الصورة والكلام ان الموضوع عن الفيل وكان اسمه جمبو (I could see from text and the picture this is going to be about an elephant called 'Jumbo') / “Jumbo was so large... something very large.” PU#4-5/ok, this is easy teacher/ I will read this now/ this eheh second paragraph/ I hope easy also/ “Elephants are the largest animals ... they are also the second tallest of all animals.” PU#6-10 [<i>Students struggles with the word 'approximately'</i>] بس هذي الكلمة ما اعرف معناها (I don't understand only this word [<i>referring to 'approximately'</i>] but, it is Ok this paragraph is about length and weight of the elephants.) / Now I read more/ Paragraph 3 is “the elephant is well known for its ... drink water by spraying it into its mouth” PU#11-14 أنا ما أعرف بالضبط شو يعني ترونك لكن يمكن هذي هي مالفيل اللي ياكل فيها يسمونها الخرطوم يمكن.. زين يتكلم عن استخداماتها وكيف يستفيد منها الفيل (I don't know what the word /tru:nk/ exactly means but I can guess it is this part of the body that an</p>

good?)

T: Thank you [student's name]. شكرا على (I appreciate your help)

أشوف معظم الكلمات / around that paragraph] / موجودة لكن ما في شيء عن الجلد (I can see most key words, however nothing mentioned about skin) / I think B is correct/ Question 6/ This is about young elephants يتعلموا عن طريق (They learn by) / they remember places and people/ the correct answer is D/ الحين باقي سؤالين (Now there are only 2 questions) / Question 7 is eh eh "elephants need to ... remember it again" mmm/ I I see this/ I will read [returns back to text and scan around the end of paragraph 4] / "they only saw once." / the answer is 'one time' number A/ The last question is about Mmm/ this is about the title/ من المقدمة أفهم إن هذا الموضوع عن الفيل جيمبو (the introduction says this is about an elephant called Jumbo) so the answer teacher is A/ Thank you teacher/ I hope this is good

T: Thank you so much for your help with that.

Student 02 (Female) Lang. Pro. Level (high)

Performance Score (5/8 marks)

T: Hello ____ [student's name]. Are you ready for this?

ST: Yes/ but I can speak in Arabic with English?

T: It is Ok. Just speak out what you are thinking of. English or Arabic is not a big issue. Just let me know how you read and understand the text.

ST: Ok

T: Thank you

ST: "Let's enjoy chocolate" يعني نستمتع بالشيكولاته (this means enjoy chocolate) Ok/ this reading is easy because about chocolate [jumps over to questions and back to text] / I have 8 questions about chocolate/ I will read first [reads 1st paragraph] "Chocolate is a food...but no cocoa solids. PU#1-14" يعني الحين هذا (This is an introductory paragraph about Chocolate) [she underlines a few keywords while reading] /now the second paragraph "The best kind of chocolate is dark...Cocoa has a lot of ehehehe PU#15-18" ما عارفه (Teacher, I cannot read

Performance Score (5/8 marks)

T: Hello ____ [student's name]. How are you today?

ST: Fine teacher/ I will read like last time?

T: Yes please. This time you will see a different reading passage but you need again to demonstrate how you read and understand the text.

ST: Ok teacher

T: Thank you. You can start.

ST: في الأول أشوف ما في عنوان... يعني أكيد (I guess there will be a question about the title, because there is no title) / لكن الصورة توضح إن النص / عن الفيل (But the picture says the text will be about elephants) / Ok/ I read introduction teacher/ "Have you ever heard about ... 'Jumbo' refers to something very large" PU#1-5 / He tells about a big elephant in in London/ اسمه جيمبو و هذا الاسم صار يستخدمونه الناس للأشياء (Its name is Jumbo and that name is used to refer to very big things) (Good, now I will read the next paragraph) / "Elephants are the largest animals ... they are also

this word.) [struggling with
 “antioxidants”] / anyway/ هذي معناها مضاد
 للأكسدة [reading from the provided
 glossary] “the antioxidants
 /tsholestrool/ in our food ... attentiveness.
PU#19-27” This paragraph about dark
 chocolate/ It is good for us and happy/
 “white chocolate...” [paragraph 3] Ah,
 this is different/ هذا عن الشيكولاته البيضاء (this
 is about the white chocolate) / Mmmmm
 [sounds like quick silent reading with
 underlining key words **PU#28-34**]
T: could you please read out loud? Please
 remember that I need to see how you read
 and understand the text.
ST: Ok/ sorry I forget/ This paragraph is
 easy and about white chocolate/ The last
 chocolate/ sorry/ the the last one
 paragraph/ This I will read/ “there are
 ...candy kiss. **PU#35-42**” هذا عن عيوب
 الشيكولاته (this is about the demerits of
 chocolate) / Good/ Now I answer the
 questions/ Number 1 [reading and
 translating into Arabic. Back to text] I
 need to find the meaning of chocolate/
 “this is a Spanish word, meaning...” هذا
 الجواب استاذ (this is the answer teacher) /
 hot water/ so the answer is d/ I now go to
 question 2/ “pure chocolate...” sugar ولا
 (or) calories solids butter/ I will see/
 [back to text, looks not sure where to
 start] / I need to see ‘pure’/ Where where.
 (help me teacher ساعدني أستاذ.. وين أدور
 where I can find this?) / ok/ I will read
 again [silent quick reading with an
 attempt to quickly find ‘pure’] / I found it/
 It is here/ يعني هذي فيها زبدة و هذا السوليد لكن ما
 (I can see أتكلم عن الكالوريز..أظن الجواب بي
 ‘butter’, ‘solids’ but ‘calories’ is not
 mentioned so, I think the answer is B) /
 Now this is question 3/ It is about ...
 [reading] darker/ يعني أختار واحدة من الأرقام
 (I need to choose one of these numbers)
 [back to text] / I saw this number/ This
 number is here here [looks scanning] / it
 is here/ It is 70% so the answer is C/ This
 is easy teacher/ (now number 4) الحين رقم 4
 “dark chocolate is ... health because of”
 يختار بي بدون قراءة لأن الكوليسترول والسكر
 والتدخين غير مفيدين، أكيد هذا ال؟؟ ما اعرف أقريره

the second-tallest of all animals” **PU#6-10**
 [Student struggles a bit with the word
 ‘approximately’ but she skipped it] In this
 part I understand many information ehehe
 mmm/ يعني الطول و الوزن كبير و الفيل يعيش في
 أماكن مختلفة (This is about height and
 weight and also the elephant lives in
 different places) [Student takes notes in
 the margins] Good/ Now I read more
 “The elephant is well-known for ... to
 drink water by spraying it into its mouth”
PU#11-14 (Now this is about the body of the elephant)
 أظن هذي معناها (How how use the trunk
 الخراطوم (I think ‘trunk’ means
 “Khartoom” [Arabic equivalent]) ok I
 complete teacher/ “The elephant’s skin is
 dark ... the mud protects the animals
 skin.” **PU#15-21** وهني يعطينا معلومات إضافية
 عن جلد الفيل وإنه يعني... ما ادري سميك وحساس
 ويحتاج حماية (Here we get more
 information about the skin and how it is
 thick, sensitive and requires protection)
 [Student takes notes in the margins] /
 Teacher, this is not difficult/ I can
 understand/ “The African elephant has a
 number of... and people that they only
 see once.” **PU#22-29**/ in this paragraph I
 eheheh/ I see more and many information
 about the elephant/ like mmmm eheheh/
 strong intelligent sensitive and memory/
 This is good teacher/ Now the the
 conclusion is last paragraph/ I read this
 now/ “Young elephants learn by...
 protect from predators.” **PU#30-38**/ وأخيرا
 يخبرنا كيف يتعلم الفيل يوم هو صغير و يعيش مع
 القطيع (Finally this is about how the
 elephant learns while it lives with the
 herd) (Now I will
 answer the questions teacher) زين السؤال
 (Ok the first question) “Jumbo is a
 word mmmmm means” Ah this is about
 meaning this word/ It is in paragraph 1/ I
 see [Student returns back to text and scan
 for answer] here teacher/ “something
 very large” I choose answer D/ large
 elephant/ Question 2 “In paragraph 2 the
 word ‘they’ refers to ..” / I will see/
 [student reads around the pronoun] / I
 understand this is about elephants/ يعني

(I choose B without reading because neither sugar nor cholesterol or smoke is healthy. I am sure the answer is ?? that word.. I cannot read it) [*she means 'flavonoids'*] / Question 5 is about make people dark chocolate happy/ Ok I will read about happy [*back to text. Looks scanning for 'good feelings' through paragraph 3*] Mmmmm! "make us feel happy" Uheh! "because dark chocolate has caffeine" got it teacher/ The answer is C/ this was easy/ أسئلة 3 لي (I still have 3 questions) ok question 6 is is is talking 'heart disease' I remember this in the reading/ [*checks the text without reading the choices. Looks scanning for 'heart disease'*] Mmm! Not here not here/ Which paragraph teacher?

T: Sorry! You need to know this by yourself.

ST: Ok أنا شافيتها جيل (I saw it before) heart heart heart [...*silence for a while*] yes, heart disease is here/ "high cholesterol can cause heart disease" / so the answer is B "too high" / 7 is white chocolate different white chocolate/ This is paragraph about white chocolate/ I will read him/ "white chocolate is different ... because it is made from ... butter" [*back to questions*] make us fat/ This is the answer لأنه هذي الزبدة بيستوي متين (This butter makes him fat) / الحين آخر سؤال (now last question) "from this article... health?" these numbers in the end [*returns back to text*] "eating 30 /kal/ /kalorz/ هذي الكلمة هههههه (this word hehehehe) [*laughing & pointing at 'calories'*] / The answer is C/ Wow! Finished teacher/ كان زين أستاذ؟ (was that good teacher?)

T: Thank you so much for you time. We can talk about that later.

الجواب الأول (the answer is A) / Ok now next question teacher/ "Elephants take a mud bath to .." I will find the 'mud bath' I will find now/ I try find it where? Where? I read this before [*she scans for the keyword*] here teacher I find it/ It says "takes a mud bath to keep cool" يعني علشان (this is because the skin is tender) I take answer A/ I read question 4 now/ This is about about mmmm 'the trunk' يعني الفيل يستخدمها كما الأنف ولا هذا ولا هذا (How the elephant use it? As a nose or this or that?) The trunk is in paragraph 3 so I read again/ Mmmm eheheh yes this is the trunk/ It tells uses its trunk to handle anything/ I don't know but handle هذي تشبه اليد ويعدين أكيد هو يتناول بيها الأشياء (This word looks like the word 'hand' and of course it is used handle things) يعني (so the best answer is C) / For question 5 African elephants are strong? Intelligent? / Mmmm eheheh predators? Short? Not the last one لأنه عكس المعلومات اللي قريتها في الأول (not the last choice because it is contradicting with previous information) and not 'predators' so A or B/ I will read to see this [*student returns back to text and scans for the key words*] / mmm this is 'strong and very intelligent' and this is 'sensitive' بختار الجواب الثاني لأنه يشمل نقطتين (I will chose answer B because it includes 2 points) / Now question 6/ young elephants learn by ... eheh/ I see last paragraph tells about learning/ Yes here word 'learn' learn by copying older elephants / answer more correct is is mmmm/ not A, doing the same things as their parents yes this correct Answer B/ Question 7 is is about mmmm/ 'elephants need to remember يعني بعد كم مرة يتذكر (means how many times to remember) هذي في نفس الفقرة (this is in the same paragraph) "They only saw once" / so answer correct is A/ Last question is about title mmmm [*reading choices silently*] I choose A because this is about the Jumbo/ The end teacher/ It is OK?

T: Thank you so much. شكرا جزيلاً

Student 03 (Male) Lang. Pro. Level (low)

Performance Score (4/8 marks)

T: Hello ____ [student's name]. Are you ready?

ST: Yes, teacher.

T: Any questions before you begin reading?

ST: No. I will read now.

[ST looks at the text, then the questions. He looks not sure to start with questions or text]

ST: I will read here first/ "Let's enjoy chocolate" واضح ان هذا الموضوع عن الشيكولاته (I can see this is about chocolate/ Ok! The picture tells that as well.) [reading] "Chocolate is a food ...the cacao. **PU#1-2**" هذا معناه ان (this means chocolate is made of cacao) [continues reading] "The word, chocolate ... hot water. **PU#3-5**" this tells chocolate hot water the meaning of the word/ [reads again] "There are several kinds ... but no cacao solids **PU#6-14**." زين يعني أنواع (Ok, this is about the components of different kinds of chocolate but what does this word mean? [referring to 'unsweetened']) / I will read the second paragraph now/ أشوف هذا الكلام مكتوب بخط مختلف (I can see these words written in bold) [pointing to 'dark chocolate'] "the best kind of chocolate is ... can cause heart diseases. **PU#15-20**" / Ok this is meaning of that difficult word [reading the provided glossary] لكن شو يعني مضاد (but what does it mean? [still the meaning not clear]) / No problem/ This [referring to 'antioxidants'] "in chocolate can ... and attentiveness." **PU#15-20** في هذا الجزأ يحكي عن فائدة هذا الشيكولاتا و إنه تخلي (in this part, the text is about the benefits of chocolate and how it makes people happy and ??? 'I don't know this word' [referring to 'attentiveness']) **PU#21-27/** Ok, next paragraph is begins 'white chocolate' يعني هذا سيكون عن النوع الأبيض (So this paragraph will be about white chocolate) "White chocolate is different ... have as much caffeine as dark

Performance Score (3/8 marks)

T: Hello dear ____ [student's name]. Are you ok?

ST: Yes teacher but I am شوي معصب. ما (A bit nervous, I don't like test)

T: No, please relax. This is not a test as I explained before. We can do it another time if you like.

ST: لا لا ما مشكلة بنسوي الحين لكن مشكلتي هي ما (No no, not really an issue. My problem is limited vocabulary but don't worry I will start now.)

[ST looks at the text for a moment]

ST: Ok teacher I will start/ This picture is about elephant/ I read paragraph 1/ "Have you ever heard about the elephant ...refers to something very large." **PU#1-5** أشوف هذا الموضوع عن فيل فيل كبير اسمه جمبو / والناس صاروا يستخدموا الكلمة للأشياء الوايد ضخمة (I can see this is about a big elephant called Jumbo and people use the word now to refer to big things) / زين الحين الفقرة / (Ok now I read the second paragraph) "Elephants are the largest animals ...and weighs about 5.400 Kilograms." **PU#6-8** وهذا يحكي عن حجم (this text tells about the size of the African elephant, its weight and also length) / أشوف كلمة مكتوبة / (I can see a word in bold [they] / I expect a question about it) / "They live anywhere...second-tallest of all animals." **PU#9-10** / Ok this is eh/ more information about elephant/ (Teacher I can see this is easier than the other one) / Paragraph 3 is "The elephant is well known for its long...The mud protects the animal's skin." **PU#11-21** / Ok this paragraph give more talk about the body / the parts of that body of elephant وكيف (And how and why the elephant uses different body parts) / I read more [continues reading] "The African elephant has a number of ...They can remember places and people that they only saw once." **PU#22-29** / In

chocolate.” **PU#28-33.** /This means dark chocolate is better than white and/“Eating white chocolate cannot make us feel happy as eating dark chocolate.” **PU#34.** Now I read final paragraph/ “There are some bad things about chocolate” **PU#35** (now the text tells about the disadvantages of chocolate) “chocolate has calories ... candy kiss” **PU#36-42/** this is about wrong calories and bad calories/ We need to eat only 30 calories not become fat/ Good I now will answer the questions/ [reading question 1 and underlines ‘chocolate means’.] I read this in paragraph 1/ [seems to be scanning] Yes, it is here/ “Spanish word meaning hot water.” The answer is D/ Question 2 is “pure ...NOT have” [reads choices and scans the text for the answer] Mmmm/ it has this ‘solids’/ ‘butter’ but not ‘sugar’/ The answer is A/ In question 3, the chocolate is darker and these numbers here/ I saw this/ I will read again/ [reading around the 1st sentence of paragraph 2] It is here 70%/ The answer is C/ [looks at question 4 and reads silently] This is about dark chocolate/ Good for health not sugar, not cholesterol, not smoke/ Ok this word is what/ I don’t know good or bad/ [referring to ‘flavonoids’. scanning for that word] I cannot see this word/ I don’t know/ I will choose.. I will choose C/ صح أستاذ؟ (Correct teacher?) السؤال خمس عن الشيكولاتة الداكنة أيضا. يعني (Question number 5 is about dark chocolate, so this is still in paragraph 2) / [ST. circles ‘good feelings’ and returns to text.] good feelings, good feelings, where? Yes, in this line “caffeine can help us have good feelings” /I choose answer C/ Question 6 “heart diseases” [reads around paragraph 2] I see here ‘heart diseases’ “we know high cholesterol can cause heart diseases” /I choose answer B/ question 7 “white chocolate is different ...because” in this paragraph [pointing P. 3] “made from cacao butter.” /it makes us

this paragraph/ I watch no see more words about elephant Africa/ يعني ذكي وقوي وعنده ذاكرة لما يشوف الناس من مرة (this means it is smart, strong and remembers people that only sees once) / (الحين بقري البراجراف الأخير يعني الخاتمة مثل ما خبرنا المعلم (now I read the last paragraph; the conclusion as our teacher said) / “young elephants learn by copying older elephants ... protect them from predators.” **PU#30-38/** In last paragraph/ he say that small one learn from big like people/ هذا آخر شيء والحين بحل الأسئلة (This was the last part and now I will answer the questions) / [ST turns to questions.] This question one “Jumbo” is is ah mmm/ I remember this word in paragraph 1 [ST scans paragraph 1] هذه هي الكلمة (this is the word) and it is something very large/ زين يعني الجواب لا الأول ولا الثاني يختار الثالث (Ok this means the answer is not A or B. I choose B teacher because it is closer to correct answer) / Question 2 “In paragraph 2” يعني الجواب (this means the answer is in paragraph 2) / Ok this about word ‘they’/ “They live anywhere from the” this say about elephants/ I choose answer A/ This is correct teacher? / And now question 3/ “Elephants take a mud bath to” ما اعرف شو يعني هذه الكلمة لكن ما مشكلة (I don’t know what this word means [pointing to ‘mud’] but no problem) / I read the word ‘bath’ [scanning for that word around paragraph 2 and down around paragraph 3] / here teacher the word “mud bath to help keep cool” **PU#20** / now now the answer is A because I think correct than other/ Now teacher this question 4 is “the elephant’s trunk is like a” / يعني شو يشبه خرطوم الفيل (what does it look like?) / I will read the paragraph/ I see trunk I see trunk where [scanning for that word] I find here teacher “The elephant also uses its trunk to drink water” so it is like mouth/ The answer is correct B/ Question 5 “African elephants are” / الخيارات فيها صفات مثل في (choices include adjectives like in paragraph 4) strong, intelligent, short/ I

fat/ A is correct/ Now 8 Mmmmm/ it is about number of calories/ [scanning last paragraph] "... about 150 calories" B is right/ Finished teacher.

T: Thank you.

read now teacher/ [reads around paragraph 4] "It is strong..." so answer A is correct/ Ok teacher? Now question number 6/ "young elephants learn by" by by [while scanning choices] / أعتقد (I think the answer for it is about memory, not sure, I will check) [returns to text and reads around paragraph 4] /This teacher "they can remember places and people" same like answer D/ it is correct/ Ok teacher?! أنا ماشي زين استاذ (Am I doing good teacher?) /I read question 7 now/ "Elephants need to see anything" ah times مرة يعني (means how often) / This is easy teacher/ I remember this/ It is one time so answer correct is A/ Now last question/ "the best title for passage" يعني شو أحسن عنوان؟ دائما (this is about the title. We always have a similar question) /Ok I will choose choose this/ no A and B and C all have elephant and D is different أنا بختار الأخيرة (I choose the last answer.) Finished teacher. I am good?

T: This is not about good or bad. I think you were natural. Thank you so much for your help with this.

Student 04 (Male) Lang. Pro. Level (high)

Performance Score (4/8 marks)

T: Hello ____ [student's name]. Are you ready?

ST: Yes

T: Would you like to start now?

ST: Yes. I will read here first/ "let's enjoy Chocolate. Chocolate is a food ... tro trop tropical tree called cacao." PU#1-2 / I don't know this 'tropical' mean هذا النص عن الشيكولاتة (this text is about chocolate) I will read/ "the word, chocolate ...has cacao solids and cacao butter." PU#3-8/ اللي فهمته إن الشيكولاتة تتكون من هذي الأشياء (I understood that chocolate is made from these things) [referring to the mentioned components in the text] "much of the chocolate we eat ... but no cacao solids" PU#9-14/ أشوف هذا الكلام تحته (I can see underlined words which indicate two types of chocolate; sweetened and

Performance Score (5/8 marks)

T: How are you ____ [student's name]?

ST: Fine teacher.

T: Any questions before we start this?

ST: No but no problem to translate words difficult to me?

T: As I said before, I don't really have to do any translations and you should depend on your own. الهدف ان الدارسة تتعرف على أداء الطلاب حتى يمكن مساعدتهم (This study aims at suggesting different ways to help students according to their own performance.) so just do your best and be natural. Any other questions?

ST: No. I will start.

T: Thank you.

ST: Ok I will read now/ No title for this but I have a picture of elephant/ it will give information about this animal/

"Have you ever heard about the elephant called Jumbo" PU#01/ يعني الموضوع بيكون

unsweetened) and two types more 'dark' and 'white' [student refers to bold words in paragraph 2 and 3] Ok, "the best kind ... dark chocolate" **PU#15-16**/ يعني هذا أفضل (it means this is the best kind) [referring to dark chocolate] "The higher the percentage, the darker the chocolate" so cocoa number is more chocolate is better/ "Cocoa has a lot of ... anti antioxi antioxidants" **PU#17-18** – what is that word? Ok ok the meaning here مضاد أكسدة [reading the provided glossary] – / "Antioxidants can lower ... can cause heart diseases" **PU#19-20**/ زين هذا من فوائد (Ok, this is one of the benefits of antioxidants.) هذا (this per se [referring to antioxidants]) / "in chocolate can lower ... happiness and attentiveness" **PU#21-27**/ I understand this paragraph is about useful things of chocolate/ The following paragraph is different/ It is about a second kind/ White chocolate/ "white chocolate is different ... not the cacao." **PU#28-30** (Unlike the dark chocolate, this one doesn't have the same benefit) "Therefore, it does not have ... happy as eating dark chocolate" **PU#31-34**/ Ok, (now I will read the last paragraph) / "There are some bad things about chocolate... make people fat." **PU#35-39**/ calories can be bad but "a good news is that ... a chocolate candy kiss." **PU#40-42**/ يعني ناكل (this means little chocolate is more useful.) / Teacher, I will answer the questions now/ Number 1 Mmmm. The meaning is is [reading the choices silently] ok/ [scanning the text, 1st paragraph] / Ah this is the answer "meaning hot water" / the answer is D/ Is this ok? Question 2 is [silent reading and underlining keywords] Now I will read text next point/ This is 'pure'/ Ok, I will read more here/ This is butter, solids, and I read about calories/ زين الحين (Ok, only sugar is missing) /the answer is A/ in number 3 I read the numbers/ Only 70 is I can see in paragraph 2/ The answer is C/ I read

عن هذا النوع من الفيلة (so the topic will be about this kind of elephants) / but what is Jumbo? / I will read "Jumbo was an African elephant... refers to something very large." **PU#02-05**/ هذا يعطينا معلومات (this gives more information about Jumbo) / it is a very big elephant/ I will see questions teacher/ [Turns to questions] questions 1 is "Jumbo is a word that people..." Ah this is in paragraph one/ الكلمة تستخدم الآن بمعنى شيء كبير (the word is used these days to mean something very big) هذي وايد سهلة (this is very easy) / I choose answer D/ no no answer C/ one minute teacher/ this or this?/ Ok I choose C/ I hope correct. Question 2 "In paragraph 2..." / I didn't read this/ I will read first [back to text and reads around paragraph 2] "Elephants are the largest animals ..." app appro approx.. ما اعرف هذي الكلمة (I don't know this word [referring to approximately] "They live anywhere ... the second tallest of animals" **PU#06-10**/ so more information about meters and kilo/ يعني (height and weight) ok question 2 is about "they" هذي (refers to which of this list?) / ok I think it refers to to elephants/ yes elephants is correct. Ok question 3 "Elephants take a mud bath to..." معنى (the meaning of this is not clear but let me see) [back to text and reads around paragraph 3] "The elephant is well known for ... the mud protects the animal's skin" **PU#11-21**/ in this paragraph/ I see information about body and other things and this is word in question 3 [refers to 'mud bath'] "the mud protects the animal's skin" يعني (means the best answer is the last one) / Teacher I choose answer D protect themselves/ In question 4 he ask about the elephant's trunk is like [pause.. seems reading the choices silently] / ok this trunk is in same paragraph / يقرأ مرة ثانية (I read again) [reads around paragraph 3 again and seems to be looking for 'trunk'] / Yes trunk is here "the elephant uses its trunk

question 4 “Dark chocolate ...because of” I read again/ “antioxidants can lower the cholesterol in our blood” / this is about cholesterol that dark chocolate can do good/ The answer is A/ Now next question/ Chocolate makes ‘good feeling’ because this this this [pointing to the choices] I will read to see/ [scanning end of paragraph 2] Ok/ here “Caffeine can help us have good feelings.” So, caffeine is correct/ This is C/ I go now to question 6/ This is heart diseases because I remember this ‘heart disease’/ I will see again [scanning for ‘heart disease’] It is here teacher/ In this line “can cause heart disease” this is about cholesterol high/ I choose answer B/ Now only 2 questions/ Number 7 “white chocolate” I read about this in that paragraph [pointing paragraph 3] /it is different because “it is made from cocoa butter” here teacher/ I think answer is A because butter makes people fat/ Now the last question “From this article ... good for our health?” one, 150, 30/ This is in last paragraph/ Here teacher/ “about 150 calories” So the answer is B/ Thank you teacher.

T: Thank you.

to handle anything/ The elephant also uses its trunk to drink water” / it is like mouth إذا الجواب الصحيح هو الثاني (so second choice is correct) Good teacher? I read this paragraph now [referring to paragraph 4] “The African elephant has a number of interesting features ... they can remember places and people that they only saw once” PU#22-29/ in this I have many adjective about elephant/ ok I read question now/ this is “African elephants are ..” Mmmmmm not C or D/ all adjective in A and B correct ما متأكد (not sure) I Choose A/ Question 6 is “elephants learn by..” يعني كيف تتعلم (means how they learn) I read to see answer/ “Young elephants learn by copying older elephants” PU#30 يعني يتعلموا بالتقليد (so they learn by imitation) let see answers/ plaing/ doing same/ protect/ remember واضح إن الجواب هو الثاني (It is obvious that correct answer is B) “This comes naturally because ... elephants protect them from predators” PU#31-38 in this I have information about elephant family help and care/ I read now next question [Looks at question 7]/ mmmm I read “elephants need to see anything..” one three many times/ mmmm this about number to see things to remember هذي أنا قرأت عنها في البراجرافات الأخيرة (I read about this in the last paragraphs)/ I will see [back to text and scans around last two paragraphs] ah this is answer/ “they only saw once” واضح جدا إن الجواب هو الأول (Quite clear the answer is A)/ Correct teacher? The last question now/ “the best title...” يعني أفضل عنوان وهذا سؤال دائما موجود (about the best title and this is a very common question)/ mmmm I think I choose A or B/ not sure but ok the answer is ‘jumbo’ A. Thank you teacher. This was good.

T: Most welcome. I really thank you for your time and efforts. شكرا

C5: **TAP** Transcripts of the Experimental Group (Pre/Post-Test)

Experimental Group	
Pre-Test	Post-Test
Student 05 (Female) Lang. Pro. Level (average)	
Performance Score (4/8 marks)	Performance Score (6/8 marks)
T: Hi ____ [<i>student's name</i>]. Are you OK?	T: Hello ____ [<i>student's name</i>] again. Are you ready for another reading task?
ST: Hello teacher. I am fine.	ST: Hello teacher. no problem
T: Are you ready for the reading task?	T: Ok, any questions before you start?
ST: Yes.	ST: No, I will start OK?
T: Ok, can you start now?	T: Please do. Thank you.
ST: I can see this text is about chocolate/ I love chocolate/ "Let's enjoy chocolate" / the title and picture tell this reading is from chocolate/ I hope is easy/ "Chocolate is a food ... 'hot water'"	ST: Ok now before I read I will will يعني (first I need to have an overall look) this <u>skim</u> to to know general thing is about what/ there is picture about elephant/ no title/ I will read introduction "Have you ever heard about the elephant called Jumbo? /this is a question about that elephant but what jumbo means ... the word 'jumbo' refers to /Aha this is the meaning/ something very large" PU#1-5 this is clear now هذا النص عن حيوان الفيل اسمه جمبر والصورة بتأكد وصاروا يستخدموا الكلمة
PU#1-5 this is means chocolate is Spanish هي أساسا كلمة أسبانية و معناها الماء الساخن (It is a Spanish word which means hot water) / this is interesting/ "There are several kinds of chocolate" PU#6 يعني (The text will now tell about these types of chocolate) / "Pure, unsweetened ...but no cocoa solids" PU#7-14 he tells about sweetened and unsweetened and white chocolates/ و (They have different components) / I read now next paragraph "The best kind ... the darker the chocolate." PU#15-17 هذي الشيكولاتة الداكنة و أتوقع يكون هناك نوع غير داكن .. نعم هذا (This is dark chocolate) هو.. الشيكولاتة البيضاء و أكيد بيقارن بينهم [ST underlines 'dark chocolate' in the first paragraph] I expect another type will be mentioned.. yes here it is [ST underlines 'white chocolate' in paragraph 3] and I am sure there will be a comparison between them) / I will read to see/ "Cocoa has a lot of ...cause heart diseases" PU#18-22/ ok "The antioxidants in chocolate can ... happiness and attentiveness." PU#23-27 so these lines are telling about how the the chocolate is good for my health and make happy/ هذي لكن لازم تكون داكنة (but it should be dark) / now the white chocolate (I expect it is different. I mean not useful like the dark one) / "White Chocolate ... as eating dark chocolate" PU#28-34 يعني ما فيها مضاد	جمبر والصورة بتأكد وصاروا يستخدموا الكلمة (it is clear now this essay is about an elephant called Jumbo and the picture confirms that and now that word means very large) This enough now/ I read questions now/ question 1 "Jumbo is a word that people... to mean" The answer I saw in introduction/ I scan for keywords 'Jumbo' and 'mean' [ST underlines 'keywords' & scans paragraph 1 again] here teacher/ 'the word ...refers to something very large' so (C is definitely the correct answer) because 'huge' means large/ correct teacher? وأيضا باقي الأجوبة (And for sure the other choices cannot be selected). Ok I will read question number two / "In paragraph 2, the word 'they' refers/ عرفته هذا اللي (I know it. This is where I need to find what a pronoun is telling about)/ I will read paragraph 2 now to see this/ [ST underlines 'they' in the question & goes to paragraph 2] The word is very black and underline/ "Elephants are the largest animals يعني هي أكبر الحيوانات على الأرض

الأكسدة و مصنوعة من الزبدة و ما فيها نفس الفائدة (It doesn't include antioxidants and is made of butter and not healthy like the dark one) / الحين الخلاصة في البرجراف الأخير (now the conclusion comes in the last paragraph) / "There are some bad ... chocolate candy kiss" **PU#35-42**/ I understand chocolate not good if I eat much and I have to eat few/ only 30 /karo karoli:s/ [meaning calories] / Now I will answer the questions [Turns to questions] / number 1 "Originally the word... means" / Mmmm [reading the choices silently] / yes I know this [back to text & scanning for 'hot water'] this is the answer "meaning hot water" / The answer is D/ number 2 is 'pure chocolate' not have.. have.. have [while reading the choices with eyes] / I will see/ This is 'pure'/ It is unsweetened سكر ما فيها سكر (means without sugar) so answer is A/ now question 3 is about dark chocolate/ النسبة المئوية المتوفرة (The available percentage) / I saw this in in in [scanning for the number% in text] / it is here 70%/ The answer is C/ I move to number 4/ This question is also dark chocolate / it is good for health because because [reading the choices silently] / ما ممكن تكون بسبب السكر أو الدخان أو الكوليسترول و ما باقي غير هذي (It cannot be healthy because of sugar, smoke or cholesterol. It should be that word [pointing to 'flavonoids'] but what does it mean? I will choose this anyway!!) So the answer is B/ next question is is is [silently reading and highlighting key choices] about good feelings/ I know this is about antioxidant/ The answer is B/ I read question 6 now/ It is about heart diseases because [pause, the back to text. Seems to be scanning for the answer in paragraph 2] I got it here/ "high cholesterol can cause heart diseases" The answer is B/ question 7 is about white chocolate so I read in paragraph [short pause] 3/ It is different because it will make us fat/ This is the answer because it has butter/ [Ticks A]. Question 7 is is is about much of

الحين (this means they are biggest now) ok/ an adult African elephant is ... kilograms وأظن هذي الكلمة الطويلة معناها؛ (I think that long word [referring to 'approximately'] means 'about') They live anywhere حسب الكلام اللي قبل اكيد الضمير يشير للفيل الأفريقي (according to previous text, 'they' refers to African elephant) They are also the second tallest of animals." **PU#06-10** [back to questions] Now next question my teacher/ "Elephants take mud bath" Mmmm this is for reason they do this يعني ياخذو حمام من (they take bath of that thing which I don't know what it is) but ok/ keywords is 'mud bath'/ I will read to find this [practice scanning]/ "The elephant is well known for its long trunk ... uses its trunk to handle anything... أظن هذا كله عن خرطوم (This is about this part of body) The elephant's skin/ الحين صار الكلام عن الجلد (now this is about the skin) /grey...wrinkled... thick....needs protection from the sun [Student jumps over these keywords] ... takes a mud bath/ هذي هي (that's it) ok why takes this bath? /The mud protects ...skin" **PU#11-21** I think I got the answer teacher/ mmmm not soft, not to drink or play/ protect is correct/ Answer D is correct. Question 4 "The elephant's trunk is like"/ the keyword is 'trunk'/ I read this there [back to paragraph 3] I see here "uses the trunk to handle and drink"/ يعني يستخدمها (Uses it like a hand)/ this is easy teacher/ answer correct is C. In question 5 "African Elephants are" strong, intelligent, thick skin, short يعني تقريبا (This is mostly about features) I need to read more [scans through paragraph 4] "An African elephant هذا هو المطلوب (this is what I need to read about)/ strong ... intelligent... sensitive... laugh [jumps over these keywords] يعني هذي هي الصفات (these are the features)/ no short no no [thinking] no thick skin لكن كل الصفات في الأول والثاني (All adjectives in A and B are there) I choose A teacher/ they can

chocolate is good/ I saw this in paragraph 4/ The number is 150 calo calories/ I choose B/ I am finished teacher.
T: Thank you dear ____ [ST's name]

remember places and people ...saw once”
PU#22-29 وهذه معلومة إضافية عن الذاكرة (this is another information about memory) ok now next question “Young elephants learn by” يعني كيف يتعلموا الصغار (how youngers learn?) I read about ‘learn’/ [scans through paragraph 5] “young elephants learn by copying older elephants يعني يسووا مثل الفيلة الكبيرة (This means they do like big ones)/ this comes naturally because .../ وهذا السبب ليش بيتعلموا .../ (this is why it is easy to learn from older ones) /... protect themselves from predators.” **PU#30-38** / I see question 6/ they learn by by/ not playing with friends/ doing same as their parents/ yes this is correct answer/ Question 7 is “Elephants need to see ...to remember it again” this is about how times يعني كم مرة (how many times they need to see something in order to remember it?)/ الجواب الأول بدون قراءة صحيح (first answer is correct without checking the text)/Now last question teacher/ This is best title/ we have many like this/ I will read/ Jumbo, African Elephants, Elephants world, intelligent animal/ I think the good title for this is A ‘Jumbo the Elephant’. Wow أنا فرحانة أستاذ أحس هذي (I am so happy teacher. I think I am far better this time) Thank you.
T: Thank you so much for helping me with this ____ [ST's name]. I wish you all the best.

Student 06 (Female) Lang. Pro. Level (high)

Performance Score (5/8 marks)

T: Hello ____ [student's name].

ST: Hello sir

T: Are you ready to start?

ST: OK Teacher. Now?

T: Yes please.

[ST looks at the text for a while]

ST: “Let’s enjoy chocolate. Chocolate is a food ... ‘hot water’ ” **PU#1-5** [student struggles with reading ‘tropical’] so I understand this is text tell me chocolate/ Paragraph 1 give means and information/ I will read this more/ Eheheh “there are several kinds ... but no cocoa solids.”

Performance Score (6/8 marks)

T: Hi ____ [student's name] again. Are you ready for that reading session?

ST: Hi teacher. I am Ok

T: Fine, do you have any questions?

ST: No, thank you. أبدأ أستاذ؟ (Shall I start?)

T: Yes please. Thank you.

ST: Ok now before I start بسوي نظرة عامة (I will skim the text to get the general idea) I can see picture/ this is elephant يعني تقريبا بكون (So the topic will almost be about elephants) زين.. أشوف الموضوع (the topic seems to be

و هذا يعطي معلومات إضافية عن الأنواع **PU#6-14** (and this adds more information about the kinds of chocolate) / next paragraph now “The best kind of chocolate is dark chocolate ... cholesterol in our blood”

PU#15-19 this is not clear I read again/ [student reads the same portion again slowly] يعني الشوكولاتة الأفضل تكون فيها كاكاو (this means better chocolate includes more cocoa and antioxidants) “We know high cholesterol can ... such as happiness and attentiveness” **PU#20-27** [student reads the rest of the paragraph continuously, however she was underlining some key words and pausing for thinking] هذا الحين (this tells about the benefits of dark chocolate) و أنه تخلينا (and it makes us happier) / الحين (now I move to next paragraph) “White chocolate ... in dark chocolate” **PU#28-31** هذه مكتوبة بخط سميك (this is written in bold because it is important) و أظن الحين بيسوي مقارنة بين (I think this is a comparison between dark and white chocolate) “Cocoa butter has very little caffeine, As eating dark chocolate” **PU#32-34** so this tell dark chocolate is good more than white because there is more caffeine/ This is easy teacher/ I understand [student looks happy because she feels the text is readable and understandable; may be indicating interest in the topic as well] “there are some bad things about chocolate. ... a chocolate candy kiss.” **PU#35-42** الحين أشوف يتكلم عن الأضرار من أكل الشوكولاتة كثير (now I see this is about the bad effect of eating much chocolate) زين (Ok) this is good teacher/ I read now the questions 1/ the mmmm chocolate means ah this is about meaning/ A B C D [student reads choices silently and returns to text. She seems to be scanning for the answer] means means means [while scanning] ah this ‘meaning hot water’/ The answer is D/ question 2 pure chocolate not have (Which of these does not exist in pure chocolate?) / I

interesting) / Teacher I will read paragraph introduction/ “Have you ever heard about the elephant called Jumbo?” **PU#01** يعني هو يسألني هذا السؤال لكن ما اعرف (This is a question to me but I don’t know Jumbo) “Jumbo was an African elephant... refers to something very large.” **PU#02-5** mmmm الحين فهمت (I got it. This question is to get me focused on next information about Jumbo) and jumbo is is يعني يستخدموها الناس الحين وايد (the word jumbo is commonly used by people these days to mean very big) (This is enough for now/ I will move to questions) (now first question) [reads question 1] “Jumbo is a word that people...mean”/ this question about meaning jumbo. This I read in paragraph 1/ I see this again [turns to text and looks for meaning of Jumbo] here teacher/ ‘something very large’ [student underlines that phrase] so I answer D/ this is ‘large elephant’/ I read question 2 “In paragraph 2...refers to” يعني هذا السؤال عن الفقرة الثانية و هذا اللي بيبي يعرف شو يشير (This question is related to paragraph 2 and it is about what a pronoun refers to) I need read good to see before and after/ “Elephants are the largest and weighs about 5400 kilograms” **PU#6-8** يعني الحين كل الكلام عن (this is all about elephants, height and weight) “they live anywhere.... They are also the second tallest of all animals” **PU#7-10** يعني أكيد (this means the pronoun refers to elephants) يعني الجواب (so the answer is A)/ I move now next question/ “Elephants take a mud bath to...” يعني ليش اخذ حمام طين (this is about the reason elephants take that bath) الكلمات الأساسية في السؤال هي حمام الطين/ (mud bath are main words in the question/ I read now to find the reason) [student turns back to text and reads around paragraph 3. Seems to be scanning for ‘mud bath’] “The elephant is well known for its long trunk” **PU#11**

will read again/ وين اللي قريته عن البيور (where is that part about 'pure chocolate' ?) pure pure 'pure unsweetened' إذا هذي كده يعني ما فيها سكر (unsweetened means without sugar) / the answer is A/ question 3 is is is [eye reading] darker chocolate/ This is about more number of of [student returns back to text] to of cocoa أفضل يعتبر (more cocoa is better) means answer D is correct 80%/ I now got question 4 "dark chocolate is good for health because." Mmmm I cannot take this or this/ [she crosses 'sugar' and 'cholesterol'] the answer B is more correct/ I will choose this teacher [pointing to B-flavonoids] / هذا يشبه السؤال "eating dark chocolate ...good feeling because of" السابق يعني ما معقولة يكون الأشياء الضارة مفيدة (this looks like the previous question which means bad things cannot be useful) / I will choose antioxidants answer B correct/ Question 6 "heart diseases" I saw this [returns back to text to scan for 'heart diseases'] mmmm 'heart' 'heart' [quick scan] here this "high cholesterol can cause heart diseases" the answer correct is B/ question 7 is "white chocolate is different..." I will read about white chocolate [returns back to text] here [pointing to paragraph 3] "...is made from cocoa butter" this means butter makes us fat/ So answer correct is A/ now last question teacher/ "from this article ... for our health?" / Yes I read this in the last paragraph/ [returns back to text and looks through the last paragraph] "eating 30 calories will not make us become fat" so answer is C/ end/ teacher I was good?

T: Thank you very much.

الحين بتكلم عن الأشياء اللي يشتهر بيها الفيل/ وهذا الترترك أول شيء واشوف كمان شيء عن الجلد.. زين (this is about known features of elephant/ first thing is the trunk and I see here skin as well.. Ok) "The elephant uses .. trunk .. handle .. uses its trunk to drink" PU#12-14/ he says trunk for what/ use two things/ and "the elephants skin .. 3 centimeters.. thick.. protection" PU#15-19 [student jumps over text and selects keywords while reading]/ I don't know 'tender' but يعني أشوفها توصف الجلد اللي يحتاج (I see it describes skin which needs protection. It may mean sensitive or delicate) / زين ها (Ah here it is I saw it now) "takes mud bath" طيب ليش (Ok why) "to help keep cool" PU#20 and "The mud protects the animal's skin" PU#21/ زين (Ok, now I go back to the question)/ [scanning choices of question 3 again] I choose answer A/ 'make skin soft'/ next question teacher/ 'the elephant's trunk is like'/ keyword trunk و (And question is about what it is like)/ nose or mouth or hand or foot/ I read coming paragraph/ "The African elephant has a number of interesting features" PU#22 يعني مو واحدة (not only one feature)/ "... strong... intelligent...sensitive...play...memories" PU#23-27 (but the question is about trunk)/ I go back paragraph/ [scans around paragraph 3 again]/ yes it is here/ trunk is here/ "uses.. to handle and ..to drink water"/ لا (no doubt this is like hand)/ Answer teacher is C/ In question 5 is يعني شو صفاتهم/ This I just read now/ [returns back to text to scan for 'features']/ Mmmm هذي كل الصفات موجودة ما (All features are here. I don't know which one now)/ أنا أستبعد (I exclude answers 3 & 4)/ because no short no predators find/ (Now first or second?)/ هو قوي لكن ما في شيء عن الجلد (it is strong but nothing mentioned about tender skin)/ (I استبعد الأولى أيضا/

	<p>exclude the first answer too)/ answer correct is now B/ “They can remember places and people that they only saw once” PU#28-29/ يعني الذاكرة قوية من مرة واحدة يتذكر (memory is strong. Once sees something never forgets)/ ok “Young elephants learn by copying old elephants” PU#30/ يعني يتعلم بالتقليد الأعمى مثل كل (like all youngsters who learn by imitating their elders)/ [goes back to questions] question 6/ ‘young elephants learn by..’ I read this now/ it is easy/ no thinking [may mean without hesitation] the answer is B “doing the same things as their parents”/ question 7/ “Elephants ...see anything ... to remember again”/ This is easy to/ Only one time see things/ I read this/ I choose answer A/ last question is mmmm/ this is title/ which is good one/ Jumbo eheh or African Elephants or world or intelligent [St jumps over minor words]/ not last not C/ Answer A or B/ I choose B teacher but not sure. Thank you teacher/ this is last. T: Thank you dear ____ [student’s name].</p>
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Student 07 (Male) Lang. Pro. Level (low)

Performance Score (3/8 marks)

T: Hello ____ [student’s name].

ST: Hello teacher

T: Shall we start?

ST: Yes teacher?

T: Ok, thank you please go ahead.

[ST looks at the text for a while, then starts reading]

ST: “Let’s enjoy chocolate! Chocolate is bad ... but no cocoa solids.” **PU#1-14**

[student reads the whole paragraph with medium accuracy and obvious struggle with words like ‘tropical’, ‘unsweetened’ and ‘Spanish’; and ignores teacher’s signs to pause at red stars for reflection and comments as discussed before]

Teacher, this tell chocolate/ I see difficult word/ I I you help teacher meaning this word/ I I you help teacher meaning this word/ في كلمات وايد ما اعرف معناها، لو بتخبرني (I don’t know the meaning of many words/ It will be great if you help with)

Performance Score (4/8 marks)

T: How are you ____ [student’s name].

Nice to see you. Are you ready to help me with this reading session?

ST: Hello teacher. no problem

T: Thank you. Any questions?

ST: No, Shall I read

T: Yes please start. Thank you.

ST: I will see size reading and how many paragraph/ 1,2,3,4,5/ this five paragraphs/ I no title/ and see picture of elephant/ يعني (I think it will be about elephant)/ وين يعيش وشو ياكل وكيف (where it lives, which food does it eat, and what does it look like)/ بقرأ الحين (I read now and answer the questions one by one)/ حسب ما (I know that questions are mostly ordered. Correct teacher?)/ I read now but أخاف وايد (new words scare me!)/ please help teacher OK?/ Answer 1

T: I know that there could be some new or difficult words but as I explained before, students need to show how they will deal with this without help. Just do your best as possible and remember this is not a test. I just need to see you manage doing this task by your own. ☺

ST: no problem my teacher/ I read and do by myself/ “The best kind of chocolate happiness and attentiveness” **PU#15-27** [again reads through the whole

paragraph with obvious difficulty and hesitation] أظن هذه الفقرة تتكلم عن الشكولاتة السوداء و إنها تكون مفيدة للقلب و السعادة .. لكن بعد (I think this paragraph is about the benefits of ‘black chocolate’ for hear and happiness. yet there are many difficult words, teacher) (Ok, I will complete) “White chocolate ...” هذا آه الحين فهمت شيء أستاذ.. هذا سيكون عن الشكولاتة البيضاء و اللي جيل كان عن السودا (Ah, I understand now that this is about white chocolate while the previous one was about the balck one) “The white chocolate ...as eating dark chocolate”

PU#28-34 [like before, the student seems to be unable to decode some words and believes they should be translated by teacher] اللي فهمته الحين إن الشكولاتة البيضاء وايد (I understand from this that the white chocolate is widely different from the black one and not as useful as the latter) زين الحين باقي فقرة واحدة، و هذي تكون الخاتمة (Ok, there is only one paragraph remaining and it is the conclusion) “there are some bad things ...as a chocolate candy kiss” **PU#35-42** question one is choose/ [means MCQ] I read this (I بشوف النص مرة ثانية “...chocolate means” I need to see again) [student returns to text] I see meaning where? where? / I can see here [pointing to word ‘meaning’ in the text] meaning hot water يعني أكيد الجواب هو (I am sure the answer is D)/ number 2 is “Pure chocolate does not have” يعني ما (It means one of these items does not exist in pure chocolate) [student scans for ‘pure’] I will see this ‘pure’ to have answer. “pure

question 1/ “/Ju:mbu/ mmmm ...people use now mean/ يسأل عن معنى الكلمة هذي (asks about the meaning of this word [referring to ‘Jumbo’]) هذي الخيارات فيها (These choices include) zoo African something and large/ بقرأ الحين وأدور الكلمات (I read now to find keywords)/ “Have you ever heard about the elephant.... The word ‘jumbo’ refers to something very large” **PU#01-05** [student reads whole paragraph with weak accuracy and noticed struggle with words like ‘jumbo’, and ‘refers’. He ignores teacher’s signs to pause at red stars for reflection and comments as discussed before]/ Teacher I see this word answer [points to ‘very large’] (this يعني إجابة السؤال بتكون الأخيرة / large means last choice is correct)/ large elephant/ question 2 now/ “In paragraph 2, the word ‘they’ refers to...” زين هذا السؤال أستاذ اللي يريد الضمير لوين يشير والجواب (This is about reference pronoun and answer is in paragraph 2)/ (I read and see)/ “Elephants are the largest animals that live on land...they are also the second-tallest of all animals” **PU#06-10** [like before, the student seems to be unable to decode some words particularly ‘approximately’ and believes they should be explained by teacher] هذا عن الفيل إنه ضخيم وطويل صفات (This is about how the elephant is heavy, tall and has many other features) (I will see now what the pronoun refers to)/ (This is all about elephants which means the pronoun definitely refers to elephants)/ Answer is /Mmmmm eheheh/ no not this/ it is A/ (now next question)/ “Elephants take a ...bath to” (why does an elephant take a bath?)/ [student returns to text and keeps humming while scanning for the word ‘bath’]/ “The elephant is well known for its long trunk ...needs protection from the hot sun and insects” **PU#11-19**/ this is teacher about elephant but no bath here/ mmmm Ah this is teacher/ هذي هي حصلتها أستاذ (that’s it. I

unsweetened ... but no cocoa solids”
PU#7-14 Teacher/ I not see calories/ All here but calories not/ So the answer B is correct/ Question 3 is easy/ I see the number 70 in paragraph [He returns back to text. Seems to be looking for 70%] I can see here [points to ‘70% of cocoa’] The answer correct is C/ now question 4 “Dark chocolate is good for our health ...”
 (الحين بدور ليش الشكولاتة السوداء مفيدة للصحة ...) (Now I need to find why this black chocolate is healthy) [student looks uncertain where to scan] where this good for health/ This word is here teacher [pointing to ‘cholesterol’] / I say this is the answer A because can lower the /tsholi tsholistru:/ [meaning cholesterol] in our blood/ In next question “eating dark chocolate can help us have many good feelings because of” I see good feelings [returns to text and seems to be scanning for ‘good feelings’] /I read this now/ This is feeling good “caffeine can help us have good feelings” I choose answer C/ أسئلة 3 (I have only 3 questions remaining) / question 6 “heart diseases happen because” eheheh/ يعني (So this question is about causes of heart diseases) أنا شايف هذا الكلام يشوف وين (I saw this text somewhere. I will check again) [student returns back to text and scans for the question keywords..... pause for long time] this teacher/ I read this teacher “can cause heart diseases” this is high /tsholi tsholistru:/ the answer is B/ I move to question 7 now/ This about white chocolate different from dark/ I read about white chocolate “white chocolate is ... made from cocoa butter” [looking for a while at the choices] so answer will make us fat.. eheheh Answer is A/ Last question is “from the article, how much chocolate a day is good ... mmmmm I I read again last paragraph/ There is 150 and 30/ answer is B or C I not know choose this or this/ I will choose B correct teacher? / I finish/ I hope my answer is good/ Thank you teacher
T: Thank you dear ____ [student’s name]

found it teacher)/ “mud bath to help keep cool. The mud protects the animal’s skin”
PU#20-21 يعني الجواب له علاقة بالجلد / يعني بلا تردد (answer is related to skin)/ (without hesitation the correct answer is A)/ next question “the elephant’s trunk is like a”/ أخمن يسأل هنا عن (I guess this is about something belongs to the elephant and what it is like)/ this is ‘trunk’ لكن ما أدري وبش معناها (but I don’t know what it means)/ بشوف (I will see) [He returns back to text. Seems to be looking for ‘trunk’]/ This is here/ I find it “its trunk to handle anything”/ يعني تشبه اليد (It is like the hand)/the answer correct is C teacher/ Question 5 is “African elephants are ..”/ هذا عن الفيل الإفريقي (This is about the African Elephant)/ [He returns back to text. Reads paragraph 4 with medium accuracy]/ “The African elephant has a number of interesting features....They can remember places and people that they only saw once.”
PU#22-29 هنا الإجابة أستاذ (Answer is here teacher, this is all about the African elephant)/ (the words in answers A & B exist in the paragraph but the other words are not there)/ I choose B correct answer/ (now question number 6)/ يعني كيف (Young elephants learn by..”/ (How they learn)/I read last paragraph / “Young elephants learn by copying older elephants....elephants protect them from predators.”
PU#30-38 يعني هذا النص عن التعليم (this is about learning)/ I choose answer D/ لأنه أكيد لازم (because they need to remember things)/ question 7 is “Elephants need to see anything ..to remember”/ (the choices mean how many times)/ I saw this answer/ هذي الإجابة شايفها (I remember I saw this)/ [He turns to text]/ وين وين (where/ where?)/ this word remember teacher/ [Long pause] yes here only saw once/ يعني أظن مرة واحدة (I think it means one time)/ I choose answer A/

	<p>سؤال (now last question)/ “The best title”/ هذا ما العنوان (This is about title)/ I choose C/ this is about elephants around the world. Finish teacher.</p> <p>T: Thank you so much for your help.</p>
Student 08 (Male) Lang. Pro. Level (high)	
<p>Performance Score (5/8 marks)</p> <p>T: Hello ____ [student's name].</p> <p>ST: Hi teacher</p> <p>T: Shall we start?</p> <p>ST: Yes</p> <p>T: Do you like to ask any questions before you start?</p> <p>ST: Thank you teacher. I will start now.</p>	<p>Performance Score (6/8 marks)</p> <p>T: How are you ____ [student's name].</p> <p>ST: Fine teacher</p> <p>T: Are you ready?</p> <p>ST: Yes</p> <p>T: Would you like to ask any questions before you start?</p> <p>ST: No teacher/ I will start</p>
<p>ST: “Let’s enjoy chocolate! Chocolate is a food ...called the cacao.” PU#1-2 this comprehension is about chocolate and the picture is also show this/ I like chocolate and this will be easy/ “The word chocolate comes ... ‘hot water’.” PU#3-5 يعني كلمة شكلاتة أساسا معناها الماء الساخن وهي كلمة إسبانية (So the word chocolate means ‘hot water’ and it is Spanish) / ok I read after/ “There are several ... chocolate with sugar.” PU#6-10 هذا معناه إن في أنواع وايد من الشكلاتة و أكيد بيوضحها في السطور اللي بعد (this means there are several kinds and that will be explained later) [Student underlines ‘several kinds’] / one kind pure (without sugar) and kind two (with sugar) / and also “white chocolate ... no cocoa solids” PU#11-14 now paragraph 2 “The best kind of chocolate is dark chocolate” يعني الحين صار (now there are white and dark chocolates) / ok I read more now “...dark chocolate with 70% of cocoa” PU#15-16 يعني ذا الرقم مهم (this number is important) “The higher the percentage, ... a lot of anti oxid antioxidants.” PU#17-18 [student struggles reading ‘antioxidants’] / لكن شو / (But what is this substance? Which benefits does it have?)/ “The antioxidants can lower the cholesterol ... can prevent heart diseases.” PU#19-22 [student underlines and numbers various benefits of antioxidants] / زين هذي كلها من فوائد المضاد</p>	<p>ST: I will read this and answer the questions/ I need know meaning general so I skim/ المقدمة و العنوان و طبعاً ممكن أستعين بالعنوان و المقدمة و الصور و الجمل الرئيسية و ممكن أقرأ الأسئلة/ زين (Of course, I can utilize the title, introduction, illustrations, and topic sentences or possibly read the questions/ Ok teacher?)/ No title but see picture elephant/ أكيد الموضوع عن الفيلة لكن أحتاج مزيد (This is definitely about elephants but this is not enough. I need more details)/ I like read introduction better/ “Have you ever heard about the elephant called Jumbo?” PU#01 واضح ان الموضوع عن فيل معين أو عن الفيلة ويبدأ بهذا السؤال حتى يلتفت نظر القاريء/ زين لكن ليش إسم جمبو (It is obvious that the topic is about a particular elephant or elephants in general and it begins with that question to attract the reader’s attention/ OK! But what is that name; Jumbo?)/ أكيد في توضيح (This will obviously be clarified)/ “Jumbo was...”/ yes this say information/ “... an African elephant that lived in the London Zoo... refers to something very large” PU#2-5/ هذا فيل إفريقي مختلف عاش في لندن ولأنه كان ضخيم صاروا يطلقوا على الأشياء الضخمة (This is a peculiar African elephant which was very big so his name; jumbo is now used to refers to very big things)/ الصورة العامة واضحة الحين بحل الأسئلة استاذ (the overall picture is clear now. I will answer the questions)/ [student turns to questions] question 1 “Jumbo” is .. word.. mean”/ this is for meaning jumbo/ I read</p>

(Ok, these are some benefits of antioxidants) (I can see here more benefits) [Points to next sentence] "Eating chocolate can also ... such as happiness and attentiveness." PU#23-27/ يعني مو بس مضاد أكسدة لكن أيضا في / (Not only antioxidants but also caffeine which makes us feel happy) / In next paragraph I can see now 'white chocolate' بشوف (I will see how it is different) / "White chocolate ... antioxidants in dark chocolate" PU#28-31 / so white chocolate not good than dark (because it does not include antioxidants) "Cocoa butter has very little ... as eating dark chocolate." PU#32-34/ و كمان ما فيها نفس / الكافيين يعني الشكولاتة الداكنة أحسن من البيضاء (It does not include caffeine either; which means dark chocolate is far better than white) / (Now I will read the conclusion) "There are some bad things ... as a chocolate candy kiss." PU#35-41/ يعني في الخاتمة يخبرنا عن الكميات (the conclusion tells us about the healthy amount of chocolate for daily consumption, otherwise it will be harmful.) / Now teacher I answer the questions/ This reading is easy/ [Student moves to questions] question 1/ Mmmmm the words chocolate eheheheh means A B C D [silent reading] / it is D/ I remember this is 'hot water'/ Now next question is is/ ah this is about 'pure chocolate'/ ok does not have what what [returns back to text and scans around 'pure'] / Mmm 'pure unsweetened' this means without sugar/ (The answer is certainly 'sugar') / This is A teacher/ الحين السؤال التالي ... آه هذا مال الأرقام أتذكر الرقم هذا (now next question... Ah This is about the numbers. I remember this) / It was eheh/ it was eheh/ I will see again ... [Scanning at the beginning of paragraph 2] (here it is) / 70 % so the answer correct is C/ Question 4 "dark chocolate ... our health because of" I don't choose 'cholesterol' because not good/

this/ Mmmmm/ where? Where?/ here 'refers to something very large'/ الحين الخيارات فيها كلمتين بمعنى وايد ضخمة واحدة توصف (choices include the elephant while the other describes anything)/ the correct answer C/ question 2 "In paragraph 2 ..they refers" [Jumps over keywords in the question]/ هذا سؤال الضمير المرجعي أستاذ/ لازم أحدد الضمير وأقرأ قبله حتى أعرف يشير لشو (this is a referential pronoun question/ I need to read before to determine what it refers to)/ نعم / الفقرة الثانية.. yes it includes that pronoun) / I read paragraph 2/ "Elephants are the largest animals ... African elephant is approximately ... they live anywhere... they are also the second-tallest of all animals." PU#6-10/ واضح ان هذا شرح عن جسم الفيل وواضح ان الضمير يشير للفيلة (It is clear this is about the body of the elephant and the pronoun 'they' refers to elephants)/ this is easy/ Answer is A/ I read question 3/ "Elephants take a mud bath to..." / أهم كلمة هي حمام الطين بسوي بحث / 'mud bath' is a key word/ I try to find it/ It should lead to the answer/ [student returns to text and keeps humming while scanning for 'mud bath'] / "The elephant is [mmmm] ...trunk ... 100000 muscles. ... uses its trunk to handle.. to drink water... skin is dark...thick...tender...usually takes a mud bath [here teacher] keep cool... mud protects skin" PU#11-21/ يعني حمام الطين (this means that mud bath helps protect the tender skin)/ I choose answer A 'make their skin soft'/ صحيح أستاذ?/ question 4 is "..." (like) يعني مثل إيش/ أنا قرئت هذي أستاذ / (I read this teacher)/ [He turns to text and scans for 'trunk']/ (this word)/ uses it to handle anything.... To drink water/ تشبه اليد (is like the hand of course)/ I choose answer C/ الآن السؤال التالي (now next question)/ "African elephants are .."/ (I see all choices are about the features of the

‘sugar’ also not and ‘smoke’ ما ليها علاقة (not relevant) / I guess B but not sure/ Question 5 is also about ‘dark chocolate’/ mmmmm ‘good feelings’ ‘cholesterol’ ‘antioxidants’ ‘caffeine’ and this [means ‘flavonoids’] / I read again [returns to text and scans for keywords] / ah it is here teacher “make us feel happy because dark chocolate has caffeine.” / I choose answer correct C/ In question 6 this is about heart diseases/ Eh I read this/ the answer is A because too much dark chocolate is not good/ is not healthy and makes diseases/ Question 7 “white chocolate is ... mmmm from dark” this because ... eheh I read again [student scans paragraph 3] “is made from cocoa butter” / I think this makes people fat so answer is A/ Last question now/ I read ehehehe! / This is about much chocolate good/ This is in last paragraph/ I will read again [student scans paragraph 4] / “eating 30 calories a day will not make us become fat” / correct answer teacher is C/ I finish and happy teacher. Thank you
T: Thank you very much.

elephant)/ Ok I read next/ “The African elephant [يعني الكلام عن الفيل الافريقي فقط] (this is only about the African Elephant)] ...features ... 100000 muscles. ... strong...intelligent.. sensitive...remember places and people ...only saw once.”
PU#22-29/ مزيد من الصفات اللي تميز الفيل الافريقي و أيضا يتذكر الأشياء من مرة واحدة (more features of the African elephant and also remembers things that saw one time)/ I think answer correct is A or B/ adjectives in the text but no skin/ I say answer correct is B/ in question 6 “young elephants learn..”/ كيف تتعلم الفيلة – باللعب ولا (How they learn- by playing or imitation or herd protection or remembering)/ I don’t take C (because this is not a way of learning.. but other methods could be)/ I read to find correct/ “Young elephants learn by copying [يعني التقليد (means imitation)] ...mothers, aunts...take care of the young... are so important that... family, herd... protect them from predators.” **PU#30-38/** هذه الفقرة (this paragraph is about learning and protection)/ answer is B sure because do same parents/ Now next question/ “Elephants need ... to remember it again/ يعني كم مرة يريد يشوف (how many times need to see something to remember?)/ answer I read before teacher/ this is one time/ Answer is A/ I do last question now teacher/ “The best title”/ this title is better [scans choices while speaking]/ I choose A jumbo the Elephant because this is jumbo/ Thank you teacher/ I learn more.
T: Thank you very much.

C6: **TAP** Strategy Coding System & Scoring Tool

Coding system procedures adapted from (Schellings et al., 2006; Lin, 2011) & Scoring form developed by the researcher

Student Number: _____						
Code	Categ	Comprehension Strategies	Pre		Post	
			Quant.	Qual.	Quant.	Qual.
C	Cognitive	C1. Using translation				
		C2. Guessing the meaning				
		C3. Skim for main idea				
		C4. Skim for topic sentences				
		C5. Scan for specific information				
		C6. Identify references				
		C7. Make inference				
		C8. Classify and group related items				
		C9. Paraphrase				
		C10. Summarize				
		C11. Synthesize				
		C12. Compare and contrast				
		C13. Recognize cause and effect				
		C14. Locate Keywords				
		C15. Use context clues				
M	Metacognitive	M1. Monitoring comprehension				
		M2. Questioning				
		M3. Making connections				
		M4. Visualizing				
		M5. Re-reading				
		M6. Check understanding				
		M7. Use alternative plans				
		M8. Analyze task				
		M9. Activate prior knowledge				
Total Quantity of used Strategies (Frequencies)			-----		-----	
Total Quality Score				-----		-----
Sophistication Score (Total Qual. / Total # of Strategies)			= Pre (-----)		Post (-----)	
Comprehension Task Score			= Pre (-----)		Post (-----)	

Teacher's Interview Form

The Effectiveness of Teaching Reading Strategies in Improving Reading Comprehension Skills

Interviewer

Mohammed Mahmoud Rihan

Interview

Location -----

Planned duration -----

Started at----- Finished at -----

Actual duration -----

Interviewer thanks the teacher for accepting to be interviewed and explains the research purpose of the interview and confirms that all collected data will stay confidential and shall be used for research purposes only.

Interviewee Details [confidential and secured]

Name -----

E-mail [optional] -----

Gender: Male ☐ Female ☐

Teaching experience (years) -----

Interview Questions

Q1: Do you usually teach individual reading comprehension lessons to your students?

Q2: How do you select the text for the reading comprehension lessons?

Q3: How would you start a reading class?

Q4: Do you announce a clear purpose before you let your students do a reading task? Why?

Q5: How would you react to a student asking for the meaning of a word in the reading passage? Explain

Q6: How would you teach your students to identify the main idea of a reading passage? Explain

Q7: Do you think your students require certain skills / strategies to perform better in a reading test? Explain and give examples as possible.

Q8: How would you assess your students' understanding of such skills/ strategies?

Q9: What would you do to help a student having troubles with reading?

Q10: How would you value teaching reading comprehension skills at your institution? Please explain and give examples as possible.

D1: Interview Transcripts

Teacher 01

Location : Principal Office

Planned duration: 20 Minutes

Started at: 10 : 30 AM Finished at : 10 : 55 AM

Actual duration : 25 Minutes

Interviewer thanks the teacher for accepting to be interviewed and explains the research purpose of the interview and confirms that all collected data will stay confidential and shall be used for research purposes only.

Interviewee Details [confidential and secured]

Name : Teacher 01

E-mail [optional] -----

Gender: Male ☐ Female ☐

Teaching experience (years) -----

Interview Questions

Q1: Do you usually teach individual reading comprehension lessons to your students?

Yes of course. Reading is an important skill. We teach our students new vocabularies and let them learn grammar. Mmmm, not only that but they learn how to find the purpose and title of the text. I believe students have troubles; many troubles with reading because they don't try follow the teacher's instructions and only need translations of difficult words.

Q2: How do you select the text for the reading comprehension lessons?

Which text? If you mean the reading passage, we use the textbook provided by the ministry of education. But don't worry because the ministry changes the book every year to make it suitable and better to our students' interest and their level of English as well. I want to say that we don't have time to do text outside the book and because it will have more vocabulary that students don't know.

Q3: How would you start a reading class?

Mmmm! This is an interesting question. A reading class is not different from other classes. I need to follow my lesson plan and begin with a warm-up activity. Students need to look at pictures and find out the type of text and I always remind them of the question types of the final reading exam. *Eeehhhhh!* My students [...*pause*...] my students are*Ehhhhhh!* They struggle with reading and always say they don't have enough time to understand all details. So, I always help them work fast by teaching them fast reading but I believe this is a common problem in our schools because students don't learn how to read well and they don't love reading even in Arabic. They prefer to watch videos and do grammar and vocabulary activities. They hate writing and reading.

Q4: Do you announce a clear purpose before you let your students do a reading task? Why?

Of course, I do this to help the students be interested in the topic and be familiar with the kind of information they are expected to face. Asking students to read without a clear purpose is useless. Once a purpose is clear, students will be more motivated and

this will guide the follow-up process and feedback.

Q5: How would you react to a student asking for the meaning of a word in the reading passage? Explain

Ah! You have just asked the big question because most students insist on asking for translations of difficult words and they say this will help them read fast and understand. I think we can help young students but in grade twelve, it is not accepted to change a reading class into a translation one. I have a good technique which helps my students with this problem. They can look at suffixes, prefixes and word roots and think of part of speech. This method works sometimes with good students but it doesn't help weak students at all, so I prefer to provide meaning of most difficult words and let students learn them before reading. This is a big problem in our school.

Q6: How would you teach your students to identify the main idea of a reading passage? Explain

Although this is easy and our students are always reminded to read the introduction and the conclusion and the topic sentence of each paragraph, they stuck with difficult words and stop very often to ask about meaning of words. This is not the case when the reading text is not challenging and when there is a clear title or picture. There is always a question in the exams about the title so we strive to help all students to be able to find the main idea of the text. To be honest, I understand how reading is important for the students' life, and we have to give more attention to these problems but this will affect [on] the other lessons.

Q7: Do you think your students require certain skills / strategies to perform better in a reading test? Explain and give examples as possible.

Students will be happy when they have direct questions in the reading test, so they just find the keywords where they are and copy the answer from that line but reading questions are not direct in the new exams. Students need to think and use their own knowledge and analyse the writer's views. Because of this, they need to learn the different types of questions and know reading skills like skim and read for gist and find key words and many other skills. I think these skills should be taught early at school because when students become[s] old, it will not be easy to [learn] them these skills but we have to keep trying.

Q8: How would you assess your students' understanding of such skills/ strategies?

If the students are able to answer the questions of the test without any problems, this means they are using suitable skills. So, the best way to evaluate their understanding is to give them a short test.

Q9: What would you do to help a student having troubles with reading?

Most students complain about their reading. They could be good at grammar, vocabulary and writing but they have problems with reading. Some of our students apply for CEPA test which is required to join some universities in the UAE. They always complain about reading section. They say time is not enough and the questions are not direct. I think they need to learn a lot of skills for the CEPA test but we don't have enough time for this at school and not all students are interested. So, I advise my students to find CEPA practice resources online and practise the test in their free time. I know this is not enough, but our schedule is very busy and we don't have time for extra work.

Q10: How would you value teaching reading comprehension skills at your institution? Please explain and give examples as possible.

I feel sad when I see grade twelve students struggling with reading and I could imagine how the study at the university will not be easy because they need to do a lot of reading, but this is not a school problem. I think there is something wrong in the educational system and reading should receive more attention from KG to grade twelve. Teachers need to update their teaching methods and they have to know much about the future requirements. I know that your study is related to this problem and I am happy to work with you because I will learn more about the problem in my school and the school principal is encouraging other teachers to learn from your study.

Researcher: Thank you so much for your time and support.

Teacher: You are welcome

Teacher 02

Location : School Resource Center

Planned duration: 20 Minutes

Started at: 11 : 15 AM **Finished at :** 11 : 35 AM

Actual duration : 20 Minutes

Interviewer thanks the teacher for accepting to be interviewed and explains the research purpose of the interview and confirms that all collected data will stay confidential and shall be used for research purposes only.

Interviewee Details [confidential and secured]

Name: Teacher 02

E-mail [optional] -----

Gender: **Male** ☐ **Female** ☐

Teaching experience (years) -----

Interview Questions

Q1: Do you usually teach individual reading comprehension lessons to your students?

Sometimes I encourage students to read silently, then we discuss the reading passage. I think silent reading is essential for comprehension and thinking. However, I prefer to plan integrated-skill lessons. I mean, I don't usually teach only reading but it comes with writing or speaking. My students like to learn new vocabulary every class.

Q2: How do you select the text for the reading comprehension lessons?

First, I check the textbook for something interesting and then I search the internet for something that goes with the textbook themes and students' interest.

Q3: How would you start a reading class?

In the warming up session, I usually set the objectives of the new lessons. In a reading lesson, I would let my students learn the purpose by encouraging them to have quick look at the reading passage and highlight any elements that could help them know what it is about very fast; like [mmmm, ehehheh] title, pictures or keywords. The students become more [interesting] when I introduce a list of new words before they read and they always ask for that.

Q4: Do you announce a clear purpose before you let your students do a reading task? Why?

Yes, as I said before. Students need to learn what is required of them. Procedures of doing a reading task certainly differ based on the purpose of reading as well as the length and difficulty level of the text. I am sure this will involve more students and will ensure everybody is working in the same direction. Without a clear purpose of learning I don't think much success could be achieved.

Q5: How would you react to a student asking for the meaning of a word in the reading passage? Explain

This always happens. So I either write a list of difficult words with definitions on board or give a quick vocabulary activity before reading to help them, or preferably, encourage them to guess the meaning based on context and whether the new word has a positive or negative meaning and the part of speech can help with guessing. Some weak students insist on Arabic translation but I let other students help according to their understanding.

Q6: How would you teach your students to identify the main idea of a reading passage? Explain

By teaching them the structure of the text and that most writers express the main idea in the introduction. I tell them also to search for the topic sentence in the body paragraphs which provides some details about the key ideas of the reading passage. The students' success in doing that depends on the difficulty of the text and the students' interest in the topic.

Q7: Do you think your students require certain skills / strategies to perform better in a reading test? Explain and give examples as possible.

Certain skills are required for English language learning. They differ according to main language skills. I mean reading, writing, speaking and listening. Mainly for reading, they need to learn how to read and understand the questions carefully, do appropriate scanning and identify topic sentences. But these and other strategies cannot work for them if their overall language skills are not good enough specially their vocabulary and grammar.

Q8: How would you assess your students' understanding of such skills/ strategies?

A standard reading test is the best way to do this. I mean a test which is mainly designed for that purpose like CEPA or IELTS but it is not possible at a school level to do so. The ministry or the educational zone need to integrate preparations for these exams in the English curriculum and not let students face this shocking fact later while they get ready to join the university. Once this happens, all teachers and students will be enforced to raise their standards and work hard to teach and learn these strategies.

Q9: What would you do to help a student having troubles with reading?

We are usually required to provide remedial work to weak students who didn't do well in the diagnosis. To be honest, such remedial work is very general and doesn't address specific problems. It focusses on language basics without a clear approach and these remedial plans are not examined for validity or reliability. I know this is not a good situation and I hope we can do any progress in the future.

Q10: How would you value teaching reading comprehension skills at your institution? Please explain and give examples as possible.

Reading is a must. It is a receptive skill that leads to writing and it should receive more attention because it is the students' gateway to learning.

Researcher: Thank you very much for your time and interest.

Teacher: It is Ok! And all the best.

Appendix E: Classroom Observation (Form and Checklist)

Classroom Observation form/ checklist

A. Class Details	Teacher's name: _____ Class/ Group: _____ Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female Total Number of Students: _____ Seating Plan: <input type="checkbox"/> Individuals <input type="checkbox"/> Pairs <input type="checkbox"/> Groups <input type="checkbox"/> Other _____
B. Lesson Details	Lesson Style: <input type="checkbox"/> Complete Reading Lesson <input type="checkbox"/> Integrated Reading Lesson Text Type: _____ Text Source: _____ Topic: _____
C. Teaching Methods	Warming up Procedures (if any): _____ _____ Presentation and Practice: _____ _____ _____ _____ _____ Comprehension Assessment Techniques & Feedback: 1. _____ 2. _____
D. Skills & Strategies	Implemented Reading Model : <input type="checkbox"/> Bottom-up <input type="checkbox"/> Top-down <input type="checkbox"/> Interactive Strategies Included (Name [E / I <i>explicit /Implicit</i>] [Performance Rate 1 <i>low</i> :5 <i>high</i>]) <u>Example:</u> <i>Skimming (E)/(4)</i> _____ _____ _____ _____ _____ _____ _____ _____ Overall Comment: _____ _____ _____ _____ _____

Appendix F: Reading Strategies Course: Plan and Material

• Timing is flexible according to school-day schedules of the respected schools.		
Time	Content	Teaching Methods
Week 01	Pre-Test (CEPA, IELTS & TOEFL) Think aloud sessions (TAP)	
Week 02	Target Strategies and Skills	Process-oriented strategy-based explicit instruction. Teach – Model – Practice (guided/free) – Feedback – Consolidation (HW & Extra online activities for interested students: http://www.rihanonline.com/home/Students/regular-class)
Week 03		
Week 04		
Materials and worksheets are adapted from the following sources		
<ul style="list-style-type: none">- Bouchard, M. (2005). <i>Comprehension Strategies for English Language Learners</i>. New York, NY: Scholastic.- Bourne, P. (2004). <i>High Impact IELTS</i>. Auckland: Pearson New Zealand.- Chesla, E. L. (2009). <i>Reading comprehension success in 20 minutes a day</i> (4th ed.). New York: Learning Express.- Dole, I. & Taggart, L. (2010). <i>Activate: College Reading</i>. Boston, MA: Cengage Wadsworth.- Edge, (2002). <i>Reading Comprehension Skills and Strategies</i>. Irvine, CA: Saddleback Pub.- Gough, C. (2010). <i>IELTS Target 5.0: Preparation for IELTS General Training: Leading to Academic IELTS: Course Book</i>. Reading, UK: Garnet Pub.- Greenberg, D. (2005). <i>Reading Skills</i>. New York: Scholastic Inc.- Mikulecky, B. S. (2007). <i>Advanced Reading Power: Extensive Reading, Vocabulary Building, Comprehension Skills, Reading Faster</i>. White Plains, NY: Longman.- Sharpe, P. J. (2004). <i>How to Prepare for the TOEFL Test: Test of English as a Foreign Language</i>. 11th ed. Hauppauge, NY: Barron's.		
Week 05	Post-Test (CEPA, IELTS & TOEFL) Think aloud sessions (TAP)	

F1: Example Lesson Plan

Day: Monday Date : 12 / 05 / 2014 It's not how hard you work, it's what you get done.



Lesson Planner

Experimental Group

Reading Skills: Guessing vocabulary meaning

This lesson is part of a brief course on "Reading Strategies" provided as part of an experimental study on the effectiveness of teaching reading strategies in improving UAE Grade 12 students' comprehension.

Learning outcomes:



By the end of the lesson Ss should be able to :

1. Recognize different ways to guess unknown words and phrases
2. Identify non-guessable words (stoppers)
3. Practise guessing strategies

Teaching Aids & Material:



1. White board, Pc, Projector
2. Attached worksheets ([Chris Gough, 2010, IELTS Target 5.0: Leading to IELTS Academic Course book](#))
3. Online extra resources
4. Feedback form

Procedures:



Warm-up:

- T. says hello and encourages STs to ask any question they might have about last class. He thanks STs who sent homework online and participated actively on the website.

Presentation:

- T. presents today's strategy and elicits STs' background information about guessing techniques.
- A PPT presentation is utilized to inform STs explicitly about guessing techniques and strategies. He links the concepts to what STs might have already encountered in the pre-test.
- T. answers many Qs about Guessing: 1- why do learners need to learn guessing? 2- How can STs use different kinds of clues (Semantic, Syntactic, lexical, contextual...etc.) to guess unknown words?
- T. provides examples

Modeling:

- Attached Ex A is done by T. to demonstrate guessing techniques and strategies.
- T. gets feedback and answers STs' questions.
- Another example is provided by T. (Attached Ex B)
- STs are encouraged to ask questions if they need more clarification.

Guided Practice:

- Step by step, T. presents exercise (C) and encourages STs to do it in pairs while he moves around to provide help and check performance.
- Answers are discussed and feedback is provided.

Free Practice:

- For free practice, Exercise (D), which looks like a real IELTS question, is distributed and STs are encouraged to do it by their own.
- T. discusses answers and gives feedback.

Evaluation & Feedback:



- A quick feed back form is provided to check STs understanding and learning (Attached E form)
- A detailed learning outcome form is filled in by STs at home and brought back next class.

Homework and extra activities:



- Extra Activity is provided for more practice at home
- Some interactive exercises are uploaded on the website for interested STs.

➔ REFLECTION ➔



F2: Sample Material

Reading 1: guessing unknown words and phrases in context

A

A Look only at the highlighted word and phrase in the extract below. Do you know either of them?

Having a good memory is certainly an advantage. My brother seems to have a brain with a huge **capacity** for new information. He remembers everything he sees or hears and has a very successful career. My brain seems to work differently – in fact, I have a **memory like a sieve**. Information goes straight in and straight back out.

B Read the whole extract and then talk with a partner. Try to explain the highlighted words.

C Answer the questions about the highlighted word and phrase.

1. Tick the correct definition for **capacity**.

- a. how long something is ☐
- b. how much something can hold ☐
- c. how fast something travels ☐

2. Tick the correct picture of a sieve.



Exam tip: When you are reading, you don't want to worry about the meaning of every word. However, some words are vital to understand the text or to answer a question correctly. You will not have a dictionary in the exam, so it is important that you learn to guess the meanings of words in context – from the other words around the word that you don't know.

D Look only at the highlighted words in these extracts. Then read the extracts and choose the correct definition of the highlighted word that follows.

R

1. It is difficult to understand even the gist of a conversation or talk if you have no idea of the topic before you listen. Knowing what the topic is helps you to **tune in**. You can then listen for key words and make more sense of the information you hear.

Tune in means ...

- a. start to understand.
- b. be an expert on a subject.
- c. do something better than other people.

2. As people grow older, they need to exercise both their bodies and their minds. Jogging or playing golf can keep people physically healthy, while reading and playing games can help them to stay **alert**.

Alert means ...

- a. quick and ready to react.
- b. slower than usual.
- c. big and strong.

3. It was very late and I had been driving for several hours. The fact that I was so tired affected my **judgement**. I didn't slow down and hit the back of another car that was waiting at the traffic lights.

Judgement is ...

- a. the need to drive carefully.
- b. a lot of cars in the same place.
- c. the ability to understand a situation.

Chris Gough, 2010, IELTS Target 5.0: Leading to IELTS Academic. Course book



Exam tip: You will read more quickly if you can guess new words from words that you already know. The word you know can be part of a new word or part of a new phrase or expression.

C

A Look at these words and phrases and guess what they mean. Compare with a partner.

brainy brainless daydream over my head in two minds

B Now look at the highlighted words and phrases in context and circle the correct option in the definition that follows.

1. James is the **brainy** one in the class. If you need help with a question, ask him.
Brainy means not busy / very clever.
2. When I went on holiday last year, I left the bathroom window open. Somebody climbed in and stole my TV and DVD recorder. I can't believe I did something so **brainless**.
Brainless means very stupid / unkind.
3. I was **daydreaming** and I walked right past my office. I had to turn round and walk back.
Daydreaming means not concentrating / thinking about important things.
4. Tariq was sick and missed a few lectures. When his friends were talking and comparing notes, it all **went over Tariq's head**.
If something **goes over your head**, you **listen very carefully** / **don't understand it at all**.
5. I'm **in two minds** about taking this job. It's very well paid, but it's very challenging. I'd have lots of money, but I'd have to work around sixty hours a week.
If you are **in two minds** about something, you **can't make a decision** / **really want it**.

C Complete these sentences so that they are true for you. Then compare with a partner.

1. _____ is the brainy one in my family.
2. I was in two minds about _____.
3. Once I was daydreaming and I _____.
4. _____ is the one in my family with a memory like sieve.

Reading 3: practice with unknown words and phrases

A Look at the highlighted words and phrases on the next page, but do not check them in a dictionary. You will need to guess their meanings to answer the questions.

B Read this advertisement for a course that improves your memory. For questions 1–6, decide if the information given below agrees with the information given in the advertisement. Write (T) true, (F) false or (NG) not given.

1. The course will show you new ways to remember names and faces. _____
2. Most successful people have met a world leader. _____
3. People who are very successful in business have a good memory. _____
4. None of the Memory Enhancer techniques have been tested. _____
5. Doing the course will make you more like other people. _____
6. Claire and David did the course in order to get better jobs. _____

For questions 7–12, complete the sentences below with words taken from the passage. Write NO MORE THAN THREE WORDS for each answer.

D

7. The Memory Enhancer course consists of _____ lessons.
8. You can achieve a number of _____ by registering for the course.
9. Even if people _____ you, you will remember them.
10. Phone numbers and addresses will be stored in your memory and you will be able to easily _____ them.
11. You will be able to concentrate more clearly and _____ for longer.
12. _____, you can learn how to give long talks and become more confident.

Memory Enhancer A course you'll never forget!

Learn the **techniques** that will help you **memorize** names, faces and so much more.

Successful people have very good memories! If you don't believe us, ask anyone who's met a world leader or a business **tycoon**. The people who really make things happen don't forget. Now you, too, can **recall** names and numbers in seconds – using **scientifically proven** techniques. Memory Enhancer is a course that will put you **ahead of the rest**.

'Memory Enhancer changed my life!' Claire Brown.

'I've said goodbye to my diary!' David Stone.

These are just two of the satisfied customers who signed up for Memory Enhancer and, in ten easy lessons, improved their lives forever.

Here are just a few of the **gains** you can achieve when you register **right now**:

- Memorize the names and faces of everyone you meet and never forget them. Impress people you've recently met by remembering them when they've forgotten you.
- Easily **retrieve** essential data. Have phone numbers, addresses, pin numbers and other bank details **stored** in your memory.
- Store dates and figures for tests and exams. Never fail another test in your life.
- Develop clearer concentration and **extend** the time you can focus on detail.
- Be more alert when you drive or operate machines.
- Memorize long speeches and presentations in minutes. Feel your confidence grow.
- Achieve more at work, make more money and be happier!

Enter your name and e-mail address here to register now – free of charge

Name: E-mail:

Register Now >>>



Chris Gough, 2010, IELTS Target 5.0: Leading to IELTS Academic. Course book

D Tick the sentences about the Reading task that are true for you and think about how you can answer more questions correctly next time.

E

- ☐ 1. I could guess the meaning of most highlighted words in context.
- ☐ 2. Guessing unknown words and phrases helped me to answer the questions.
- ☐ 3. I was happy with how quickly I found the information that I needed.
- ☐ 4. I am happy with how many questions I answered correctly.

All birds have feathers, and feathers are peculiar to birds. No other major group of animals is easy to categorize. All birds have wings, too, but there are other winged creatures, such as bats and certain insects.

Many adaptations are found in both feathers and wings. Feathers form the soft down of geese and ducks, the showy plumes of ostriches and egrets, and the strong flight feathers of eagles and condors. Wings vary from the short, broad ones of chickens, which seldom fly, to the long, slim ones of albatrosses, which spend almost all their lives soaring on air currents. In penguins, wings have been modified into flippers and feathers into a waterproof covering. In kiwis, the wings are almost impossible to detect.

Yet diversity among birds is not as striking as it is among mammals. The difference between a hummingbird and an emu is great, but hardly as dramatic as that between a bat and a whale. It is variations in details rather than in fundamental patterns that have been important in the adaptation of birds to many kinds of ecosystems.

1. In the passage, the phrase peculiar to is closest in meaning to

- a) Necessary for
- b) Important to
- c) Symbolic of
- d) Unique to

2. The word categorize in the passage is closest in meaning to

- a) Appreciate
- b) Comprehend
- c) Classify
- d) Visualize

3. The word showy in the passage is closest in meaning to

- a) Ornamental
- b) Powerful
- c) Pale
- d) Graceful

4. Which of the following is closest in meaning to the word detect in the passage?

- a) utilize
- b) observe
- c) extend
- d) describe

5. In the passage, the word diversity is closest in meaning to

- a) Function
- b) Heredity
- c) Specialty
- d) Variety

6. The word hardly in the passage is closest in meaning to

- a) Definitely
- b) Not nearly
- c) Possibly
- d) Not softly

7. Which of the following could best be substituted for the word fundamental in the passage?

- a) Basic
- b) Shifting
- c) Predictable
- d) Complicated



Adapted from CEPA website

Appendix G: Learning Feedback Form

Adapted from (Makni, 2006)

Student's name: _____

Group/ Class: _____ Date: _____

A. How would you rate كيف تقيم ما يلي ؟

Tick(✓) the suitable circle

1. Your overall satisfaction with today's lesson?
الرضا العام عن درس اليوم ...

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Your interest in the reading topic?
اهتمامك بموضوع درس القراءة ...

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Activities and teaching methods?
الأنشطة وطرق التدريس ...

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

B. Target Strateg(y)ies of Today's Lesson: لقد تعلمت اليوم المهار(ة)ات التالية ...

Name: _____

1. How often have you used it (them) before?
كم مرة استخدمت هذه المهار(ة)ات من قبل؟

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How much did you find it (them) useful?
كيف وجدتها مفيدة؟

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. To what extent you feel you can apply it (them)?
لأي مدى يمكنك تطبيقها؟

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. After today's class, I can ... يمكنني بعد درس اليوم أن ...

1. _____
2. _____

D. How do you think today's lesson would affect your reading comprehension skills? كيف تعتقد أن درس اليوم سيؤثر في مهارات الفهم القرائي لديك؟

1. _____
2. _____
3. _____
4. _____

Appendix H: UAE Grade12 Standard En. Term Exams
H1: Term 01, 2013 - 2014

المادة: اللغة الإنجليزية زمن الإجابة: حسب الجدول المعتمد عدد صفحات الأسئلة: (7)		دولة الإمارات العربية المتحدة وزارة التربية والتعليم إدارة التقويم والامتحانات
امتحان نهاية الفصل الدراسي الأول للصف الثاني عشر الأدبي والعلمي للعام الدراسي 2013 - 2014 م على الطالب التأكد من عدد صفحات الأسئلة الإجابة على الورقة نفسها		

I. Reading (60 points)

30

60

Text 1

Read the following text and answer the questions below. (3 points each)

- Paragraph 1 Reading opens the door to a world of adventure, culture, diversity and knowledge, and is an **activity** vital to the development of curiosity and a love of learning. So, how can you help to develop your children's reading skills to enjoy these numerous benefits? Here are some tips:
- Paragraph 2 Surround them with books and reading material, both around the house and in their bedroom. Your child will be more inclined to pick them up and get absorbed in the pages. With so many other games, electronic **devices** and programmes battling for your child's attention, you will want to give them every opportunity to explore the wonders of the written word.
- Paragraph 3 Encourage a wide variety of books and reading materials. A part of developing strong reading skills is the ability to self-select a wide range of reading material. This doesn't need to be limited to books, but can also include newspapers, magazines, websites and other literature.
- Paragraph 4 Set a good example. Children **commonly** copy the behaviour of their parents. Therefore, if they see you regularly picking up a book, your child may be more likely to do the same. Talk to them about what you are reading, the characters you have met and what you think might happen next, and encourage them to do the same.
- Paragraph 5 Read to them. It can be a powerful way to get them excited about stories and expose them to more advanced texts than they are able to read themselves. As well as reading to them, encourage your child to read to you. Be patient with their mistakes and pay attention to the story so you can discuss it together afterwards.

Text 2

Read the following text and answer the questions below. (3 points each)

- Paragraph 1 Gray kangaroos roam the forests of Australia and Tasmania and prefer to live among the trees, though they do take to open grasslands for grazing. Gray kangaroos, red kangaroos, and wallaroos are called the great kangaroos because they are so much larger than the nearly 70 other kinds of kangaroos.
- Paragraph 2 Gray kangaroos hop along on their powerful hind legs and do so at great speed. A gray kangaroo can reach speeds of over 56 kilometers an hour and travel for long distances at 24 kilometers an hour. They can cover 8 meters in a single **leap** and jump 1.8 meters high.
- Paragraph 3 Females have one baby at a time, which at birth is smaller than a cherry. The infant immediately climbs into its mother's pouch and does not emerge for two months. Until they reach about 10 or 11 months of age, **threatened** young kangaroos, called joeys, will quickly dive into their mom's pouch for safety. As they grow, joeys' heads and feet can often be seen hanging out of the pouch.
- Paragraph 4 Larger male kangaroos are powerfully built. Like many species, male kangaroos sometimes fight over potential mates. They often **lean** back on their sturdy tail and "box" each other with their strong hind legs. Kangaroos can also bite and use sharp claws, which they may do in battle with an enemy, such as a dingo.
- Paragraph 5 Gray kangaroos gather in groups called "mobs". Australians have spent centuries clearing open areas of land and establishing water sources - both of which are blessings to kangaroo populations. Many millions of these animals roam Australia, and considerable numbers are killed each year for their skin and meat, which is becoming a more popular human food.

Questions:

Circle the most suitable answer from a, b, c or d.

11. The best title for this text would be _____.
 a. Kangaroos' Species
 b. Gray Kangaroos' Habitat
 c. Body Structure of Kangaroos
 d. Amazing Facts about Kangaroos
12. The word **leap** in Paragraph 2 is a/an _____.
 a. verb
 b. noun
 c. adverb
 d. adjective
13. Paragraph 3 is mainly about kangaroos' _____.
 a. females
 b. pouches
 c. babies
 d. sizes
14. The **OPPOSITE** of the word **threatened** in Paragraph 3 is _____.
 a. protected
 b. healthy
 c. strong
 d. raised
15. The word **lean** in Paragraph 4 likely means _____.
 a. move
 b. wave
 c. bend
 d. stand
16. According to the text, it can be inferred that Gray Kangaroos are _____.
 a. slow animals
 b. lonely animals
 c. about to be extinct
 d. part of Australians' life
17. What is **NOT TRUE** about Gray Kangaroos?
 a. They live with dingoes peacefully.
 b. They carry their baby in a pouch.
 c. They are fast animals.
 d. They have strong legs.

Complete the following table with information from Paragraph 5.

Gray Kangaroos	
Habitat	killed for
18. _____	19. _____
	20. _____

II. Writing (40 points)

1. Sentence Writing (15 points)

(3 points each)

15

40

Write **TWO** meaningful simple sentences and **THREE** compound or complex sentences about the pictures below.

You may use connectives such as and, but, so, yet, ...etc.



Picture 1



Picture 2

1. _____
- _____
2. _____
- _____
3. _____
- _____
4. _____
- _____
5. _____
- _____

H2: Term 02, 2013 - 2014

المادة: اللغة الإنجليزية
زمن الإجابة: حسب الجدول المعتمد
عدد صفحات الأسئلة: (7)



دولة الإمارات العربية المتحدة
وزارة التربية والتعليم
إدارة التقويم والامتحانات

امتحان نهاية الفصل الدراسي الثاني للصف الثاني عشر الأدبي والعلمي للعام الدراسي 2014/2013 م
على الطالب التأكد من عدد صفحات الأسئلة
الإجابة على الورقة نفسها



I. Reading (60 points)

30

60

Text 1

Read the following text and answer the questions below.

(3 points each)

- Paragraph 1 The Hanging Gardens of Babylon evoke a romantic picture of greenery and colorful flowers cascading from the sky. However, not only are the Hanging Gardens of Babylon not standing today, but their entire **existence** is debated.
- Paragraph 2 In ancient writings the Hanging Gardens of Babylon were first described by Berossus in the late 4th century BC. In his *Babyloniaca*, written around 280 BC, he describes the gardens and **attributes** them to the great Babylonian king Nebuchadnezzar II.
- Paragraph 3 According to these ancient sources, Nebuchadnezzar had the Hanging Gardens built around 600 BC for his wife Amytis. She was homesick for her green and mountainous home, and quite depressed living in the flat and dry Babylon. Thus an elaborate garden was constructed to replicate her homeland and cheer her up.
- Paragraph 4 The Hanging Gardens did not actually hang at all. They were made up of a simulated mountain with rooftop gardens. They would have likely been multi-level terraces supported by baked brick columns. These columns would have been filled with dirt to allow large plantings and trees to root and grow. The effect of the plants hanging down likely gave the effect of a green mountain landscape.
- Paragraph 5 Recent archaeological excavations of the palace in Iraq have uncovered evidence of a building with arched rooms and a well nearby. However, the location of the palace complex contradicts where Greek historians placed the Hanging Gardens, which was on the banks of the Euphrates River. There have been recent excavations on the banks of the Euphrates River of some **substantial** 25 meter-thick walls. Could these have been part of the Hanging Gardens of Babylon?
- Paragraph 6 Though some believe that the Hanging Gardens never existed, it is not outside of the realm of possibility that they were real. But why would later historians spend so much time describing this masterpiece of ancient history if it did not exist in at least some physical form?

Questions:

Circle the most suitable answer from a, b, c or d.

1. The text is mainly about _____.
a. a recent excavation
b. the Kingdom of Babylon
c. the life of Nebuchadnezzar II.
d. a masterpiece of ancient history
2. The text can mostly be considered as a/an _____.
a. advertisement
b. interview
c. report
d. fable
3. The ROOT of the word **existence** in Paragraph 1 is _____.
a. exist
b. existing
c. existent
d. existential
4. According to Paragraph 2, Babyloniaca is the name of a _____.
a. historian
b. garden
c. palace
d. book
5. The word **attributes** in Paragraph 2 likely means _____.
a. donates
b. relates
c. passes
d. rents
6. Nebuchadnezzar's wife was unhappy because _____.
a. Babylon was mountainous
b. her palace was not big enough
c. Babylon was unlike her homeland
d. her palace was away from the Euphrates
7. The writer of the article believes that the Hanging Gardens of Babylon _____.
a. lay on mountains
b. were almost real
c. were built by the Greeks
d. were an imaginary picture
8. The word **substantial** in Paragraph 5 is a/an _____.
a. adjective
b. adverb
c. noun
d. verb
9. Paragraph 4 is mainly about the _____ of the Hanging Gardens of Babylon.
a. construction
b. excavation
c. location
d. history
10. In which Paragraph would this sentence BEST fit?
"Many other Greek historians went on to provide detailed descriptions of the gardens, citing either Berossus' work, or from accounts of other ancients."
a. Paragraph 1
b. Paragraph 2
c. Paragraph 3
d. Paragraph 4



Text 2



Read the following text and answer the questions below.

(3 points each)

- Paragraph 1 To the untrained eye, African and Asian elephants can be indistinguishable, but there are key physical features that make these two species relatively easy to tell apart.
- Paragraph 2 The most noticeable physical differences can be seen in the ears, tusks and head shapes of the two species, according to The Elephant Sanctuary, a natural-habitat refuge for **endangered** elephants located in Hohenwald, Tennessee.
- Paragraph 3 African elephants have large ears, shaped much like the continent of Africa itself. The larger surface area of their ears helps to keep African elephants cool in the blazing African sun. Asian elephants have less to worry about heat-wise, as they tend to live in cool jungle areas, so their ears are smaller.
- Paragraph 4 Asian and African elephants have very **distinct** head shapes. African elephants have fuller, more rounded heads, and the top of their head is a single dome. Asian elephants have a twin-domed head with an indent in the middle.
- Paragraph 5 There is another thing that sets them apart: Only male Asian elephants grow tusks and even then, not all males will have them. In African elephants, both sexes generally exhibit tusks.
- Paragraph 6 Despite these physical differences, both species of elephant are very similar socially. Both are herd animals living within defined social structures, according to the conservation group World Wildlife Fund. The herds are usually led by the oldest female, and are made up of her daughters, sisters and their offspring. Once they reach puberty, male calves leave the mother's herd and join other young males in bachelor groups. Older males tend to be solitary.
- Paragraph 7 As Asian and African elephants do not come in contact in the wild, there has only been one incident of cross-breeding between the two species. In 1978, at the Chester Zoo in England, the Asian elephant cow Sheba gave birth to a calf with an African elephant bull named Jumbolino. Their calf was named Motty, who had **features** of both his parents. Sadly, he was premature and died of stomach complications two weeks later.

II. Writing (40 points)

1. Sentence Writing (15 points)

(3 points each)

15

40

Write TWO meaningful simple sentences and THREE compound or complex sentences about the pictures below.

You may use connectives such as and, but, so, yet, ...etc.



Picture 1

Picture 2

1. _____
2. _____
3. _____
4. _____
5. _____

2. Essay Writing (25 points)

Write an essay of about 200 words on the following topic.

25

All of us experience happy and sad situations. Compare and contrast the happiest day to the saddest day you went through in your life.

These questions may help you:

- When and where did it happen?
- Who were involved?
- What made it your happiest /saddest day?
- How did you feel about both days?

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

This image shows a full page of blank, white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

The End
Marking Key

	Content	Grammar	Vocabulary	Organization	Spelling & Punctuation	Total
Points	5	5	5	5	5	25
Marker 1						
Marker 2						
Revisor						

Appendix I: Target Population Statistics

(Ministry of Education, 2014, p. 10)

توزيع الطلبة (تعليم حكومي) على المناطق التعليمية للعام الدراسي 2013/2014 م
Distribution of Students (G.E) by Educational Zones for the Academic year 2013 / 2014

STAGE	Students																		المرحلة		
	مجموع Total	الثانوي Secondary			الحقة الثانية Cycle 2						الحقة الأولى Cycle 1						رياض الأطفال kindergarten				
		12	11	10	9	8	7	6	مجموع	5	4	3	2	1	مجموع	Kg2	Kg1				
Abu Dhabi Edu. Zone	63,832	13,092	4,704	4,041	4,347	19,248	4,493	4,756	5,081	4,918	23,479	4,669	5,003	4,699	4,428	4,680	8,013	4,172	3,841	منطقة أبوظبي التعليمية	
Al Ain Edu. Zone	53,545	10,976	4,043	3,397	3,536	16,025	3,678	3,934	4,067	4,346	19,855	4,097	4,266	3,992	3,748	3,752	6,689	3,401	3,288		منطقة العين التعليمية
Al Garbia Edu. Zone	9,782	2,312	790	763	759	2,989	760	785	706	738	3,397	705	768	682	622	620	1,084	558	526		المنطقة الغربية التعليمية
Total	127,159	26,380	9,537	8,201	8,642	38,262	8,931	9,475	9,854	10,002	46,731	9,471	10,037	9,373	8,798	9,052	15,786	8,131	7,655	المجموع	
Dubai Edu. Zone	29,080	6723	2372	2090	2261	8592	2098	2067	2194	2233	11028	2276	2335	2216	2059	2142	2737	1413	1324	منطقة دبي التعليمية	
Sharjah Edu. Zone	41,411	9049	3199	2894	2956	12142	2826	2970	3126	3220	15188	3129	3239	3032	2891	2897	5032	2457	2575	منطقة الشارقة التعليمية	
Ajman Edu. Zone	15,099	3143	1144	1008	991	4471	1004	1094	1204	1169	5706	1182	1263	1139	1088	1034	1779	943	836	منطقة عجمان التعليمية	
Umm Al Quwain Edu. Zone	5,734	1194	458	379	357	1648	380	409	416	443	2122	438	445	417	411	411	770	366	404	منطقة أم القيوين التعليمية	
Al Fujairah Edu. Zone	21,985	4687	1659	1485	1543	5961	1394	1515	1517	1535	8164	1598	1666	1657	1574	1669	3173	1580	1593	منطقة الفجيرة التعليمية	
Ras Al Khaimah Edu. Zone	32,844	6906	2279	2150	2477	9529	2196	2344	2462	2527	12421	2538	2620	2459	2366	2438	3988	1942	2046	منطقة رأس الخيمة التعليمية	
Total	146,153	31702	11111	10006	10585	42343	9898	10399	10919	11127	54629	11161	11568	10920	10389	10591	17479	8701	8778	المجموع	
Grand Total	273,312	58,082	20,648	18,207	19,227	80,605	18,899	19,874	20,773	21,129	101,360	20,632	21,605	20,293	19,187	19,643	33,265	16,832	16,433	إجمالي الدولة	

Appendix J: Official Permissions and Consent Letters

1. BUID Letter to the Ministry and Fujairah Educational Zone



Ministry of Education
Fujairah Educational Zone

5 April, 2014

Confirmation of Master of Education Student Status: Mohamed Mahmoud Rihan

To whom it may concern,

I am writing to confirm that **Mohamed Mahmoud Rihan** is currently enrolled in the Master of Education Programme, in the Faculty of Education at the British University in Dubai. He has completed all taught modules and is currently conducting his dissertation on the reading strategies of Arab learners of English.

The MEd qualification is to be accredited in the UAE, and the Faculty of Education at BUID was established in partnership with the School of Education at the University of Birmingham in the UK. Mohamed's research methodology has been approved by the University Ethics Committee, and complete anonymity for research participants is his foremost consideration. With the fulfillment of this requirement, I am therefore writing to kindly request your permission to allow Mohamed to gain access to relevant schools in the Fujairah educational zone, so he can collect the required data for his dissertation. Should you have any questions or concerns regarding this letter or Mohamed's research, please contact me at my e-mail address below.

Thank you for your co-operation.

Yours faithfully

Assist. Prof. Yasemin Yildiz
Faculty of Education, TESOL Program
The British University in Dubai (BUID)
PO Box 345015 - 1st & 2nd Floor, Block 11
Dubai International Academic City
Dubai, United Arab Emirates



Honorary Fellow - University of Birmingham, School of Education, UK

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Dubai International Academic City
Dubai, UAE
Tel: +971 4 391 3626 Fax: +971 4 366 4698

3. No-objection Letter (School A)

United Arab Emirates
Ministry of Education
Fujairah Education Zone
Educational Operations Section
Educational Information Systems Unit



دولة الإمارات العربية المتحدة
وزارة التربية والتعليم
إدارة منطقة الفجيرة التعليمية
قسم العمليات التربوية
وحدة نظم المعلومات التعليمية

الرقم م ت 4 : 961

التاريخ : 15 / 4 / 2014 م

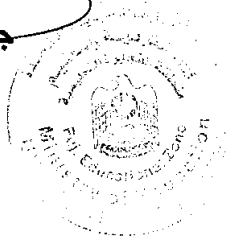
المحترم

السيد / مدير مدرسة حمد بن عبدالله الشرقي للتعليم الثانوي
تحية طيبة وبعد ،،،،،

الموضوع / تسهيل مهمة باحث

أتقدم لسيادتكم بجزيل الشكر والتقدير في خدمة العملية التعليمية
متمنياً لكم دوام الصحة والعافية
نرجو من سيادتكم التكرم بتسهيل مهمة الأستاذ : محمد محمود ريجان ؛ حيث يقوم بإعداد دراسة للحصول على
درجة الماجستير حول " فعالية تدريس استراتيجيات القراءة في تحسين المستوى التحصيلي لطلاب الصف الثاني
عشر في الامتحانات المدرسية و اختبارات القبول في الجامعات (السيبا - الأيلتس - التوفل) " .
سوف يقوم الباحث بالمرور على المدرسة و إجراء الدراسة على المعنيين.
وتفضلوا بقبول فائق الاحترام والتقدير

مدير إدارة منطقة الفجيرة التعليمية
جمعة خلفان الكندي



نسخة لكل من :

سعادة المدير
السادة النواب
السيد رئيس قسم العمليات التربوية
التنسيق المختص
البريد الإلكتروني
الملف والصادر العام

منطقة الفجيرة التعليمية هاتف: 09/2233666 ، فاكس: 09/2221885 ، ص.ب: 62، الفجيرة - الإمارات العربية المتحدة
Fujairah Education Zone. Tel: 09/2233666 ,Fax:09/2221885, PO Box:62, E- mail: fez@fez.gov.ae

4. No-objection Letter (School B)

United Arab Emirates
Ministry of Education
Fujairah Education Zone
Educational Operations Section
Educational Information Systems Unit



دولة الإمارات العربية المتحدة
وزارة التربية والتعليم
إدارة منطقة الفجيرة التعليمية
قسم العمليات التربوية
وحدة نظم المعلومات التعليمية

الرقم م ت 4 : 961
التاريخ : 15 / 4 / 2014 م

المحترمة

السيدة / مديرة مدرسة الماسة للتعليم الثانوي
تحية طيبة وبعد ،،،،،

الموضوع / تسهيل مهمة باحث

أتقدم لسيادتكم بجزيل الشكر والتقدير في خدمة العملية التعليمية
متمنياً لكم دوام الصحة والعافية
نرجو من سيادتكم التكرم بتسهيل مهمة الأستاذ : محمد محمود ربحان ؛ حيث يقوم بإعداد دراسة للحصول على
درجة الماجستير حول " فعالية تدريس استراتيجيات القراءة في تحسين المستوى التحصيلي لطلاب الصف الثاني
عشر في الامتحانات المدرسية و اختبارات القبول في الجامعات (السبيا - الألتس - التوفل) " .
سوف يقوم الباحث بالمرور على المدرسة و إجراء الدراسة على المعنيين.
وتفضلوا بقبول فائق الاحترام والتقدير

مدير إدارة منطقة الفجيرة التعليمية

جمعة خلفان الكندي



خطة للتدريس :

سعادة المدير
السادة النواب
السيد رئيس قسم العمليات التربوية
التنسيق المختص
البريد الإلكتروني
الملف والصغار العام

منطقة الفجيرة التعليمية هاتف: 09/2233666 ، فاكس: 09/2221885 ، ص.ب: 62 ، الفجيرة - الإمارات العربية المتحدة
Fujairah Education Zone, Tel: 09/2233666 , Fax: 09/2221885, PO Box: 62, E- mail: fez@fez.gov.ae

5. Parents and Students' Consent Letter

مدرسة: الماسة للتعليم الثانوي
موافقة الطالبة وولي الأمر
التاريخ: 2014 / 4 / 16



دولة الإمارات العربية المتحدة
وزارة التربية والتعليم
منطقة الفجيرة التعليمية

السيدة(ة)/ ولي(ة) أمر الطالبة _____

بالمصف الثاني عشر (علمي - أدبي)، الشعبة _____

تتمنى لكم إدارة مدرسة الماسة للتعليم الثانوي كل التوفيق وتتمنى لجميع الطلاب النجاح مع بداية الفصل الدراسي الثالث و نحيطكم علما بأن المدرسة قد تم اختيارها بناءا على الكتاب الوارد من منطقة الفجيرة التعليمية للمساهمة في إجراء دراسة ميدانية تجريبية بعنوان "مدى فاعلية تدريس الاستراتيجيات في تحسين مهارات القراءة والفهم في الاختبارات المدرسية وامتحانات القبول بالجامعات لدى طلاب الصف الثاني عشر بدولة الإمارات العربية المتحدة" نرجو التوقيع بالموافقة أو عدم الموافقة في حال اختيار الطالبة للمشاركة إذا انطبقت عليها الشروط. علما بأن:

1. هذه الدراسة اختيارية ومجانية
2. سوف تستغرق أسبوعين تقريبا وسوف تكون خلال اليوم الدراسي ولن تؤثر على انتظام الدراسة
3. ربما تكون هناك واجبات خفيفة جدا
4. تمنح الطالبة شهادة معتمدة من المدرسة في نهاية الدراسة
5. سوف يعقد امتحان قبلي وآخر بعدي لقياس مدى اختلاف الأداء
6. النتائج ستبقى سرية جدا وخاصة وسوف تستخدم لأغراض البحث العلمي فقط
7. سوف يتم شرح جميع التفاصيل والإجابة على أسئلة الطالبات حول هذه الدراسة

شاكرين حسن تعاونكم،

مع تحيات/ إدارة المدرسة
التوقيع: _____



لمزيد من المعلومات يرجى
الاتصال بإدارة المدرسة

توقيع ولي الأمر

<input type="checkbox"/> موافق
<input type="checkbox"/> غير موافق

توقيع الطالبة	_____
في حال الموافقة نرجو كتابة درجة مادة اللغة الإنجليزية في:	_____
الفصل الأول:	_____
الفصل الثاني:	_____
<input type="checkbox"/> موافقة	
<input type="checkbox"/> غير موافقة	

مدرسة: حمد بن عبد الله للتعليم الثانوي
موافقة الطالب وولي الأمر
التاريخ: 2014 / 4 / 16



دولة الإمارات العربية المتحدة
وزارة التربية والتعليم
منطقة الفجيرة التعليمية

السيد(ة)/ولي(ة) الطالب _____

بالصف الثاني عشر (علمي - أدبي)، الشعبة _____

تتمنى لكم إدارة المدرسة كل التوفيق وتتمنى لجميع الطلاب النجاح مع بداية الفصل الدراسي الثالث ونحيطكم علماً بأن المدرسة قد تم اختيارها بناءً على الكتاب الوارد من منطقة الفجيرة التعليمية للمساهمة في إجراء دراسة ميدانية تجريبية بعنوان "مدى فاعلية تدريس الاستراتيجيات في تحسين مهارات القراءة والفهم في الاختبارات المدرسية وامتحانات القبول بالجامعات لدى طلاب الصف الثاني عشر بدولة الإمارات العربية المتحدة" نرجو التوقيع بالموافقة أو عدم الموافقة في حال اختيار الطالب للمشاركة إذا انطبقت عليه الشروط. علماً بأن:

1. هذه الدراسة اختيارية ومجسائية
2. سوف تستغرق أسبوعين تقريباً وسوف تكون خلال اليوم الدراسي ولن تؤثر على انتظام الدراسة
3. ربما تكون هناك واجبات خفيفة جداً
4. يمنح الطالب شهادة معتمدة من المدرسة في نهاية الدراسة
5. سوف يعقد امتحان قبلي وآخر بعدي لقياس مدى اختلاف الأداء
6. النتائج ستبقى سرية جداً وخاصة وسوف تستخدم لأغراض البحث العلمي فقط
7. سوف يتم شرح جميع التفاصيل والإجابة على أسئلة الطلاب حول هذه الدراسة

شاكرين حسن تعاونكم،



مع تحيات/ إدارة
التوقيع: _____

لمزيد من المعلومات يرجى
الاتصال بإدارة المدرسة

توقيع ولي الأمر

<input type="checkbox"/> موافق
<input type="checkbox"/> غير موافق

توقيع الطالب	_____
في حال الموافقة نرجو كتابة درجة مادة اللغة الإنجليزية في:	_____
الفصل الأول: _____	<input type="checkbox"/> موافق
الفصل الثاني: _____	<input type="checkbox"/> غير موافق

ملحوظة: تسلم الأوراق للمدرسة في اليوم التالي مباشرة