EUROPEAN ACADEMIC RESEARCH
Vol. VII, Issue 8/ November 2019

Impact Factor: 3.4546 (UIF)
DRJI Value: 5.9 (B+)

ISSN 2286-4822
www.euacademic.org

The Online Reading Strategies that Preparatory Year Students at University of Hail / KSA Use for Academic Purposes

ABEER ABDALLAH EBRAHIM MOHAMMEDZEEN
English Language Lecturer, University of Hail- Saudi Arabia
Dr. AHMED MUKHTAR MARDI OSMAN
Supervisor
Associate Professor, Sudan University of Science and Technology
MUNTASIR HASSAN MUBARAK ALHAFIAN
Co-Supervisor
Assistant Professor, Sudan University of Science and Technology

Abstract:

This study investigates the online reading strategies that students use for academic purposes among Preparatory Year students at University of Hail / KSA academic year 2018/2019 during the second semester. The data gathered to address this topic came from multiple sources. First, to examine the students' responses to the open-ended question as to what they perceived as their reading difficulties when reading online for academic purposes, I calculated the percentage of their responses to the OSORS and investigated whether the reported data from both groups were found to be different from each other.

To gain more insights into the students' actual use of strategies when they were asked to undertake online reading tasks, the research question was formulated. To address this question, I used qualitative data from multiple sources: Internet use questionnaires, pre- and post-reading interviews, observations through think-aloud sessions, and self-reports of online reading strategies.

Keywords: online reading strategies, academic purposes, preparatory year students, University of Hail/KSA

INTRODUCTION:

As we all know because large amount of course books, references, and internet materials are written in English, reading is considered to be the main gateway to access knowledge. Academic reading or reading for the purpose of learning, thus, has become one of the most important demands placed on EFL postgraduate students. In order to fulfill their academic requirements, reading English academic text skillfully is especially necessary to them.

Most EFL adult learners when they further their study at a graduate level cannot read English academic text skillfully. Many teachers may even employ a variation of the grammar translation method to teach reading by asking their students to translate English reading passages into EFL. Their assumption is that EFL students are weak in English because they have a limited vocabulary. Thus, the only way they can read English is to translate English words in Arabic first. Having been taught to read in this way, many Arabic EFL adult learners are still weak in both decoding and comprehension. According to Samuels (1994), fluent reading entails heavy demands on the reader's attention and relies on the automatic processes of decoding and comprehension. A lack of both decoding and comprehension skills may have limited the automatic processes among EFL adult learners.

Based on the understanding that skillful readers display a higher degree of reading strategy awareness, reading strategy instruction has become highly recognized among EFL teachers. Research has suggested that reading strategies used by proficient readers can be taught to EFL learners, so EFL learners should be trained to acquire and develop reading strategies (Anderson, 2004). As training EFL learners to use certain reading strategies will improve their reading skills and help them to become skillful EFL readers, fostering reading strategies among EFL adult learners to deal with English academic text skillfully should be the goal for all EFL reading classes.

STATEMENT OF THE PROBLEM:

University of Hail in Kingdom of Saudi Arabia adopts English as a medium of instruction in Tracks of applied medical sciences and

engineering. The researcher through the remarks which are derived from the English language teaching at preparatory year thinks that students need to know more about the online reading strategies when they reading for academic purposes.

OBJECTIVES OF THE STUDY:

This study aimed to examine the online reading strategies to find the actual use of strategies among proficient and less proficient readers.

QUESTION OF THE STUDY:

What reading strategies do the students use when reading English text online?

HYPOTHES OF THE STUDY:

The students use reading strategies when reading English text online.

SIGNIFICANT OF THE STUDY:

This paper is working to identify what online reading strategies that students use for academic purposes when they read online in English for academic purposes. The findings obtained from this study could be used as a guideline for teachers to gain more insights into the students' actual use of strategies when they were asked to undertake online reading tasks.

METHODOLOGY:

In this study, several instruments and approaches will use to collect data: 1) the Online Survey of Reading Strategies (OSORS), 2)TOEFL reading proficiency test scores, 3) Internet use questionnaire, 4) pre- and post-reading interviews, 5) observations through think-aloud sessions, and 6) self-report of online reading strategies.

LIMITS OF THE STUDY

This study is limited to students of the preparatory year at University of Hail (academic year 2018 – 2019- Second semester).

LITERATURE REVIEW:

As one of the most significant technological revolutions in history, the Internet has become a powerful new means of communication,

information retrieval, transaction processing, and problem solving (Friedman, 2005). In the realm of reading, this technology has enormous potential to make fundamental changes in the way we read on a daily basis. Research indicates that the online reading process is not isomorphic with the offline reading process, and thus proficient readers offline are not necessarily proficient readers online (Coiro & Dobler, 2007; Henry, 2006).

A New Literacies Perspective In an attempt to capture the nature of online literacy, many have begun to use the terms new literacies, which means in fact many different things to many different people. The various definitions of new literacies range from social practices (Street, 1999) or new Discourses (Gee,2003) that emerge with new technologies to new semiotic or cultural contexts made possible by new technologies (Kress, 2004; Lemke, 2002). While multiple perspectives associated with the term new literacies differ from one another, the most recent review (Coiro et al., 2008) concludes that most share a set of common assumptions: (1) new literacies include the new skills, strategies, dispositions, and social practices that are required by new technologies for information and communication; (2) new literacies are central to full participation in a global community; (3) new literacies regularly change as their defining technologies change; and (4) new literacies are multifaceted and our understanding of them benefits from multiple points of view.
For this research, I would like to conceptualize my work within a new literacies theory of online reading comprehension (Castek et al., 2007; Leu et al., 2004). More specifically, to enrich my understanding of online reading, I subscribe to the theoretical work which argues that the nature of literacy is rapidly changing as new technologies emerge (Alexander & Jetton, 2000; Lankshear & Knobel, 2003). Within this perspective, Leu et al. identify five practices that take place during online reading process: (1) identifying important questions; (2) locating information; (3) critically evaluating information; (4) synthesizing information; and (5) communicating information. Further, they posit that while the aforementioned skills appear to overlap with offline reading practices, traditional reading skills are not sufficient to comprehend online information on the Internet.

Reading Strategy Assessment:

Reading researchers have adopted qualitative and quantitative assessment methodologies to explore how effective strategies are for learning. While every effort has been made to document how learners use strategies, Chamot (2007) argued that using strategies, which are mental processes, cannot be observed. Hence, researchers have relied, to a large extent, on self-reporting verbalization. Despite their lack of veridicality and imperfection, self-reported data still provide useful information about internal cognitive processing (Afflerbach, 2000). Chamot further concluded that self-report may be the single best way to discover learners‟ mental processing.

In fact, there is a wide spectrum of methods researchers can employ to examine; however, each assessment technique has its own appropriate uses and limitations. Robson (1993) emphasized that whatever method a researcher adopts, he or she must take the main purpose of the study into consideration.

In this section, the following main research methods and procedures used to gather data on reading strategies are discussed: (1) written questionnaires; (2) oral interviews; (3) think-aloud protocols; and (4) journals.

a. **Written Questionnaires:** As a self-report method, questionnaires have become the most frequently and widely used measurement in learning strategy research (Chamot, 2007). They are used to elicit learner responses to a set of questions; thus, it is imperative that the researcher make a decision on question format and research procedures (Cohen & Scott, 1996). Oxford and Crookall (1989) explained that written questionnaires usually cover a broad range of language learning strategies and are typically structured and objective in nature. Put differently, researchers provide little or no freedom to questionnaire respondents who are given limited choice answers.

Question items can range from those requiring “yes” or “no” responses or frequency indication, such as Likert scales to less structured or open-ended questions which ask respondents to describe their use of language learning strategies, for instance. Nunan (1992) posited that written questionnaires allow researchers to collect data which are more amenable to quantification than those gathered from such field

notes as participant observing journals or the transcripts of oral language.

While written questionnaires have been proven to be effective for various research purposes, they have also been criticized due to some limitations. This type of data appears to be superficial. Also, there is very little or no examination of whether the responses are honest and serious. Often times, researchers take the view that, although analysis may be easy, interpretation of questionnaire data may be time-consuming as well as problematic (Robson, 1993).

b. Oral Interviews: Apart from questionnaires which require learners to write down their responses, researchers can conduct oral interviews in which learners describe what language learning strategies they use and how they use them. Ellis (1994) clarified that a student needs to give retrospective accounts of learning strategies he or she has utilized, which is also considered an applicable elicitation technique.

Characterized by their degree of formality, interviews can be placed along a continuum ranging from unstructured through semi-structured to structured (Nunan, 1992). Regardless of their type, interviews offer personalized information and profound insights into how learners use language learning strategies.

An unstructured interview, which the interviewer exercises little or no control over, is directed by the interviewee's responses. During a semi-structured interview, the interviewer asks a limited set of questions. This type of interview is flexible enough to allow the interviewer to generate new questions according to the direction of the interview. In a structured interview, the interviewer ensures that the interviewee is presented with a list of predetermined questions.

Nunan further claimed that, due to its flexibility the semi-structured interview appears to be the most popular among researchers, particularly those who work within an interpretative research tradition.

As per its limitations, Robson (1993) commented that this specific type of interview calls for the interviewer's skill and experience. Moreover, it has been criticized for its lack of standardization, biases that are difficult to eliminate, and the time-consuming nature of the interview.

c. Think-aloud Protocols: A think-aloud protocol is defined as:
"a moment-by-moment description which an individual gives his or her own thoughts and behaviors during the performance of a particular task" (Gerloff, 1987, p. 137).

In attempts to report detailed observation of the learners" use of language learning strategies, researchers conduct their studies by means of the think-aloud procedures. They believe that, through this method, learners can report what is in their working memory (Ericsson & Simon, 1993; Pressley & Afflerbach, 1995). Kuusela and Paul (2000) added that reporting which happens concurrently while performing a task offers more and better information than reporting what they did retrospectively.

Oxford and Burry-Stock (1995) advocated for think-aloud protocols by indicating that they provide the most detailed information on how students implement language learning strategies; nevertheless, these protocols are typically used only on a one-to-one basis. Even though the think-aloud procedure, when compared with silent conditions, increases the time for undertaking the task, it does not affect the sequence of thoughts (Ericsson & Simon, 1993). In relation to their limitations, Oxford and Burry-Stock further commented that they not only take a great deal of time but also reflect strategies which are task-specific only.

d. Journals: Bailey (1990) defined a diary as:
"a first-person account of a language learning or teaching experience, documented through regular, candid entries in a personal journal" (p. 215).

Reflective journals or diaries have been increasingly employed as a research tool (Cohen & Scott, 1996). They pointed out that journal entries are learner-generated and usually unstructured; thus, a wide range of themes and issues may emerge from these documents. For instance, learners may choose to report cognitive, metacognitive, and social strategies they use to deal with language learning tasks on a daily basis. O'Rourke (1998) proposed that writing reflectively about what students learned benefits both teachers who can identify students' learning process and students who develop their critical thinking skills and professional growth. However, as Rubin (2003) remarked, teachers and researchers alike may find that students have

difficulty writing reflectively. Rather than reflect on what they had learned, some students simply used journals to keep detailed records of what they did. Further, because of their familiarity with writing descriptively, some students may have difficulty writing reflectively. Thus, Grenner (1989) suggested that it is a wise idea to avoid having students write a journal as an open-ended assignment.

METHODOLOGY:

In this study, several instruments and approaches will use to collect data: 1) the Online Survey of Reading Strategies (OSORS), 2)TOEFL reading proficiency test scores, 3) Internet use questionnaire, 4) pre- and post-reading interviews, 5) observations through think-aloud sessions, and 6) self-report of online reading strategies.

SUBJECT:

A total of 98 Preparatory Year students at University of Hail who completed the OSORS provided responses to the open-ended question. The data were included for 60 and 38 students in the proficient group and less proficient group, respectively. The respondents in both groups were diverse in terms of age, majors, and English proficiency. For the purpose of this research, students with grades of A, B+, and B were categorized as proficient readers whereas those with grades of C+, C, D+, and D belonged to the less proficient reader group.

INSTRUMENTS:

The researcher calculated the responses by using TOEFL Reading proficiency test scores, internet use questionnaire, pre- and post-reading interviews, observation through think aloud sessions and self-report of online reading strategies

PROCEDURES:

The researcher starts the process of collecting the data for this study four weeks after the beginning of the second semester to ensure that the whole students have built a clear view and ideas about the online materials.

DATA ANALYSIS AND DISCUSSION:

The research hypothesis was directed toward identifying the online reading strategies reported to be used by Arab EFL university students who participated in this study. To test this hypothesis, I used quantitative data from the OSORS, which measured the students' perceived use of reading strategies when they read online texts for academic purposes.

All of the surveyed students were asked to complete the 39-item OSORS with the fivepoint Likert scale questions, ranging from always or almost always (5) to never or almost never (1). This survey measured three subcategories of online reading strategies: global, problem solving, and support strategies. Table 4.1 below demonstrates the means and standard deviations for each OSORS item. The value of the mean refers to the frequency of use which ranged from 1 (never or almost never) to 5 (always or almost always) with 3 as sometimes (50% of the time).

Table 4.1: The Means and Standard Deviations for Each OSORS Item (N = 111)

No	Strategy	Mean	SD
1	I have a purpose in mind when I read online.	2.92	1.01
2	I participate in live chat with other learners of English.	2.03	0.87
3	I participate in live chat with native speakers of English.	1.90	0.84
4	I take notes while reading online to help me understand what I read.	2.05	0.83
5	I think about what I already know to help me understand what I read online.	3.10	0.95
6	I first scroll through the online text to see what it is about before reading it.	3.46	1.00
7	When online text becomes difficult, I read aloud to help me understand what I read.	2.79	0.94
8	8. I analyze whether the content of the online text fits my reading purpose.	2.83	0.76
9	I read slowly and carefully to make sure I understand what I am reading online.	3.19	0.84
10	I review the online text first by noting its characteristics like length and organization.	3.35	0.97
11	I try to get back on track when I lose concentration.	3.22	0.86
12	I print out a hard copy of the online text then underline or circle information to help me remember it.	2.30	1.00
13	I adjust my reading speed according to what I am reading online.	2.73	0.92
14	When reading online, I decide what to read closely and what to ignore.	3.06	0.80
15	I use reference materials (e.g., an online dictionary) to help me understand what I read online.	3.44	1.08
16	When online text becomes difficult, I pay closer attention to what I am reading.	3.09	0.95
17	When academic sites have links to other sites, I click on them to see what they are.	2.90	0.92
18	I use tables, figures, and pictures in the online text to increase my understanding.	2.80	1.13
19	I stop from time to time and think about what I am reading online.	2.86	0.87
20	I use context clues to help me better understand what I am reading online.	3.32	0.97
21	I paraphrase (restate ideas in my own words) to better understand what I read online.	3.38	0.96
22	I try to picture or visualize information to help remember what I read online.	3.49	0.94
23	I use typographical features like bold face and italics to identify key information.	3.34	0.93
24	I critically analyze and evaluate the information presented in the online text	2.85	0.78
25	I go back and forth in the online text to find relationships among ideas in it.	2.87	0.94

26	I check my understanding when I come across new information.	2.94	0.82
27	I try to guess what the content of the online text is about when I read.	3.41	0.94
28	When online text becomes difficult, I reread it to increase my understanding.	3.01	1.04
29	I ask myself questions I like to have answered in the online text.	2.70	0.91
30	I check to see if my guesses about the online text are right or wrong.	2.84	0.77
31	When I read online, I guess the meaning of unknown words or phrases.	3.23	1.05
32	I scan the online text to get a basic idea of whether it will serve my purposes before choosing to read it.	3.04	0.88
33	I skip words or sections I find difficult or unfamiliar.	3.14	0.95
34	I critically evaluate the online text before choosing to use information I read online.	2.96	0.90
35	I can distinguish between fact and opinion in online texts.	2.99	0.92
36	When reading online, I look for sites that cover both sides of an issue.	2.47	0.85
37	When reading online, I translate from English into Arabic.	2.98	1.00
38	When reading online, I think about information in both English and Arabic.	3.00	0.92
39	When I encounter difficult reading in English, I seek material on the same topic in Arabic.	2.81	1.00

As shown in the table above, the surveyed students reported using each reading strategy item on the OSORS with varying degrees of frequency. The means of individual strategy items ranged from a high of 3.49 to a low of 1.90 (with an overall mean of 2.94). The most frequently reported strategy was no. 22 *I try to picture or visualize information to help remember what I read online (M = 3.49). This strategy with the highest mean was followed by strategies no. 6 I first scroll through the online text to see what it is about before reading it (M = 3.46) , and no. 15 I use reference materials (e.g., an online dictionary) to help me understand what I read online (M = 3.44). The strategy with the lowest mean was no. 3 I participate in live chat with native speakers of English (M = 1.90), followed by no. 2 I participate in live chat with other learners of English (M = 2.03) and no. 4 I take notes while reading online to help me understand what I read (M = 2.05).*

It should be noted that the information presented in the table above only represents the data from all surveyed students, regardless of their English reading proficiency. Table 4.2 below then displays the reported strategy use by proficient and less proficient students. As mentioned earlier, the OSORS items were arranged in random order. To explore the strategy use of both student groups in greater detail, the strategy items were categorized into three separate subcategories: global strategies (17 items), problem solving strategies (12 items), and support strategies (10 items).

Table 4.2: Reported Strategy Use by Proficient and Less Proficient Students

Strategy		Proficient (N = 68)		Less Proficient (N = 43)	
		M	**SD**	**M**	**SD**
Global Reading Strategies					
1	Having a purpose in mind	3.15	1.7	2.53	0.74
2	Live chatting with other learners	2.16	0.92	1.81	0.73
3	Live chatting with native speakers	2.6	0.90	1.65	0.69
5	Using prior knowledge	3.32	0.92	2.74	0.90
6	Scrolling through text	3.65	1.00	3.21	0.91
8	Analyzing if the content fits purpose	2.97	0.81	2.60	0.62
10	Noting length and organization	3.59	0.92	2.98	0.94
14	Deciding what to read closely	3.24	0.83	2.79	0.67
17	Clicking on links to other sites	3.04	0.95	2.67	0.84
18	Using tables, figures, and pictures	3.10	1.15	2.33	0.94
20	Using context clues	3.63	0.93	2.84	0.81
23	Using typographical aids (e.g., italics)	3.60	0.95	2.93	0.74
24	Evaluating what is read	2.94	0.73	2.70	0.83
26	Checking my understanding	3.16	0.70	2.58	0.88
27	Guessing what the content is about	3.62	0.88	3.07	0.91
30	Confirming predictions	3.04	0.78	2.51	0.63
32	Scanning the text before reading Total	3.21	0.89	2.77	0.81
	Total 3.15	0.90	2.63	0.80	
Problem Solving Strategies					
9	Reading slowly and carefully	3.38	0.86	2.88	0.70
11	Trying to stay focused on reading	3.50	0.82	2.77	0.72
13	Adjusting reading speed	2.93	0.94	2.42	0.82
16	Paying closer attention to reading	3.32	0.97	2.72	0.80
19	Pausing and thinking about reading	3.00	0.86	2.63	0.85
22	Visualizing information read	3.78	0.94	3.02	0.74
28	Rereading for better understanding	3.29	1.08	2.56	0.80
31	Guessing meaning of unknown words	3.57	0.95	2.70	0.96
33	Skipping difficult words or sections	3.16	1.05	3.09	0.78
34	Evaluating text before using it	3.09	0.91	2.77	0.87
35	Distinguishing fact from opinion	3.26	0.92	2.56	0.73
36	Resolving conflicting information	2.54	0.87	2.35	0.81
	Total	3.24	0.93	2.71	0.80
Support Reading Strategies					
4	Taking notes while reading	2.12	0.87	1.95	0.75
7	Reading aloud when text is hard	2.91	0.97	2.60	0.85
12	Printing out a hard copy of text	2.40	1.01	2.14	0.97
15	Using reference materials	3.56	1.12	3.26	1.00
21	Paraphrasing for better understanding	3.66	0.92	2.91	0.81
25	Going back and forth in text	3.04	0.97	2.60	0.82
29	Asking myself questions	2.75	0.92	2.63	0.90
37	Translating from English into Arabic	2.90	1.09	3.14	0.77
38	Thinking in both English and Arabic	3.10	0.96	2.84	0.84
39	Seeking material in Arabic	3.01	1.06	2.49	0.80
	Total	2.95	0.99	2.66	0.85

As revealed in the table above, the proficient reader group reported that they used problem solving strategies the most (M = 3.24), global strategies the second most (M = 3.15), and support strategies the least (M = 2.95). However, the less proficient reader group reported that they used problem solving strategies the most (M = 2.71), followed by support strategies (M = 2.66) and global strategies (M = 2.63).

Based on the three levels of interpretation of reading strategy use proposed by Oxford and Burry-Stock (1995), these means can be divided into three groups: high usage group (mean of 3.50 or above), medium usage group (mean of 2.50 to 3.49), and low usage group (mean below 2.50). To provide useful information as to the frequency of strategy use of the proficient and less proficient students, Table 4.3 below summarizes the information contained in the previous table according to the interpretation key explained.

Table 4.3: Frequency of Strategy Use in the Three Subsections:

Usage	**Proficient (N = 68)**			**Proficient (N = 68)**			**Total**	
	GLOB	PROB	SUP	GLOB	PROB	SUP	Proficient	Less Proficient
High	3	5	2	-	-	-	10	-
Medium	10	9	6	14	10	8	25	32
Low	2	-	2	3	2	2	4	7

For the proficient reader group, 10 of the 39 strategies (26%) fell in the high usage group, while 25 of the remaining strategies (64%) had means between 2.50 and 3.49, indicating medium usage of these strategies. Four of the strategies (10%) were reported to be used with low frequency. For the less proficient reader group, none of the strategies fell in the high usage category; 32 strategies (82%) fell in the medium usage group; and the remaining seven strategies (18%) had means below 2.5. It is interesting to note that the majority of the strategies reported by the students from both groups fell in the medium usage group, which indicates that they used these strategies on a relatively regular basis. Furthermore, while the proficient students reported ten strategies with high mean values (mean of 3.50 or above), none of the strategies belongs to this high usage group for the less proficient students. The very aspect becomes one of the major divergences found between the two groups' uses of strategies reported on the OSORS when reading English academic texts online.

The following section discusses the most and least frequently reported strategies by: (1) all students, (2) the proficient students, and (3) the less proficient students. First, Table 4.4 illustrates the top 10 and the bottom 10 online reading strategies reported by all students as identified in the OSORS.

Table 4.4: Reported Strategies Used Most and Least by All Students

Most Frequently			**Least Frequently**		
Most Frequently			**Least Frequently**		
Category	No	**Strategy**	**Category**	No	**Strategy**
PROB	22.	Visualizing information read	GLOB	3.	Live chatting with native speakers
GLOB	6.	Scrolling through text	GLOB	2.	Live chatting with other learners
SUP	15.	Using reference materials	SUP	4.	Taking notes while reading
GLOB	27.	Guessing what the content is about	SUP	12.	Printing out a hard copy of text
SUP	21.	Paraphrasing for better understanding	PROB	36.	Resolving conflicting information
GLOB	10.	Noting length and organization	SUP	29.	Asking myself questions
GLOB	23.	Using typographical aids	PROB	13.	Adjusting reading speed
GLOB	20.	Using context clues	SUP	7.	Reading aloud when text is hard
PROB	31.	Guessing word meaning	GLOB	18.	Using tables, figures, and pictures
PROB	11.	Trying to stay focused on reading	SUP	39.	Seeking material in Arabic

As for the most frequently used strategies, five of the top ten strategies (50%) are global strategies, three (30%) are problem solving strategies, and two (20%) are support strategies. Moreover, all students reported five (50%) support strategies, three (30%) global strategies, and two (20%) problem solving strategies as their least favored strategies on the OSORS.

After an investigation into the most and least frequently reported strategies by all students who responded to the OSORS, Table 4.5 presents the reported strategies used most and least by the proficient students as follows:

Table 4.5: Reported Strategies Used Most and Least by the Proficient Students

Most Frequently			**Least Frequently**		
Most Frequently			**Least Frequently**		
Category	No	**Strategy**	**Category**	No	**Strategy**
PROB	22.	Visualizing information read	GLOB	3.	Live chatting with native speakers
SUP	21.	Paraphrasing for better understanding	SUP	4.	Taking notes while reading
GLOB	6.	Scrolling through text	GLOB	2.	Live chatting with other learners
GLOB	20.	Using context clues	SUP	12.	Printing out a hard copy of text
GLOB	27.	Guessing what the content is about	PROB	36.	Resolving conflicting information
GLOB	23.	Using typographical aids	SUP	29.	Asking myself questions
GLOB	10.	Noting length and organization	SUP	37.	Translating from English into Arabic
PROB	31.	Guessing word meaning	SUP	7.	Reading aloud when text is hard
SUP	15.	Using reference materials	PROB	13.	Adjusting reading speed
PROB	11.	Trying to stay focused on reading	GLOB	24.	Evaluating what is read

Based on the ranking above, it appears that the strategies reported as being used the most and the least by the proficient students are similar to those reported by all students. The most frequently reported strategy is no. 22 I try to picture or visualize information to help remember what I read online while no. 3 I participate in live chat with native speakers of English becomes the least frequently reported strategy.

Once the information as to the reported strategies used most and least by the proficient students was provided, I then presented the perceived use of strategies by the less proficient students in Table 4.6 below.

Table 4.6: Reported Strategies Used Most and Least by the Less Proficient Students:

Most Frequently			**Least Frequently**		
Most Frequently			**Least Frequently**		
Category	No	**Strategy**	**Category**	No	**Strategy**
SUP	15.	Using reference materials	GLOB	3.	Live chatting with native speakers
GLOB	6.	Scrolling through text	GLOB	2.	Live chatting with other learners
SUP	37.	Translating from English into Arabic	SUP	4.	Taking notes while reading
PROB	33.	Skipping difficult words or sections	SUP	12.	Printing out a hard copy of text
GLOB	27.	Guessing what the content is about	GLOB	18.	Using tables, figures, and pictures
PROB	22.	Visualizing information read	PROB	36.	Resolving conflicting information
GLOB	10.	Noting length and organization	PROB	13.	Adjusting reading speed
GLOB	23.	Using typographical aids	SUP	39.	Seeking material in Arabic

SUP	21.	Paraphrasing for better understanding	GLOB	30.	Confirming predictions
PRO	9.	Reading slowly and carefully	GLOB	1.	Having a purpose in min

It is shown from the table that the less proficient students reported no. 15 I use reference materials (e.g., an online dictionary) to help me understand what I read online as their most frequently used strategy and no. 3 I participate in live chat with native speakers of English as their least frequently used strategy with the lowest means. Using the information pertinent to the reported strategies used most and least by the proficient and less proficient students, I made some observations concerning the two groups' use of online reading strategies for academic purposes. First of all, it is evident that the three strategies reported as being used by both groups with high mean values include no. 22 I try to picture or visualize information to help remember what I read online (M = 3.78 and 3.02), no. first scroll through the online text to see what it is about before reading it (M = 3.65 and 3.21), and no. 27 I try to guess what the content of the online text is about when I read (M = 3.62 and 3.07). As for the bottom 10 strategies which students used least frequently, six common strategies were listed by both proficient and less proficient students. These include: no. 3 I participate in live chat with native speakers of English, no. 2 I participate in live chat with other learners of English, no. 4 I take notes while reading online to help me understand what I read, no. 12 I print out a hard copy of the online text then underline or circle information to help me remember it, no. 36 When reading online, I look for sites that cover both sides of an issue, and no. 13 I adjust my reading speed according to what I am reading online. Evidently, neither of the strategies related to live chatting with either native speakers or non-native speakers of English were favored by either group of students. With respect to live chat with native speakers of English, the fact that students in Saudi Arabia study English as a foreign language accounts for very low means of 2.06 for the proficient students and 1.65 for the less proficient students. Provided with limited opportunities to interact with native speakers or participate in live chat with them, the proficient and less proficient students reported using the strategy no. 2 or live chatting with other learners of English with higher mean values of 2.16 and 1.81, respectively.

It is also interesting to pinpoint that, while reading online for academic purposes, both groups of students seldom took notes (strategy no. 4) or printed out a hard copy of text (strategy no. 12). Even though offline readers often take notes to help them understand what is read, these online readers in both groups reported low means of 2.12 and 1.95 for this particular strategy.

Also, low means of 2.40 and 2.14 were reported for the strategy pertaining to printing out a hard copy of the online text to underline and circle information. While offline readers depend to a great extent on a hard copy of the text, the surveyed students in this study revealed that this strategy was of little use to them when reading online. The following part discusses the top three strategies reported using by all students, the proficient students, and the less proficient students participating in this study. Insights gained from the findings contribute to our better understanding of how the students selected strategies to foster their online reading for academic purposes. In each of the three following tables, the global, problem solving, and support reading strategy subsections are accompanied by the top three strategies reported with the highest means. Table 4.7 contains the information as to the use of strategies by all students.

Table 4.7: Top Three Strategies Reported to be used by All Students

Category	No	Strategy	Mean	SD
Global	6.	Scrolling through text	3.46	1.00
	27.	Guessing what the content is about	3.41	0.94
	10.	Noting length and organization	3.35	0.97
Problem Solving	22.	Visualizing information read	3.49	0.94
	31.	Guessing meaning of unknown words	3.23	1.05
	11.	Trying to stay focused on reading	3.22	0.86
Support	15.	Using reference materials	3.44	1.08
	21.	Paraphrasing for better understanding	3.38	0.96
	38.	Thinking in both English and Arabic	3.00	0.92

As indicated in the table above, the global strategy with the highest mean is no. 6 I first scroll through the online text to see what it is about before reading it (M = 3.46). However, of all the 39 strategy items listed on the OSORS, the strategy that received the highest mean is no. 22 I try to picture or visualize information to help remember what I read online (M = 3.49), belonging to the problem solving subcategory. The third strategy to receive a high mean is the support reading strategy no. 15 I use reference materials (e.g., an

online dictionary) to help me understand what I read online (M = 3.44).

This information about the particular strategies reported as being used deserves careful attention because of the potential effects of reading strategy instruction provided to the students participating in this study both prior to and during the course of data collection.

As stated earlier, the students who responded to the OSORS were those enrolled in PREP Reading for Information, which was a reading course intended to equip students with various reading skills they needed. Among a wide variety of skills taught in this course were, for instance, predicting what the text to be read is about, identifying text structure, extracting these and main ideas, and dealing with unfamiliar words by using context clues and dictionaries. Evidently, the strategies nos. 6, 10, 15, 21, 27, 31, which received high means as identified in the table above, are concrete examples of those introduced in the reading course. Even though this reading course focused primarily on offline reading or printed texts, it may be assumed that the teachers‟ explicit instruction also played a pivotal role in the students' use of strategies and allowed the transfer to the online context.

Table 4.8 below continues to discuss the issue by displaying the top three strategies reported to be used by the proficient students.

Table 4.8: Top Three Strategies Reported to be used by the Proficient Students

Category	No	Strategy	Mean	SD
Global	6.	Scrolling through text	3.65	1.00
	20.	Using context clues	3.63	0.93
	27.	Guessing what the content is about	3.62	0.88
Problem Solving	22.	Visualizing information read	3.78	0.94
	31.	Guessing meaning of unknown words	3.57	0.95
	11.	Trying to stay focused on reading	3.50	0.82
Support	21.	Paraphrasing for better understanding	3.44	1.08
	15.	Using reference materials	3.56	1.12
	38.	Thinking in both English and Arabic	3.10	0.92

It is noticeable that the means indicated in the table above are much higher than those of all students' use of strategies, as reported in Table 4. The first strategy with the highest mean is the problem solving strategy no. 22 I try to picture or visualize information to help remember what I read online (M = 3.78), followed by the support

strategy no. 21 I paraphrase (restate ideas in my own words) to better understand what I read online (M = 3.66), and the global strategy no. 6 I first scroll through the online text to see what it is about before reading it (M = 3.65). Below is Table 4.9 which lists the top three strategies in each subsection reported through the OSORS by the less proficient students in the study.

Table 4.9: Top Three Strategies Reported to be used by the Less Proficient Students

Category	No	Strategy	Mean	SD
Global	6.	Scrolling through text	3.21	0.91
	27.	Guessing what the content is about	3.07	0.91
	10.	Noting length and organization	2.98	0.94
Problem Solving	33.	Skipping difficult words or sections	3.09	0.78
	22.	Visualizing information read	3.02	0.74
	9.	Reading slowly and carefully	2.88	0.70
Support	15.	Using reference materials	3.26	1.00
	37.	Translating from English into Arabic	3.14	0.77
	38.	Thinking in both English and Arabic	2.91	0.81

On the whole, the means of the less proficient students' use of strategies are relatively low in comparison with the proficient students' means or even all students' means. The highest mean values in each subcategory include the support reading strategy no. 15 I use reference materials (e.g., an online dictionary) to help me understand what I read online (M = 3.26), the global strategy no. 6 I first scroll through the online text to see what it is about before reading it (M = 3.21), and the support strategy no. 37 When reading online, I translate from English into Arabic (M = 3.14).

MAIN FINDINGS:

1. Most of the students need to orchestrate strategy use to cope with different reading demands, particularly the struggling ones, relied on a fixed set of reading strategies they had been accustomed to regardless of text difficulty level.
2. In addition to offline reading strategies that students could also employ while reading online, they could be equipped with critical evaluation skills in relation to the information that appears online.
3. This study indicated that the OSORS was created as a useful and convenient tool for providing valuable information about

the students' online reading strategies, this type of information assists students in raising their awareness of reading strategies, enhancing their understanding of the reading process and increasing confidence in their own reading ability.

RECOMMENDATIONS:

Based on the finding of the study, the researcher recommends the following:

1. Teachers need to incorporate strategy awareness training before engaging students in online reading tasks, they should introduce a few strategies at one time and extensively model strategies to explain and discuss with students the value of strategies. Also they should provide feedback and discussion with students as they attempt strategies in attempt to help students maintain a high level of motivation.
2. Teachers should help students to develop strategies for critically evaluating information they encounter on the Internet. During a class session, teachers can have students work individually or in groups to discuss some possible ways in which they evaluate websites they find on the Internet and report to the whole group. Teachers then explain why students need these skills for online reading.
3. Teachers can benefit from OSORS information as they help their students to become more highly responsive and thoughtful readers.

CONCLUSION:

This paper reported investigates the online reading strategies that students use for academic purposes. The Internet becomes an increasingly important dimension for all readers, redefining what it means to be literate in the online world. The nature of online reading comprehension has therefore become a significant area of research. Through empirical evidence, this study enriches our understanding of what additional skills and strategies are required as Internet readers in the Arabic EFL context constructed meaning from their reading experiences in ways that differ from how reading takes place within the offline reading environment.

In addition to conventional strategies that prove helpful for readers, some strategies specific to online academic reading include using online reference materials (e.g., dictionaries), clicking on hyperlinks to other sites, seeking online materials in the native language, resolving conflicting information using online resources, and evaluating online information.

REFERENCES:

1. Aebersold, J. A., & Field, M. L. (1997). From reader to reading teacher. Cambridge:
2. Cambridge University Press. Afflerbach, P. (2000). Verbal reports and protocol analysis. In M. L. Kamil, et al. (Eds.), Handbook of reading research (pp.163-179). Mahwah, NJ: Erlbaum.
3. Alfassi, M. (2004). Reading to learn: Effects of combined strategy instruction on high school students. The Journal of Educational Research, 97, 171-184.
4. Alexander, P.A., & Jetton, T.L. (2000). Learning from text: A multidimensional and developmental perspective. In M.L. Kamil, P. Mosenthal, P.D. Pearson, & R.Barr.
5. (Eds.) Handbook of reading research, Volume III (pp. 285-310). Mahwah, NJ: Erlbaum.
6. Anderson, N. J. (1991). Individual differences in strategy use in second language reading and testing. Modern Language Journal, 75, 460-472.
7. Anderson, N. J. (2003). Scrolling, clicking, and reading English: Online reading strategies in a second/foreign language. The Reading Matrix, 3, 1-33.
8. Anderson, R. C., & Nagy, W. E. (1991). Word meaning. In R. Barr, M. L. Kamil, P. B.
9. Mosenthal., & P.D. Pearson (Eds.), Handbook of reading research (pp. 690-724).
10. D. Nunan (Eds.), Second language teacher education (pp. 215-226). Cambridge: Cambridge University Press.