Journal of Studies in Learning and Teaching English Volume. 7, Issue. 2, Ser. 14, (2018), 123-144

Investigating the Difference between Iranian EFL Learners' Reading Comprehension Using Online and Offline Activities

Asma Siyahi*

Department of English Language Islamic Azad University Shiraz, Iran Email: asma.siyahi@yahoo.com

Firooz Sadighi

Department of English Language Islamic Azad University Shiraz, Iran

Abstract. The present study investigated the mode of presenting online and offline supplementary reading materials in Iranian intermediate English learners' reading comprehension. This study aimed to find out which one, online, or offline supplementary reading materials could help intermediate learners to improve their reading comprehension ability. The participants of the present study were eighty intermediate English learners in Caspian and Hakim institutes in Shiraz. As a pre-test, a reading comprehension test was administered. After the pre-test, the participants were divided into two groups of online and offline. Both groups received treatment. The treatment consisted of eight sessions, during which both groups received the same type of instruction. The offline group received a printed form of Internet-based texts, and the online group received an online text with its hyperlinks. To obtain the results of the treatment, a reading comprehension test parallel to the pretest was used as the post-test. The researchers applied descriptive statistics, independent, and paired t-tests to measure the differences between the two groups' reading performance in the pre and post-tests. Also, to verify the results of the quantitative part of the study, a semi-structured interview protocol was prepared and used. The results of the quantitative and qualitative analyses indicated that the online group had better improvement in the post-test. Thus, they outperformed in reading

Received: April 2018; Accepted: October 2018

^{*}Corresponding author

comprehension compared to the offline group. The results of this study showed that online supplementary reading materials could be more useful for intermediate learners to improve their reading comprehension ability.

Keywords: Online supplementary reading materials, offline supplementary reading materials, reading comprehension, supplementary reading materials

1. Introduction

The development of the world has lots of influences on different aspects of life. One of these aspects is the educational system. Nowadays, the Internet is a necessary tool that helps people to have access to new and limitless information. Most of the online resources are up-to-date, and they have the potential to encourage students and teachers to use them as they give the possible opportunity to the users to be linked to other related web pages (Liu, 2006).

The Internet is a rich source for language learning, especially for those who want to improve their reading comprehension skill. Reading skill provides increased opportunities for the second language (L2) development (Day & Bamford, 1998). However, learners often have limitations for finding the sources of L2 input, especially in the Iranian language learning context in which some websites are blocked. Different factors may affect the process of reading comprehension achievement. Factors such as time limitation, class size, and the number of students in a classroom. One of the ways to increase reading comprehension achievement is the use of Internet resources in the classrooms. Internet resources, according to Godwin-Jones (1998), can solve these problems. Online supplementary materials can be substituted by the traditional ones such as the printed form of passages and old-fashioned books. Online supplementary materials provide pictures, pronunciation, and native speakers' voices that can be very interesting for EFL learners and encourage them to keep on with improving their reading skills through online supplementary materials. Online materials can also lead the learners to another site when the learners click on a specific place in the reading text. One of the essential advantages that the Internet offers to EFL students is the high

number of hypertext materials, where the unfamiliar and new passages and vocabularies can be found.

On the other hand, offline materials, which are also Internet-based resources in printed form, may seem tedious, and they may not motivate learners any more since they look exactly like their textbook or other written materials provided to them. The way of teaching in Iran changes every year, and the Internet can have an essential role in promoting the teaching and learning process. The present study was an attempt to find the differences between using online and offline supplementary materials in Iranian intermediate English learners to examine which one is better for them to improve their reading comprehension skills.

2. Review of Literature

Teachers and students employ Computer-assisted Language Learning (CALL) to describe the use of computers as a component of a language course (Hardisty & Windeatt, 1989). Conventionally, it is used as a means to present, reinforce, and test particular language items. In the last decade, research has clarified how computer technologies support meaningful educational experiences (e.g., Cordes & Miller, 1999; Oppenheimer, 1997).

The CALL is an academic field that finds the role of information and communication technologies in English language learning and teaching. It encompasses many activities in material development, pedagogical practice, and research. Chambers and Davies (2001) state that the CALL is a highly interactively and communicatively-base support for the four skills of language learning, including extensive use of the Internet.

Likewise, the CALL is referred to as a sub-division of Computer Assisted Instruction (CAI), since it deals specifically with language learning. It belongs to the field of applied language studies. Also, it is mostly related to second language acquisition (SLA), as a rapidly evolving discipline. The CALL is a field incorporating both the computer and linguistics sciences. Integrating the two disciplines, it provides excellent opportunities for teachers, ling uists, and computer researchers to cooperate very closely to solve some of the intricacies of language acquisition. This cooperative situation can help provide more effective and principled language teaching (Kenning, 1990).

Kern (2006) believes that the CALL has attracted the attention of many educators and researchers to facilitate learning a foreign language. It has become a routine for academic institutes to use computers and the Internet as an integral part of language classroom activities. Alshumaimeri (2008) also asserts that Computers give ample opportunities to students to access several authentic materials and to interact with other speakers of the target language.

With the advances in technological aids, we witness more interactive uses of CALL and overwhelmingly increased integration of various media into the computer system (Pusack & Otto, 1990). Kulik and Kulik (1991) compared learners who received computer-assisted instruction with learners who received traditional paper-based instruction. They concluded that learners tended to learn more and in less time with computer-assisted learning.

Esmaeili Fard and Nabifar (2011) examined the effect of Computer Assisted Language Learning on reading comprehension in an EFL context. The result of the study indicated that the students who were taught by CALL instructional significantly outperformed the students who were taught by the traditional printed text. Also, students find traditional methods of language learning non-interactive (Kessler 2007; Lan, Sung, & Chang, 2006) and believe that computer options for learning are in varied forms (McEnery & Wilson, 2011). They also consider online forms as more interesting ones (Liu & Chen, 2007). Computer language learning projects engaged in several exciting and interactive activities meant to enhance reading skills (Yubune, Kanda, & Tabuchi, 2007).

Son (2003) examined the effect of a CALL program on Korean TAFE college EFL students' reading comprehension regarding learning effectiveness, tutor, interest, and difficulty. He compared CALL and traditional reading activities for one semester. Seventy-four first-year students majoring in English participated in the study and were divided into 2. The researcher administered a questionnaire at the end of the semester. Also, groups were interviewed for supplementary data. The results showed the CALL-based English reading class' positive atti-

tudes. Though this study did not investigate the impact of a CALL program exclusively on the reading ab ility of the students, it gave more importance to opinions towards the application of web-based instruction on language teaching. What can be deduced from the result s of this research is that it supports the benefits of CALL-based reading instruction.

Theodorou (2006) examined the influence of two systems for training college students during a reading strategy course: Web-based and traditional classroom training. Participants were randomly divided into three conditions. In the first situation, the participants got conventional classroom training on the problem-solution structure while through reading and recalling information. In the second situation, the participants got the web-based training on the same text structure. In the third situation, the participants did not get text structure strategy training. The results indicated that the participants who were trained to use the problem-solution structure strategy. Also, the participants in the web-based training situation did not outperform those in the traditional-classroom situation on the training drills. However, the participants in the web-based situation had more positive attitudes towards the web-based training program.

Hypertext is a new type of text where large bodies of information are organized non-sequentially (Goldman, 1996). World Wide Web (WWW) is the best example of hypertext, which combines text with multimedia features such as audio, graphics, images, video, and animation. Thus, hypertext is a concept that consists of verbal and visual ideas with no particular order (Bolter, 1991). The most crucial difference between hypertext and a printed text is the way they are read. While a traditional text is read linearly from left to right and from top to bottom, the hypertext is read as chunks of text in a non-sequential pattern (Synder, 1998).

Different studies have investigated how hypertexts can be used to improve students' reading comprehension (Chen, 1996; Huang, Chern, & Lin, 2009; Ray & Belden, 2007). In all these studies, the results showed that students attain significantly higher comprehension scores by reading the hypertext version and that they prefer this mode over the printed version. However, few studies have reported the impact of hypertext reading on comprehension in the EFL context. Although hypertexts can offer many advantages, students may become lost in a "sea of information" since reading hypertexts often require a more cognitively demanding mode of learning compared to reading printed texts (Nowak, 2008).

To this end, in line with previous studies, the present study aimed to determine whether reading online supplementary materials have a positive influence on intermediate learners' reading comprehension abilities.

3. Research Questions

To achieve the objective of this study, the following research questions were posed by the researchers:

1. Do online reading materials help Iranian intermediate learners improve their reading comprehension ability?

2. Do offline reading materials help Iranian intermediate learners improve their reading comprehension ability?

3. Is there a statistically significant difference between using online and offline materials in promoting Iranian intermediate learners' reading comprehension?

4. Methodology

4.1 Design of the study

As reading comprehension is a complex process, involving a variety of cognitive and linguistic skills, the use of interviews suits the objectives of this study. So, the present study employed a mixed-methods design to gain a detailed description of the dynamic process in the participants' terms. Also, this study was quasi-experimental as the participants were not selected randomly and there was no control group. There were two experimental groups, both using supplementary materials, one in print form and the other online ones.

4.2 Participants

The participants of the present study were 80 male and female intermediate learners who were chosen from among 98 intermediate English

learners. They included 38 male and 42 female participants. Seventy participants were chosen from intermediate classes of Caspian and Hakim institutes in Shiraz. Also, 10 participants were selected from one of the researcher's private intermediate classes. Their age range was between 16-26 years old, 23 participants aged between 16-19 and 57 between 20 to 26 years. All of them shared the same language background. Their native language was Persian. The method of selection used was non-probability availability sampling because they were the only participants to whom the researchers had access. The reason why the learners were chosen from intermediate level classes was that this paper was a mixed-methods one, and the researchers intended to conduct some interviews with the participants and to record their statements. So, the learners needed to have an acceptable level of speaking ability.

4.3 Instruments

To satisfy the goal behind the investigation, the subsequent instruments were utilized:

First an Oxford Quick Placement Test (OQPT) was given to the participants of this study. The OQPT is a standardized placement test in English, structured by Allan (1992). This test comprises 60 questions in vocabu lary, sentence structure, reading comprehension, and cloze tests, which can give a general overview of the proficiency level of the members. It was contrived by Oxford and Cambridge colleges.

Then Reading comprehension texts for pre-post tests were administered and some online reading materials were provided.

The researchers prepared a semi-structured interview, which consists of some questions for the participants to answer. Twelve participants, including nine online and three offline learners, were selected randomly for face-to-face interviews. Questions were based on the comments and insights of the participants and the review of theoretical backgrounds and previous empirical studies.

4.4 Data collection procedures

To have a homogenous sample, 80 intermediate participants were selected based on their scores in the OQPT placement test. Then they were randomly divided into two groups, i.e., offline and online groups. As A. Siyahi and F. Sadighi

a pre-test, a reading comprehension test consisting of 4 reading comprehension tests with 20 multiple-choice items was administered. During the treatment period, which consisted of eight sessions, both groups received the same type of instructions, but the offline group received a printed form of Internet-based texts, and the online group received an online text with its hyperlink. After the treatment session, a similar test was taken as a post-test to check whether there was a significant difference between online and offline groups' reading comprehension. Also, in order to verify the results of the quantitative part of the study, a semi-structured interview protocol was prepared and used.

4.5 Data analysis

In an attempt to obtain homogeneous participants, the Oxford Quick Placement Test (OQPT) was conducted at the first step of the study. The original number of learners in the intact classes was 98. However, after running the OQPT placement test, 18 learners were excluded from the study because their scores were sharply (-2 SDs) lower than other participants' scores. Based on the results of the OQPT, 80 intermediate learners were randomly allocated into two groups, namely offline and online groups. Half of the intermediate classes in both institutes were considered as an online group, and the other participants were assigned into an offline one. In the case of free participants, 5 participants were considered as online learners, and the other 5 participants were selected as offline participants in this study.

The technique that was used to increase the credibility of the qualitative part of the present study was peer debriefing. It was done by one of the researchers and her colleague as an English teacher and a peer to check whether or not she had overemphasized a point, or missed a rival legitimate hypothesis, under-emphasized a point, and in general, did a careful reading of the data and the final report. Regarding the reliability of the study, the researchers checked for reliability through inter-rater agreement.

Since the focus of the study was on the effect of the new method of presenting reading comprehension materials, most of the participants, i.e., 9 interviewees out of 12 were invited from Online group and 3 in-

131

terviewees were invited from Offline group. Table 1 represents the demographic information of the interviewees.

No	Pseudonym	Gender	Age	Field of study	Group
1	Sara	F	26	Accountancy	online
2	Sourena	Μ	17	Humanities	online
3	Pouriya	М	17	Mathematics	online
4	Parisa	F	21	Architecture	online
5	Mohammad	М	23	Social Psychology	online
6	Sina	F	19	Sociology	offline
7	Ryan	М	18	Chemistry	online
8	Maral	F	26	IT	offline
9	Sahar	F	23	Microbiology	online
10	Navid	М	20	Civil Engineering	online
11	Shiva	F	19	Economics	online
12	Saba	F	22	Management	offline

 Table 1: Demographic information of interviewees

5. Results and Discussion

Quantitative data analysis Descriptive Statistics were used to analyze the pre-test scores of two groups before the treatment to see if they were at the same level of reading comprehension. The results of the pre-test of the two groups are presented in Table 2.

 Table 2: Descriptive Statistics of Pre-test of the Two Groups

	Groups	Ν	Mean	Std. Deviation	Std. Error Mean
Pretest	Offline	40	13.3000	1.69766	.26842
	Online	40	13.1500	1.71793	.27163

The results of the descriptive statistics of the pre-test of the two groups showed that the two groups had almost the same mean scores. The mean score of the offline group is 13.30, and the mean score of the online group is 13.15. The standard deviation of the offline group is 1.69, and the standard deviation of the online group is 1.71.

To check if there was a significant difference between the mean scores of the pre-test for the two groups, an independent sample t-test was used. The results of the independent sample t-test of a pre-test for the online and offline groups were presented in Table 3.

 Table 3: Independent Samples t-test of Pre-test for the Online and
 Offline Groups

						-			
	Leven	e's Test for			t-t	est for Equali	ty of Mean	5	
	Equality	of Variances							
	F	Sig.	t	df	Sig. (2-	Mean	Std.	95% Confidence	Interval
					tailed)	Difference	Error	of the Differ	ence
							Differen	Lower	Uppe
							ce		r
Equal variances assumed	.009	.923	.393	78	.696	.15000	.38188	61027	.9102 7
Equal									
variances			.393	77.98	.696	.15000	.38188	61027	.9102
not			.575	9	.070		.50100	101027	7

The results of the Table 3 indicated that the p-value was greater than 0.05(p > 0.05, sig = 0.69). It showed that the two groups were the same in the ability of reading comprehension before the treatment. Moreover, there was not any significant difference between the mean scores of the two groups.

After the treatment and administration of the post-test, the pre-test and post-test scores of both groups were compared with each other. To compare the pre and post-test scores of the two groups, first the descriptive statistics and then the paired sample t-test were used. The results of both descriptive statistics and paired sample t-test were presented in Tables 4 and 5.

	Omine Groups Ferformanees							
		Mean	Ν	Std. Deviation	Std. Error Mean			
Offline	Pre-test	13.3000	40	1.69766	.26842			
Omme	Post-test	13.5750	40	1.63123	.25792			
Online	Pre-test	13.1500	40	1.71793	.27163			
Omme	Post-test	15.9750	40	1.86035	.29415			

 Table 4: Descriptive Statistics on, Pre and Post-test of Offline and
 Online Groups Performances

improved after the treatment, but the online group showed a significant improvement due to the different ways of presenting the passages to them through the Internet. To examine if there was any significant difference between the mean score of pre-and post-test of the two groups separately, a paired-sample t-test was used. The results were presented in Table 5.

 Table 5: Paired T-test for Online and Offline Groups Pre and Post-test Scores

				Paired Diffe	erences				
		Mean	Std.	Std. Error	95% Confide	nce Interval of	t	Sig. (2-tailed)	df
			Deviatio	Mean	the Di	fference			
			n		Lower	Upper	_		
Offline	Pre-test-Post-test	27500	1.08575	.17167	62224	.07224	-1.602	.117	39
Online	Pre-test-Post-test	-2.82500	1.46563	.23174	-3.29373	-2.35627	- 12.191	.000	39

As Table 5 shows, the comparison of pre and post-test scores of the offline group indicated that p > 0.05(sig = 0.117), and there was no significant difference between the pre and post-test scores of the offline group. The comparison of pre and post-test of the online group showed that p < 0.05(sig = 0.00), so there was a significant difference between the pre and post-test scores of the online group. The results indicated that the online group had better performance after their treatment, and online supplementary reading materials had a better effect on their reading comprehension ability compared to offline supplementary materials.

In order to compare the two groups' post-test scores, descriptive statistics were used. The results of the descriptive statistics on the posttest scores of both groups were presented in Table 6.

	Group	Ν	Mean	Std. Deviation	Std. Error Mean
Post-test _	Offline	40	13.5750	1.63123	.25792
1051 1051 -	Online	40	15.9750	1.86035	.29415

Table 6: Descriptive Statistics of Post-test of the Two Groups

The mean score of the online group (mean=15.97) is more than the mean score of the offline group (mean=13.57). The results showed that the online group had a better performance in the post-test.

 Table 7: Independent Sample T-test on Online and Offline Groups, Post-test Scores

		Levene	's Test			t-tes	st for Equality of	Means		
		for Equ	ality of							
		Varia	inces							
		F	Sig.	t	df	Sig. (2-	Mean	Std. Error	95% Conf	idence
						tailed)	Difference	Difference	Interval	of the
									Differe	nce
									Lower	Uppe
										r
	Equal									
	variance	2.257	.137	-6.135	78	.000	-2.40000	.39121	-	-
	s	2.237	.157	-0.133	/8	.000	-2.40000	.39121	3.17884	1.62116
Posttest	assumed									
Postest	Equal									
	variance			-6.135	76.690	.000	-2.40000	.39121	-	-
	s not			-0.135	/0.090	.000	-2.40000	.59121	3.17905	1.62095
	assumed									

Comparing the pre- and post-test scores, the post-test scores showed that there was a statistically significant difference between the two groups' achievements, and the online group had a better achievement.

Qualitative data analysis

In the present study, besides using pre and post-test scores and quantitative analysis of data, a semi-structured interview was used to confirm and increase the accuracy of data and quantitative results. Accordingly, a group of online and offline learners was interviewed.

Having analyzed the data derived from the interviews, the researchers came up with several factors influencing reading comprehension abilities in both groups. The researchers of the present study transcribed the recordings of individual interviews to orient herself with the data at hand. Transcriptions were generated from the recorded interview data. Once transcriptions have been completed, the researchers read the transcripts several times, looking for salient and recurring ideas emerging from the data in order to present them in the form of some codes. Moreover, while analyzing the data, the researchers looked for the factors the online and offline learners described as having an impact on their reading comprehension abilities, as well as those that emerged from the interview data. Once the codes were developed, the researchers attempted to put similar codes together to arrive at categories or themes or findings. When the data were analyzed, the researchers summarized the data and then interpreted them.

Availability of definitions and explanations

Concerning the content, three participants stated that available underlined definitions helped them to comprehend the texts more effectively. Sara, for example, stated that:

"I click certain words that are underlined because it shows the meaning of words and has additional information about that word. The underlined words are helpful as I often click them; they give more specific information about some keywords."

Pouriya also believed that underlined words (gloss) could be useful in comprehending materials by saying that:

"For me with a limited vocabulary, the hyperlink and glossaries can help understand the topic being discussed"

Mohammad also stated that: "It's easier to read online reading materials, as comprehensible information of the words is available to the learners.

Easy access to different resources

Easy access to different resources was another critical factor which was considered as an essential reason in preferring the online resources over offline resources from participants' point of view. Four participants agreed that it was a helpful way of extending the domain of vocabulary knowledge and promoting reading comprehension. Shiva, for example, stated that:

"Well, in addition to the reading materials which we were supposed to read, by a click, I could search on the Internet and find other materials in which I was interested."

The participants also believed that by searching through the Internet, they could find a similar text to those they were supposed to read. As an example, Sahar stated that:

"I could search on the Internet and find some similar topics to the reading materials, which helped me in a more clear understanding of them."

Additional materials: pictures/videos

From the participants' notes, it was understood that additional materials provided on the Internet, such as pictures, audio, and video features, have positive effects on the participants' comprehension of the online reading texts. As one of the online learners, Navid, stated:

"When I cannot understand the passage, I watch the picture and video provided. It improves my comprehension abilities."

Ryan also agreed to say that: "When I look at the pictures first, I have a better comprehension of the text."

Both responses showed the usefulness of extra materials, such as audio or video, in helping the participants acquire a better understanding of the online reading materials.

According to the GSI Teaching and Resource Center (2015, p.5): "Cognitive constructivism states knowledge is something that is actively constructed by learners based on their existing cognitive structures. Therefore, learning is relative to their stage of cognitive development. Cognitivist teaching methods aim to assist students in assimilating new information to existing knowledge, and enabling them to make the appropriate modifications to their existing intellectual framework to accommodate that information." Also, readers are required to adopt new skills and strategies as they go through the process of online reading comprehension (Cairo and Dobler, 2007).

It is supposed that the participants in the present study went through a similar process. By referring to supplementary materials made available on the websites, students were able to construct new knowledge by relating pictures, video, or audio with previous knowledge. This process provides learners with more in-depth knowledge of the subject (Maslawati, 2012).

The participants in the online group confirmed this idea by stating that:

"Images are like visual versions of the paragraph. I have mind maps with some main ideas for a paragraph. By looking at them, I can relate it with my previous lesson; therefore, I can understand the reading materials better" (Parisa).

A few participants, however, found that some images were "not completely helpful" because they were small and non-editable.

These findings suggest that participants had the opportunity to choose appropriate materials for their reading preferences based on their learn-

ing strategies. The choice to have access to supplementary materials such as videos is an instance of this freedom.

Code fre	quency Identified codes	s Main themes.
3	Helpfulness of underlined words	Availability of definitions
2	Helpful for learners with limited vocabulary	and explanations
1	Availability of comprehensible information	of the words
4	Reading materials by a click and searching or	n the Internet Easy access to different resources
2	Finding similar texts	
2	A better understanding of the passages	Additional materials: Pictures/videos
5	Constructing new knowledge by relating p	icture, video or audio with previous knowledge
1	Being attracted to the passage by seeing p	bictures related to it
2	Gathering updated information related to the	e reading materials Access to update resource
3	Finding some general information, beside	s those related to the passages
2	Distracted by advertisements	Design of the reading material
3	Enlarging fonts	
2	Copying and changing the design of mater	rials
3	Conquering fear of reading	Improving self-image, interest and motivation
4	Increasing curiosity about the plot of the	he story, and consequently sustaining learners
	interest	
2	Exploring related texts about the story to i	ncrease their background knowledge.

 Table 8: Codes Identified in Interviews with Online Learners

Access to update resources

Having access to various websites, the participants could have access to the most recent published materials. They had the chance to download the newly suggested materials and take advantage of them to learn the passages deeply. As stated by Pouriya and Sourena: "I could find a lot of information related to the passages which were published in the current year."

Sara also stated that:

"Well, without being aware of it, I found some general information by surfing through the Internet."

Fonts and colors

The participants had contradictory reactions when they were asked about the design of the reading materials.

Some participants complained about the different advertisements in the marginal parts of the passages.

"When I wanted to read the passages, there was some advertisement that made me distracted, and I could not concentrate on the passage." (Parisa).

The other participants were satisfied with the options that they could have for adjusting the color and size of the font.

"Well, I could enlarge the fonts of passages." (Navid).

"I could copy the passages to a word document file and change the design and color of words to my favorite design," Mohammad said.

Improving autonomy, interest, and motivation

When online learners were asked about their motivation for reading online passages, almost all students agreed that they were more motivated and interested in reading online reading comprehension. Also, they stated that they felt more responsibility towards their reading and learning reading materials, and they tried to be more autonomous. Pouriya, for example, stated that

"Actually reading printed text is terribly boring for me" Sourena also agreed, saying:

"For me, reading the online materials are more interesting, in fact, I wish I could read all other courses via my laptop or cellphone, it reminds

me of the fact that I am living in a modern world." It was clear that the younger the interviewees were, the more they were interested in online reading and using the Internet in general.

In general, the participants' perceptions of hypermedia reading materials were varied. Despite positive attitudes towards reading online materials, a few online participants mentioned some negative points regarding using online materials, including problems with the Internet connection, physical problems such as eye strain, distraction, scanning rather than reading through texts.

Offline Learners

Offline learners were also asked about their experience of the reading printed mode of reading texts. Sina, for example, stated: "Reading is a pleasure only when you relax during it. If you really want to enjoy reading, you should choose the printed one."

Saba also stated:

"It's easier to remember where a special point or statement is and to find it in a printed book

6. Conclusion

After examining both quantitative and qualitative data of the present study, the researchers came to this conclusion that online supplementary reading materials were more effective in increasing intermediate learners' reading comprehension ability. The data analysis showed that although the offline group had improvement after the treatment, it was not significant, and the online group outperformed the offline group in reading comprehension ability. One significant advantage of the Internet is its flexible features that can meet the individual needs of the learners. For example, the Internet offers individualized attention and encourages learners to work in their way. It allows for self-paced learning: Students or trainees can take reading materials from their own devices anytime and anywhere. So, those who do not have time for traditional classes can read online materials when they have the time.

According to Warschauer (1996), learners working with the Internet indicate positive attitudes increased attention span and attendance in the class. Using the Internet in language teaching and learning offers some benefits including motivating the students and teachers (Frizler, 1995; Warschauer & Whittaker, 1997); increasing their participation (Singhal, 1997; Warschauer, 1996) and enhancing interaction in the classroom (Singhal, 1997); allowing for a deeper integration with the culture of the target language (Leloup & Ponterio, 1995); providing students with a more active role in their learning (Kasper, 1999), and helping to facilitate cross-curricular work (Leloup & Ponterio, 1995).

Most of the time, what we read in class is forgotten within a week or two. Having that spark of interest and knowing how to find information online assures that what you read is always available to you. If you become interested in a particular topic, perhaps because of something you see, read or hear about, you can get online and look it up. You will have developed the skills to find information, understand it, combine it, and formulate an answer to any question that comes your way.

The motivation to read online materials comes from the students. It is called student-centered or active reading and learning. The online students take responsibility for their course of studies and mature into an individual for whom learning and accomplishment are highly valued. In short, their success depends on themselves.

The results of the qualitative analysis indicated that the students believed that using online supplementary reading materials have many advantages. They assumed some specific advantages which provide the students with working online supplementary reading materials. In the first place, the readily available definitions and explanations through online supplementary reading materials can motivate students to go deep into the themes under discussion, which removes lexical and conceptual ambiguities leading to a clearer understanding of the materials. Secondly, the students' passion to integrate learning and technology may provide a further drive for the effective use of such materials. The results of this study can be applied by teachers where appropriate access to the Internet exists. In technology-rich areas, this procedure can be considered by curriculum developers to promote effective use of the Internet in EFL situations.

References

Allan, D. (1992). Oxford placement test. Oxford: Oxford University Press.

Alshumaimeri, Y. A. (2008). Perceptions and attitudes toward using CALL in English classrooms among Saudi Secondary EFL teachers. *The JALT CALL Journal*, 44 (2), 29-66.

Bolter, J. D. (1991). *Writing space: The computer.* hypertext, and the history of writing. New Jersey: Lawrence Erlbaimi.

Cairo, J. and Dobler, E. (2007). Exploring the online reading comprehension strategies used by sixth-grade skilled readers to search for and locate information on the Internet. *Reading Research Quarterly*, vol. 42, pp. 214-57.

Chambers, A. and Davies, G. (Eds.). (2001).*ICT and language learning: A European perspective*. Lisse: Swets & Zeitlinger.

Chen, J. (1996). CALL is not a hammer and is not every teaching problem is a nail: Changing expectations of computers in the classroom. *The Internet TESL Journal*, 3 (1), 1-4.

Cognitive Constructivism. (2015). Graduate student instructor teaching & resource center. Retrieved from http://gsi.berkeley.edu/gsi-guide-contents/learning-theory-research /cognitive- constructivism/

Cordes, C. and Miller, E. (1999). Fools gold: A critical look at computers in childhood. College Park, MD: Alliance for Childhood. Retrieved January 8, 2015, from

http://www.allianceforchildhood.net/projects/computers/computers_reports.htm.

Day, R. and Bamford, J. (1998). *Extensive reading in the second language classroom*. Cambridge: Cambridge University Press.

Esmaeili Fard, H. and Nabifar, N. (2011). The effect of computerassisted language learning (CALL) on reading comprehension in the Iranian EFL context. Journal of Academic and Applied Studies, 1 (4), 1-8.

Frizler, K. (1995). The Internet as an educational tool in ESOL writing instruction. Unpublished master's thesis, San Francisco State University. The USA. Retrieved from http://thecity.sfsu.edu/-funweb/thesis.htm. On April 18, 2016.

Godwin Jones, R.(1998). CGI: Server-based interactivity. Retrieved from http://www.fln.vcu.edu/cgi/4.html on October 24, 2016.

Goldman, S. R. (1996). *Reading, writing, and learning in hypermedia.* In H. van Oostendorp, & S. de Mul (Eds.), Cognitive aspects of electronic text processing (pp.7-42). New Jersey: Ablex Publishing.

Hardisty, D. and Windeatt, S. (1989). *CALL. Oxford:* Oxford University Press.

Huang, H. C., Chern, C. L., and Lin, C. C. (2009). EFL learners' use of online reading strategies and comprehension of texts: An exploratory study. *Computers and Education*, 52, 13-26.

Kasper, L, F. (1999). Print, film, and hypertext: A multimedia model for discipline-based ESL Instruction. *Teaching English in the Two Year College*, 26 (4), 406-414.

Kenning, M. J. (1990). Computer and language learning: Current theory and practice. New York: Ellis Horwood Limited.

Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, 4 (1), 183-210.

Kessler, G. (2007). Formal and informal CALL preparation and teacher attitudes toward technology. *CALL Journal*, Taylor and Francis: Antwerp.

Kulik, C. L. and Kulik, J. A. (1991). Effectiveness of computerassisted instruction: An updated analysis. *Computers in Human Behavior*, 7, 75-94.

Lan, Y., Sung, Y., and Chang, K. (2006). Collaborative early EFL reading among distributed learners: A simulation pilot study. *The JALT CALL Journal*, 2 (2), 53-66.

Leloup, J. and Ponterio, R. (1995). *Basic internet tools for foreign language educators*. In M. Warschauer (Eds.), Virtual connections: Online activities & projects for networking language learners. Honolulu, HI: University of Hawaii Press.

Leloup, J. and Ponterio, R. (1995). Addressing the need for electronic communication in foreign language teaching. In R. Steinfeldt (Ed.). Educational technologies-monograph of the New York State Council of Educational Associations (pp. 39-54). Available: http://cortland.edu/www/?teach/articles/nyscea.html.

Liu, Z. (2006), Print vs. electronic resources: a study of user perceptions, preferences, and use. *Information Processing and Management*, 42 (2), 583-592.

Liu, G.-Z. and Chen, A. S. W. (2007). A taxonomy of Internet-based technologies integrated into language curricula. *British Journal of Educational Technology*, 38 (5), 934-938.

Maslawati, M. (2012). Hypermedia reading environment for adult learners: a case study at Universiti Kebangsaan Malaysia. Unpublished Ph.D. Thesis, Universiti Kebangsaan Malaysia.

McEnery, A. and Wilson, A. (2011). *Corpus linguistics*. Information and communications technology for language teachers (ICT4LT). Retrieved from http://www.ict4lt.org/en/ on August 30, 2016.

Nowak, L. (2008). Digital reading theory and its relationship to academic readin practices. *Design of Electronic Text*, 1 (1), 1-7.

Oppenheimer, T. (July 1997). *The computer delusion*. The Atlantic Online 280(1). Retrieved from

http://www.theatlantic.com/issues/97jul/computer.htm in June 2016.

Pusack, J. P. and Otto, S. K. (1990). Applying instructional technologies. *Foreign Language Annals*, 23 (5), 409-417.

Ray, R. D. and Belden, N. (2007). Teaching college-level content and reading comprehension skills simultaneously via an artificially intelligent adaptive computerized instructional system. *The Psychological Record*, 57, 201-218.

Signhal, M. (1997). The Internet and foreign language education: Benefits and challenges. *Tesol Journal* 3 (6).

Son, J. B. (2003). A hypertext approach to foreign language reading: Student attitudes and perceptions. *Australian Review of Applied Linguistics*, 17, 91-110.

Synder, I. (1998). Beyond the hyphen Reassessing hypertext. In 1. Synder (Ed.), Page to Screen: Taking Literacy into the Electronic Era (pp. 125-143). London: Routledge.

Theodorou, E. S. (2006). The relationship between self-regulated learning and transfer of problem-solving and a reading strategy. Unpublished thesis. Pennsylvania State University.

Warschauer, M. (ed.) (1996). *Virtual connections:* Online activities and projects for networking language learners, Honolulu, HI: University of Hawaii Second Language Teaching and Curriculum Center.

Warschauer, M. and Whittaker, P. F. (1997). The Internet for English teaching: Guidelines for English teachers. *TESL Reporter*, 30 (1), 27-33.

Yubune, E., Kanda, A., and Tabuchi, R. (2007). Effects of different computer display methods of reading units on learners' reading efficiency. *Language Education and Technology*, 44, 215-228.