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## Research Article

**The Impact of Iranian EFL Learner's Interaction in an Online-based Instruction on Improving their Reading Skill****Mehrdad Rezaee**

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**Email:** [mi.askari@iauctb.ac.ir](mailto:mi.askari@iauctb.ac.ir)**Phone:** +98 912 6054144**ABSTRACT**

This study tried to explore the impact of online instruction on Iranian EFL learners' reading comprehension. To this end, 60 language learners were chosen via convenience sampling from among a pool of 100 language learners. To achieve homogeneity among the participants, Oxford Placement Test was administered. Then, the participants were randomly assigned to two experimental vs. control groups randomly. The experimental group was treated in the telegram environment under online instruction. The control group, however, was taught through traditional method of teaching reading comprehension. Two instruments were employed in this study: reading comprehension test (pretest and posttest) and attitude questionnaire (pretest and posttest). As the result of this study show, online instruction has significant effects on both Iranian EFL learners' reading comprehension and attitude. This finding is helpful for language teachers and material developers, in a way that they should focus on the role of new technologies in the processes of language learning and teaching.

**Keywords:** reading comprehension, attitude, online instruction

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## 1. INTRODUCTION

In Iran, teaching reading has been the main focus, since English is a required subject for students who want to enter higher education. Reading is a very complicated process that represents various difficulties to teenager learners figuring out how to read in their native language, and much more difficulties to young English-language learners (Moss & Newton, 2002). Reading is the most significant skill for second and foreign language learners in academic contexts particularly at the third level students because these students must access professional knowledge (Huckin & Bloch, 1993). According to Chang (1998), using fluent reading proficiency, learners not only receive better success in English learning but gain better academic performance.

Regarding reading as a mutual process, Widdowson (1979) states that reading is not a reaction to the written text, but a mutual process between the writer and the reader which is promoted by the written text. Readers' schemata have an important effect on understanding the text. Millrood (2001) believes "reading is a visual and cognitive process to extract meaning from writing by understanding the written text processing information and relating it to existing experience" (p. 117). Grabe (1991) considers reading as a mutual process between a reader and a text, in which the reader interacts gradually with the text as he/she attempt to derive the meaning and where different kinds of information (linguistic or systemic knowledge (through bottom-up processing) as well as schematic knowledge (through top-down processing) are being used.

In other studies, by Seifoori, even further considerations were taken into account on receptive and comprehensive skills of the language learners. Through the mentioned research outcomes, the reading comprehension and content retention from various multi-facet framework of vocabulary acquisition to metacognitive strategies were focused to examine their ultimate outcomes on communicative skills via gender-based lenses (2023, 2024a & 2024b).

In the same line, Rashtchi and Keyvanfar (2010, p. 141) believe "reading is a receptive skill that readers decode the message of the writer and try to recreate it anew. It could be as a dialogue between the reader and the writer". Concerning aforementioned points, it should be noted that finding useful techniques for teaching reading comprehension is of great importance both in language for general and specific purposes. Accordingly, online-based instruction has been suggested as a potential apparatus which can ease the process of teaching reading comprehension.

Through online-based instruction language learners can access to an important source of language learning i.e., Internet. Thus, the main feature of online-based instruction is that, it does not suffer from contextual limitations such as time and space. Regarding the advantages of online-based instruction, in this study attempts were made to investigate the effect of learner's interaction in an online-based instruction on developing reading skill.

Second language reading has attracted a good deal of interest in the last 25 years. First, part of this interest can be attributed to the fact that reading comprehension is vital for academic achievement and that second language (L2) reading is considered as a primary channel that L2 students can use to learn independently beyond the context of classroom (Celce Murcia, 2002).

Second, we all live in a multi-lingual and multi-cultural society, one that global media and the new global economy have made more interconnected and the ability to effectively comprehend a text makes humans' connection more powerful than ever. This has brought the place of L2 reading research and instruction into spotlight.

Reading is a complex skill and the development of fluent reading comprehension by second language learners is a challenging enterprise (Grabe, 2009). According to Pressley (2007), "reading is a visual and cognitive process to take meaning out from writing by comprehending the written text, processing information, and making it related to available experience" (pp. 117-118). Reading comprehension is more than decoding the meaning of individual words in the context. Comprehension is the result of deciphering the underlying, deeper meaning of the text as the whole (Brown, 2001)



Reading comprehension is an important skill for learners in EFL course. Foreign language reading comprehension is a mutual and complicated method influenced by linguistic and cognitive factors, social and cultural variables, and emotional and motivational factors (Xu, 1999). Anderson (2003) pointed out that fortified reading skills allow EFL learners to advance and gain much more progression in all academic fields.

Reading comprehension is a great undertaking when the number of elements and factors actually playing a pivotal role in the course of comprehension is taken into account. Reading comprehension can become challenging, frustrating process when the reader confronts an unfamiliar, technical or difficult text (Chastain, 1989).

Acquisition of reading skill is not an over-night endeavor. A successful reader learns to implement various strategies to overcome reading comprehension obstacles. Grabe (2009) was very clear in emphasizing the importance of reading comprehension strategies stating that the “acquisition of better reading strategies is apparently needed to crack the illusion of comprehension in readers who are settling for low standards of comprehension. They need to acquire and implement strategies to facilitate deeper levels of comprehension” (p. 449).

Eskey and Grabe (1988) believe “Reading requires a relatively high degree of grammatical control over structures that appear in whatever readings are given to L2 students” (p.226). English language learners encounter some challenges when reading in English. These challenges are not only learning the English language, but also becoming aware of the phonemic and phonological ideas of this language (August & Hakuta, 1997).

Mehrpour, et al (2012) believe that Iranian EFL students rely on decoding skills and they prefer to read in a word-by-word, sentence-by-sentence mood; and they often use the bilingual dictionary for translation. They also believe that, this analytical reading behavior is influenced by the students’ past learning experience. Students are trained to concentrate on grammatical rules, lexical knowledge and literal translation from English to Persian or vice versa. As a result, by entering higher education, students find it very difficult and frustrating to read their textbooks written in English. The reason is that they rely mostly on local decoding skills and have limited knowledge of reading strategies to help them understand the text they are reading.

The other difficulty that English teachers in Iran have to face in universities, is huge classes consisting of approximately 70 students with different learning styles, expectations, interests and motivation in English learning. Most of the times, it is not possible for teachers to meet every student’s need or get them all involved in classroom activities under these situations. In addition, because of the widespread approach to teaching mentioned above, a number of students have developed passive attitudes and will not be able to take responsibility for their learning process.

Over the past fifteen years, the internet has evoked a huge shift in research on human behavior. With Ever - increasing numbers of people interacting continuously in online venues like chat rooms, Web forums, emails, and instant messaging environments (e.g., Whatsapp, Telegram, and the like), social scientists and educators have explored their behavior in order to better appreciate the essence and the character of computer-mediated communication and how it can be integrated in a specific contexts of use (Herring, 2004).

From the host of online learning and communication tools, educational institutes are increasingly integrating online classroom into their syllabi. Online classrooms have offered many opportunities for language learners and teachers alike, “enables groups that are separated in time and space to engage in the active production of shared knowledge” (Gunawardena, Lowe, & Anderson, 1997, p. 410). Furthermore, online courses offer a chance for social, communal learning which is characterized by participation and interactivity for both students and instructors (Brindly & Walti, 2009). It is important to note that online learning is not easy to adopt and demands a dramatic reconstruction and reformation of students and



instructors' roles. Furthermore, the nature of these relations and the types of practice require a critical enquiry (Vonderwell & Liang, & Alderman, 2007).

Online classes can foster collaborative learning and engagement. A collaborative learning environment facilitates sharing and distribution of knowledge. The participants work toward common learning goals (e.g., a shared appreciation of a subject). In contrast to traditional classes, collaborative learning, as an offshoot of online classes, grants authority to language learners and acknowledges their presence. Language learners are not passive recipients but are active agents who actively co-create knowledge (Brindly & Walti, 2009).

In an online course, instructors are removed and are advised to preserve a distant figure who give assignment, review work, and interact via text messages. Therefore, in sharp contrast to common language classes in which an instructor stands at the front of a class and holds a dominant role, ownership and power are more distributed (Johnson, 2015). Given this, the present study will explore the role of learners' interaction in an online environment on developing reading skills of Iranian EFL learners.

Since the 1980s, a number of groundbreaking advances have been made in research on reading (see for example Smith, 2004). While the advances in first language (L1) context have led us to gain a more comprehensive picture of the nature of reading, the similar studies in L2 context have not had the same impact (Grabe, cited in Richards & Renandya, 2002).

Fluent reading comprehension is a complex endeavor and poses the learner innumerable dilemmas which can be traced back to the "lack of appropriate reading strategies, lack of background knowledge related to the topic of the target language or lack of attitudes toward reading, to name a few" (Altamimi, 2006, p. 24). Nevertheless, these problems can be alleviated, if not eradicated, by giving due attentions and appropriate instructions.

Since its appearance in distance education, online learning has been the subject of many questions about the best way to use this technology in foreign language learning as there are many questions over the types of communicative activities students should engage in, the roles and the responsibilities the interlocutor fulfills, and the types of learning outcomes that can be achieved (Rurke & Kabuka, 2007). It is commonly argued that since online classes suffer from the lack of effective communication channels, are less capable of representing the 'social presence' of participants in online classes (Swan, 2001). There are also some concerns about the interactive nature of online-mediated discourse, which serves as an important factor in the success of online learning classes (Eastmond, 1995).

In sharp contrast to what goes in language learning centers around the world, the majority of educational institutes as well as universities and schools have turned a blind eye to learning opportunities provided by the recent advancement of the internet and digital tools. Not to mention that no considerations taken to investigate the efficacy of online contributions and interaction among EFL learners. These inadequacies can be attributed to a host of reasons. Firstly, the application of digital tools that effectively engage students across content areas and serves as a valuable strategy for facilitating learning is quite rare in many contexts in Iran. It goes without denial that the results of many studies have shown that traditional educational systems have failed to improve educational goals, still struggles with teacher-dominated, subject-oriented learning methods (Asadpour, 2015). Secondly, the cost of internet services is rather high and does not live up the expectations when it comes to speed and accessibility.

Finally, the role of instructor and the way online classes are to be managed have compounded the dilemma. In traditional language classes, a language teacher may express his/her power through body language and punishment. In online classes; however, learners are much more willing to speak out and misbehave (Garrison & Innes, 2005). Given the gaps like the ones stated above, the present study intends to determine the extent to which interaction in online classes can improve students' reading comprehension and how much the different reading skills will affect student's reading comprehension.

Interest in L2 reading comprehension research and instruction has expanded a lot in the last 15 years. This can be attributed to the recognition of the fact that reading comprehension ability plays a pivotal role





in academic achievement and is the main source of interaction and learning for foreign language learners beyond the classroom context (Grabe, 2009). Considering Ever-increasing importance of reading in foreign language context, it is evident that sufficient degree of attention must be attached to reading comprehension.

Another equally important issue is that globalization and the internet have dramatically transformed the contemporary world in many different ways. From a host of technological tools advanced for social interactions, videoconferencing, chat rooms, and online forums have attracted a good deal of interest in foreign language learning. This can be attributed to the fact that the aforementioned social encounters provide new communities and maximize learners' opportunities for exposure to a foreign language (Kern, 2014).

The digital world has dominated the world and is believed to have changed both the nature and the way people interact with each other. This, in turn, has had a huge impact on classroom learning and more and more college courses have been converted into online offering. Recent advances in instructional technology have made it possible to design educational curricula that incorporate varied forms of online learning. (Johnson, 2015). Therefore, it is not surprising to find that nearly one-third of all students in higher education in the United States are already enrolling in one online course (Kern, 2014).

The present study is of significance in many ways. Firstly, the results of the study might raise teachers' awareness of the shady nature of online learning classes, the types of interaction occurs in this realm, and offers a brand new learning environment for those learners who need some extra practice. The study might also provide learning opportunities for direct, inexpensive communication across distance for language learners and breaks time and geographical barriers. Furthermore, the results of the current study might provide beneficial results for EFL teachers in general and Iranian English teachers in particular, making them aware of the role of interaction in online learning classes to enhance of reading comprehension abilities of EFL learners.

### **Research Questions**

The present study was aimed at answering the following questions:

RQ1) Does online instruction have any significant effect on Iranian EFL learners' reading comprehension?

RQ2) Does online instruction have any significant effect on Iranian EFL learners' attitude?

RQ3) What types of interactions do the Iranian EFL learners' employ in the online instruction environment?

## **2. METHODOLOGY**

### **2.1. Design**

As the sampling procedure of this study was convenience sampling it was a quasi- experimental method with pretest-posttest control group design.

### **2.2. Participants**

The participants of the present study were selected from one of the English language institutes in Tehran. 60 male and female participants out of 100, aged 15-22, were selected through convenience sampling. All the participants in the study were from Tehran and Persian was their native language. To ensure that all participants are at the right level of proficiency, the Oxford Placement Test was administered. Through OPT, 40 students were selected based on Oxford Placement Test Direction. In this direction scores in the area of 1-17 are considered Beginners, 18-27 (Elementary), 28-36 (Lower- intermediate), 37-47 (Upper- intermediate), 48-55 (Advanced), and 56-60 (very advanced). Those language learners whose scores fell in 28-36 were considered the main sample of the study. Then, the participants were assigned to two equal groups: An experimental (online instruction) and a control group.



### 2.3. Instruments and Materials

In this study, the effectiveness of learners' interaction in an online-based instruction on reading comprehension was investigated through the administration of several instruments including; a proficiency test, a pre-test, a post-test and a motivation questionnaire.

#### **Oxford placement test of English language (OPT)**

In the present study, the Oxford placement test of English language was administered to homogenize the participants. The sample of Oxford placement test used in this study was divided into two parts: part A: 40 items, part B: 20 items. This test took about 70 minutes. Based on Oxford Placement Test Direction, scores in the area of 1-17 are considered Beginners, 18-27 (Elementary), 28-36 (Lower- intermediate), 37-47 (Upper- intermediate), 48-55 (Advanced), and 56-60 (very advanced).

#### **Reading Pre-test**

Before the treatment, a researcher-made pre-test was administered to the participants to elicit the ability of the language learners in reading comprehension skill. The pre-test consisted of 20 multiple-choice reading items selected from *Select Readings* (Intermediate) by Lee (2003). To prepare passages of appropriate level of difficulty for reading comprehension, the readability of the texts was assessed. In effect, the passages were selected from reliable sources (e.g., Reading Through Interaction, Farhady & Mirhassani, 2004) which offer passages of appropriate length, content, and difficulty. The participants were asked to answer the pre-test within an hour. In order to establish the reliability of the pre-test, it was piloted prior to the main administration.

#### **Reading Post-test**

After the treatment, a researcher-made post-test, piloted in advance, was given to all participants based on the materials or content covered during the treatment or teaching program. The post-test consisted of 20 multiple-choice reading items selected from materials covered throughout the course.

#### **Qualitative Textual Description**

In order to conduct qualitative textual description, some parts of the discussion among the participants of the study were extracted and analyzed qualitatively through grammatical and lexical structures. And also, various types of interaction techniques have been identified. This work is done because of the main variable of this study which was online instruction in experimental group.

#### **Language Learning Attitudes Questionnaire**

The measuring instrument was an attitude questionnaire which focuses on the attitudes towards learning English. Additionally, it was aimed to explore the differences in the participants' attitudes by their demographic information. The items were partly adapted from the Attitude and Motivation Test Battery (AMTB) designed by Gardner (1985). This questionnaire consists of 18 items. The items are put in a 5-point Likert scale from Level 1: Strongly Disagree to Level 5: Strongly Agree.

#### **Materials**

To conduct the present study, the researcher used the following materials: *New Headway* (Fourth Edition, Intermediate) by Soars and Soars (2013), *Select Readings* Intermediate. According to the authors, these books are specially designed for intermediate-level students and contain appropriate texts which boost students' reading comprehension.

#### **Procedure**

At the beginning and before the instruction begins the OPT was given to a population of 100 language learners in order to make sure that there will be no significant differences between the participants. After scoring homogeneity tests, the data were analyzed and 60 learners were selected based on Oxford Placement Test Direction. In this direction scores in the area of 1-17 are considered Beginners, 18-27 (Elementary), 28-36 (Lower- intermediate), 37-47 (Upper- intermediate), 48-55 (Advanced), and 56-60 (very advanced). Those language learners whose scores fell in 28-36 were considered the main sample of the study. The participants, then, were assigned to an experimental (online instruction) and a control group equally. Next,



in both groups, the pretests, attitude questionnaire and reading comprehension pretest were administered to measure the reading comprehension and the level of attitude of the participants toward reading comprehension process of the participants before receiving the instruction.

Each session, the teacher posted a reading passage to an online learning environment (i.e., Telegram). The passages revolved around a same theme throughout the classes. The teacher introduced a reading strategy each session. She would exemplify each strategy with appropriate example. The strategies were selected in a way to encourage learners have interaction with each other. The students responded both to the teacher's questions and to each other's after reading the passage. The teachers' and the students' interaction served as the classroom discourse generated in an online learning environment. The students in the experimental group interacted to elaborate the main meaning of the text.

In order to assess the type of students' interaction, they were classified based on indexical, elliptical, or projective elements. Indexical utterances rested on reference to context and previous contributions. Elliptical comments were those in which they rely on previously-mentioned ideas, do not add anything new and are redundant. Projective comments took the conversation to a new level and provide a direction to move the discussion forward. Through this, it became clear that whether a student or the teacher's post reflected the understanding of the previous messages, or if it reflected on a totally new point. Hence, the teacher responses would be categorized as either redirecting for further discussion, or simply indexical comments.

The control group, however, were exposed to conventional teaching methods common in traditional classes. That is, the same passages were read by the teacher. She translated the passage into L1, and provided some synonyms and antonyms if they are needed. The online classes were held for 7 sessions. After the treatment, two posttests were given to all participants. At the end, an attitude questionnaire and some random interviews were conducted to explore learners' attitude toward the classes.

#### **2.4. Data Collection and Analysis Procedures**

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In order to investigate the research questions, various statistical analyses including both descriptive and inferential statistics were used. The data for the present study were collected from the online learning classes held in an online learning environment (e.g., Telegram). For the first research question, both descriptive (mean, SD, etc.) and inferential statistics (e.g., T-Test) were employed. For the next research questions, percentage and qualitative descriptions was used.

### 3. RESULTS AND DISCUSSIONS

#### Answering the First Research Question:

The first research question of this study was to investigate the effects of online instruction on Iranian EFL learners' reading comprehension. To find the answer of this question the statistical procedure is as follows:

**Table 1**

*The Independent T-Test for Showing the Difference of Experimental and Control Groups in Pre-Test.*

T	Df	Sig	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
-0.227	38	.822	-.15	.660	-1.487	1.187

Table 1 presents the results of independent t-test which was used to show the difference between the experimental group and control group in the pre-test. The results of the independent t-test showed that there is no significant difference ( $P > 0.05$ ) between the two groups in the pre-test. In other words, the experimental group and control group were equal in level of reading comprehension before the treatment.

#### Answering the Second Research Question

The second research question of this study was to investigate the effects online instruction have on learners' attitude.

**Table 2**

*Paired Samples Test for the Pre and Posttests*

Pair		Paired Differences				T	df	Sig. (2-tailed)	
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
<b>1</b>	Pretest control	-2.00	.66	.13	-2.25	-1.60	-	19	.00
								14.89	





		Posttest control							
<b>Pair 2</b>	Pretest ex	-2.60	.45	.12	-2.84	-2.38	-	19	.00
	posttest ex							22.58	

Based on the results of paired T-test, this progress was statistically significant ( $P \leq 0.05$ ). In other words, the participants in both control and experimental group progress in the post test. This progress is more evident in the participants' attitude of experimental group. The lowest progress between the results of pre and post-test was observed for the control group.

### Answering the Third Research Question

To answer the third research question of the study, which refers to the types of online interaction in the classroom, the participants' and the researcher's texts and comments in the Reading Comprehension Group of telegram are considered as the main corpus of this study.

**Table 3**

### *Occurrence Frequencies and Ranking of the Advantages of Telegram*

	Frequency	Percent	Ranking
<b>Telegram saves time of the students</b>	11	36.66 %	First
<b>Telegram brings down the cost of learning materials</b>	5	16.66 %	Third
<b>Telegram is free resources available in open license</b>	4	13.33 %	Fourth
<b>Telegram increases the level of interaction among language learners</b>	4	13.33 %	Fourth
<b>Telegram can improve writing skill</b>	6	20 %	Second
<b>Total</b>	30	100%	

According to Table 3, the first advantage of this study is "Telegram saves time of the students". Most of the participants (36.66 %) stated that they could save time because they did not have to go to the class, they can stay at home and attend in the Reading Comprehension Group. The second advantage of this study is "Telegram can improve writing skill". Majority of the participants (20 %) agreed upon this point, typing in Telegram can improve their spelling and writing skills. In addition, through reading the others' comments and contents they learn new vocabularies and spelling of new words. The third advantage of online instruction is "Telegram brings down the cost of learning materials". Some of the participants (16.66 %) believe that Telegram is very cost effective and they do not have to pay too much money for educational material and instruments on the Telegram. The fourth advantage of online instruction is "Telegram is free resources available in open license" and "Telegram increases the level of interaction among language learners".

Language teachers, can employ online-based instruction as a practical and helpful tool, to improve language learning process. Chen, Belkada and Okamoto (2004, p. 47) in their paper "How a Web-based Course Facilitates Acquisition of English for Academic Purposes", discuss that technological advancement creates changes in SLA, smooth computer-based learning activities, and make student autonomous, they are finally instruments in the hands of material developers who must use them creatively to boost language learners' learning experience and to increase their language acquisition for communicative ends.

EFL learners' reading comprehension and attitude. In addition, the participants of this study employed all types of online interaction (indexical, projective, and elliptical) in reading comprehension class. The



findings of the present study are in line with the findings of some studies, which were reviewed in chapter two, such as Faust and Glenzer (2000) and

Millis and King (2001) conducted two experimental studies with undergraduate psychology students who were asked to read short passages twice from computer screens. Both study results showed a significant main effect on readers' memory scores, especially when they, to some extent, strategically reread texts. In another study by Yoon (2012) on sixty-two Korean elementary students, he explored the effects of an e-book reading on the following aspects: 1) vocabulary increase over the experiment period, and 2) the changes of affective factors on learning English through an e-book. The results showed that with an e-book reading, vocabulary knowledge, motivation, and interest on reading and English learning have been remarkably increased.

The other finding of this study, which emphasize the significant effects of online instruction on reading comprehension, is consistent with the following studies. Dunkel (1990), for example, mentioned the possibilities of computer technology as a tool include increasing language learners' (1) self-esteem, (2) vocational preparedness, (3) language proficiency and (4) overall academic skills. Armstrong & Yetter-Vassot (1994) and many others explored the benefits of multimedia, the Internet, and various forms of distance education. Ehsani and Knodt (1998) emphasized the role of CALL programs, especially speech technology and voice-interactive CALL for improving learners' speaking skills. Computer technology in combination with a conferencing system (Telegram) is an effective tool for organizing a goal-directed writing and reading instructions.

Online learning is a trend that has the potential to enhance learning and increases the importance of knowledge of new teaching methods, which apply to new learning environments (Jung, 2001; Romero, Berger, Healy & Aberson, 2000). In line with this mindset, According to previous studies, some learners encounter difficulties learning online, since they have difficulty changing their learning habits to accept reading electronic texts (Aragon, 2004; Steinhauer & Friederici, 2001). Learners feel doubtful about their learning abilities and believe that they are not as skilled as readers who can overcome the changes in the learning process. Some learners, contrarily, always try their hardest to adapt to the current learning environment, since they believe that they will eventually become comfortable with reading electronic materials (Ehrlich, Kurtz-Costes & Loridant, 1993; Ferguson, 1999; Schommer-Aikins & Easte, 2006).

#### **4. CONCLUSION**

The main conclusion of this study was its significant effect of online instruction on Iranian EFL learners' reading comprehension and attitude. According to Grabe (1991), reading is an interactive process between a reader and a text, in which the reader interacts progressively with the text as he/she tries to comprehend the meaning and where different sorts of information are being utilized: linguistic or systemic knowledge (through bottom-up processing) as well as schematic knowledge (through top-down processing). Since reading is a complex process, Grabe (1991) argues, "many researchers attempt to understand and explain the fluent reading process by analyzing the process into a set of component skills" (p. 379). In this study, there was an emphasis on using types of interaction (indexical, elliptical, and projective) through online instruction to promote language learners' reading comprehension ability.



## REFERENCES

- Anderson, N. J. (2003). Scrolling, clicking, and reading English: Online reading strategies in a second/foreign language. *The Reading Matrix*, 3, 1–33.
- August, D. & Hakuta, K. (Eds.). (1997). *Improving schooling for language-minority children: A research agenda*. Washington, DC: National Academy Press.
- Bacsich, P., Phillips, B., and Bristow, S. F. (2011). Learner Use of Online Educational Resources for Learning (LUOER). Retrieved from <http://www.jisc.ac.uk/media/documents/programmes/elearning/oer/LUOERLfinalreport.docx>
- Barroso, J. M. (2012) ‘Growth and jobs: next steps’, Presentation to the informal European Council of 30 January 2012. Accessed June 16 2013. [http://ec.europa.eu/europe2020/pdf/cm012012\\_barroso\\_en.pdf](http://ec.europa.eu/europe2020/pdf/cm012012_barroso_en.pdf)
- Bateman, P., Lane, A., & Moon, R. (2012). An emerging typology for analysing OER initiatives. In Cambridge 2012: Innovation and Impact – Openly Collaborating to Enhance Education, a joint meeting of OER12 and OpenCourseWare Consortium Global 2012, 16-18 April 2012, Cambridge, UK. Retrieved from <http://oro.open.ac.uk/33243/1/>
- Beetham, H., Falconer, I., McGill, L., & Littlejohn, A. (2012). Open Practices: a briefing paper, JISC 2012. Retrieved from <https://files.pbworks.com/download/S4brBZB4DW/oersynth/58444186/Open%20Practices%20briefing%20paper.pdf>
- Brooks, G., & Burton, M. (2010). European Adult Learning Glossary, Level 1. Brussels: European Commission. Retrieved from [http://ec.europa.eu/education/more-information/doc/2010/adultglossary1\\_en.pdf](http://ec.europa.eu/education/more-information/doc/2010/adultglossary1_en.pdf)
- Bacsich, P., Phillips, B., and Bristow, S. F. (2011). Learner Use of Online Educational Resources for Learning (LUOER). Retrieved from <http://www.jisc.ac.uk/media/documents/programmes/elearning/oer/LUOERLfinalreport.docx>
- Barroso, J.M. (2012) ‘Growth and jobs: next steps’, Presentation to the informal European Council of 30 January 2012. Accessed June 16 2013. [http://ec.europa.eu/europe2020/pdf/cm012012\\_barroso\\_en.pdf](http://ec.europa.eu/europe2020/pdf/cm012012_barroso_en.pdf)
- Bateman, P., Lane, A., & Moon, R. (2012). An emerging typology for analysing OER initiatives. In Cambridge 2012: Innovation and Impact – Openly Collaborating to Enhance Education, a joint meeting of OER12 and Open Course Ware Consortium Global 2012, 16-18 April 2012, Cambridge, UK. Retrieved from <http://oro.open.ac.uk/33243/1/>
- Beetham, H., Falconer, I., McGill, L., & Littlejohn, A. (2012). Open Practices: a briefing paper, JISC 2012. Retrieved from <https://files.pbworks.com/download/S4brBZB4DW/oersynth/58444186/Open%20Practices%20briefing%20paper.pdf>
- Eskey, D., & Grabe, W. (1988). Interactive models for second language perspectives on instruction. In P. L. Carrell, J. Devine, & D. Eskey (Eds.), *Interactive approaches to second language reading* (pp. 223-238). Cambridge: Cambridge University Press.
- Grabe, W. (1991). Current developments in second language reading research. *TESOL Quarterly* 25 (3): 375-406.
- Lee, J. F. (2003). Background knowledge and L2 reading. *The Modern Language Journal*, 70, 350–354.
- Millrood, R. (2001). *Teacher development series: Modular course in English teaching methodology*. Cambridge University Press.
- Moss & Newton. (2002). An Examination of the Informational Text Genre in Basal Readers. *Reading Psychology*.



- Rashtchi, M. & Keyvanfar, A. (2007). *ELT: Quick'n'easy* (3rd Ed.). Tehran: Rahnama.
- Widdowson, H. G. (1979). *Explorations in applied linguistics*. Oxford: Oxford University Press.
- Xu, Y. (1999). The activation of phonology during silent Chinese word reading. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 25, 838–857.
- Seifoori, Z. (2024a), Postgraduate English students' reading comprehension and content retention across major: links to metacognitive strategy use. *International Journal of Language and Translation Research*, 4(1), pp. 57-75.
- Seifoori, Z. (2023). Undergraduate ESP students' reading comprehension and metacognitive awareness across discipline and gender, *Journal of Teaching English Language Studies*, 8(3), pp. 55-66.
- Seifoori, Z. (2024b). Iranian bilingual EFL learners' willingness to communicate across gender, *Journal of New Trends in English Language Learning (JNTELL)*, 3 (3), pp. 1-7.

