International Journal of Foreign Language Teaching and Research
ISSN: 2322-3898- http://jfl.iaun.ac.ir/journal/about

Please cite this paper as follows:
Kamali, M., Behjat, F., & Sadegh Bagheri M., (2021). The Effects of Three Forms of Reading-based Tasks on Iranian Intermediate and Advanced EFL Learners' Vocabulary Uptake. *International Journal of Foreign Language Teaching and Research, 9* (37), 99-117.
DOI: 10.52547/JFL.9.37.105

Research Paper

The Effects of Three Forms of Reading-based Tasks on Iranian Intermediate and Advanced EFL Learners' Vocabulary Uptake

Mojtaba Kamali[1], Fatemeh Behjat[2]*, Mohammad Sadegh Bagheri[3]

[1]Ph.D. Candidate, Department of English, Shiraz Branch, Islamic Azad University, Shiraz, Iran
mojkamali@yahoo.com
[2]Assistant Professor, Department of English, Abadeh Branch, Islamic Azad University, Abadeh, Iran
fb_304@yahoo.com
[3]Assistant Professor, Department of English, Shiraz Branch, Islamic Azad University, Shiraz, Iran
Bagheries@gmail.com

Received: November 07. 2020 **Accepted: March 13. 2021**

Abstract
The present study explored the effects of three forms of reading-based L2 vocabulary tasks on learning and retention of 40 target words by Iranian intermediate and advanced male English as a Foreign Language (EFL) learners. To this end, 176 EFL learners were randomly selected and assigned to three experimental and one control condition across two levels of intermediate and advanced proficiency levels. The participants in the experimental conditions read 8 texts including 40 target words and performed word-focused (WF) tasks, oral reproduction (OR) plus summary writing (SW) tasks, and WF plus OR vocabulary tasks incorporating target words according to their task designation. The results of two-way MANOVA and Scheffe's post-hoc test demonstrated that while all three experimental conditions significantly outperformed the control group in terms of learning and retention of target words, the WF plus OR task was found to be the most effective condition. The results are justified in light of Laufer and Hulstjin's (2001) Involvement Load Hypothesis, Nation and Webb's (2011) Technique Feature Analysis, the Skill Acquisition Theory, and Swain's (1985) Output Hypothesis. The study concluded with pedagogical implications for language teachers and materials developers with regard to including both word-focused and meaning-oriented L2 vocabulary tasks in language classes and language textbooks.

Keywords: *incidental vocabulary learning, involvement load hypothesis, oral reproduction, summary writing, vocabulary tasks*

بررسی تاثیر سه نوع کارتمرین مبتنی بر خواندن بر یادگیری واژگان زبان انگلیسی توسط زبان آموزان سطح متوسط و پیشرفته ایرانی

مطالعه حاضر به بررسی تاثیر سه نوع کارتمرین مبتنی بر خواندن بر یادگیری چهل واژه زبان انگلیسی توسط زبان آموزان پسر ایرانی سطح متوسط و پیشرفته می پردازد. بدین منظور، تعداد 176 زبان آموز به شیوه نمونه گیری تصادفی انتخاب شدند و سپس در سه گروه آزمایشی و یک گروه کنترل در دو سطح متوسط و پیشرفته قرار گرفتند. در مرحله بعدی مطالعه، زبان آموزان گروه های آزمایشی پس از خواندن هشت متن که حاوی چهل واژه جدید بودند یکی از سه کار تمرین واژه محور، بیان شفاهی متن و خلاصه نویسی متن با استفاده از واژگان هدف و کار تمرین واژه محور و بیان شفاهی متن با استفاده از واژگان هدف را انجام دادند. نتایج آزمون های واژگان با استفاده از روش آماری تحلیل واریانس چند متغیره موثر بودن هر سه نوع کارتمرین ذکر شده بر یادگیری کوتاه مدت و بلند مدت واژگان هدف را نسبت به گروه کنترل نشان دادند. همچنین، کار تمرین واژه محور و بیان شفاهی متن با استفاده از واژگان هدف موثرتر از دو نوع کارتمرین دیگر بود. یافته های مطالعه حاضر در چارچوب فرضیه های بار درگیری، تحلیل ویژگی های روش، تئوری فراگیری مهارت و فرضیه خروجی زبانی توجیه و بررسی شده اند. بر پایه یافته های این مطالعه، پیشنهادهایی در جهت بهبود روش های موجود تدریس واژگان زبان انگلیسی و نیز گنجاندن همزمان کارتمرین های واژه محور و معنی محور در تولید محتوای آموزشی زبان انگلیسی ارایه شده اند.

واژگان کلیدی: یادگیری تصادفی واژگان، فرضیه بار درگیری، بیان شفاهی، خلاصه نویسی، کارتمرین های واژگان

Introduction

Second language (L2) vocabulary knowledge is considered as an integral component of language competence by both language teachers and L2 vocabulary researchers. An important issue regarding L2 vocabulary acquisition is the fact that vocabulary learning is incremental in nature; that is, vocabulary learning is a life-long endeavor which necessitates both intentional and incidental learning (Henriksen ,1999). A point in case regarding L2 vocabulary learning is that while the majority of L1 vocabulary is acquired incidentally and naturally with relative ease and speed (Nagy, Anderson, & Herman, 1987; Nagy, Herman, & Anderson, 1985; Nagy & Herman, 1987; Sternberg, 1987), most L2 vocabulary has to be learned intentionally due to class time constraints and language teachers having to teach other language skills as well (Hu & Nassaji, 2012; Hulstijn & Laufer, 2001; Laufer, 2005; Nassaji, 2003, 2004; Nassaji & Hu, 2012; Schmidt, 2001). Consequently, it is desirable that some reading-based intentional as well as incidental vocabulary learning tasks be designed to enhance learners' L2 vocabulary knowledge in language classes.

L2 vocabulary development is an indispensable component of Task-based Language Teaching (TBLT) due to the fact that in order to carry out communicative tasks, L2 learners need to acquire a large vocabulary through different vocabulary-enhancing tasks. As Richards and Rodgers (2014) postulated, one of the linguistic assumptions of TBLT is that "lexical units are central in language used and language learning" (p. 179). Consequently, TBLT and strategies for vocabulary learning are considered as complementary. In the same vein, Skehan (1996b) commented:

Although much of language teaching has operated under the assumption that language is essentially structural, with vocabulary elements slotting in to fill structural patterns, many linguists and psycholinguists have argued that native language speech processing is very frequently lexical in nature (pp. 21-22).

The problem of finding and employing effective vocabulary learning tasks seems to be graver in the Iranian educational context due to a variety of reasons. First, since the English education system in Iran prioritizes grammar over other aspects of language proficiency, the vocabulary learning tasks have been marginalized and considered as less important than grammatical accuracy. As Ghorbani (2009) indicated, highly standardized tests in Iran force language teachers and learners to focus on structural features of English because these are the needed features to pass English exams. Second, as English is a foreign language in Iran, there is very little exposure to English vocabulary outside the English language classes. Third, since almost all language teachers in Iranian schools teach English textbooks in students' first language, that is, Farsi, students do not see any point in boosting their L2 vocabulary knowledge beyond the requirements of their schools' curriculum.

As a result of the above discussion, it seems that there is a need for supporting L2 learners to boost their L2 word knowledge through a variety of vocabulary leaning tasks so that they can integrate their L2 vocabulary knowledge into other language skills which reflects the real-world uses of language.

Literature Review

Incidental and Intentional L2 Vocabulary Learning

A distinction has been made in L2 vocabulary acquisition research regarding how L2 vocabulary is learned, namely intentional and incidental learning (Hulstijn, 2001). Incidental vocabulary learning refers to the process of learning L2 words as a by-product of reading or listening for meaning or doing grammar tasks while learners' primary goal is not learning new words. In other words, incidental word learning refers to the acquisition of a word or expression

without a conscious intention to commit the element to memory, such as picking up an unknown word from listening to someone else using it or from reading it in a text (Hulstijn, 2013).

Some argue that the incidental learning of vocabulary while reading is the most beneficial and effective way to learn vocabulary (Krashen, 2003). This is also referred to as *the Default Hypothesis* which posits that most L2 words are learned from input, particularly reading input, rather than by decontextualized learning of words since the number of words to be learned is too vast to be accounted for by instruction (Nagy, Herman, & Anderson, 1985; Sternberg, 1987). Consequently, extensive reading in L2 was proposed as a vocabulary-enhancing activity for developing L2 learners' lexical competence. Extensive reading involves learners reading numerous self-selected texts, primarily for personal enjoyment rather than for language learning purposes (Al-Homoud & Schmitt, 2009). The argument in favor of extensive reading for L2 vocabulary acquisition is that the task of learning a large number of words is beyond the scope of L2 classrooms.

On the other hand, intentional vocabulary learning fits well with form-focused instruction, which involves varying degrees of attention to language items. In Focus on Form (FonF), the attention to language items, in this case vocabulary, is brief, and it may occur through pedagogical techniques such as input enhancement or corrective feedback. In contrast, Focus on Forms (FonFs) involves primary attention to language items along with intentional types of learning.

Focus on Forms, Focus on Form, and L2 Vocabulary Acquisition

FonFs approach to L2 acquisition rests on the assumption that L2 acquisition resembles the acquisition of other cognitive skills (Bley-Vroman, 1988). In this approach, discrete linguistic items are taught explicitly in non-communicative contexts with opportunities for practicing these items. In addition, in FonFs instructional approach, students view themselves as learners of the language and the language as the object of study (Ellis, 2001). In addition, FonFs is justified in terms of Skill Acquisition Theory which distinguishes three stages of learning a new skill or language: declarative or factual knowledge; procedural knowledge responsible for knowing what is to be done with language data; and automatization of procedural knowledge, that is, using language according to rules without thinking about them (Anderson, 1982; De Keyser, 1998). For declarative knowledge to transfer into procedural knowledge, the target linguistic items should be intensively practiced. De Keyser defines *practice* as "specific activities in the second language, engaged in systematically, deliberately, with the goal of developing knowledge of and skills in the second language" (p. 1). As a result, when target linguistic items are presented to learners, they should be practiced and used systematically and frequent opportunities should be provided for learners to produce the target linguistic items.

Long (1991) defined FonF as "drawing students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication" (pp. 45-46). The term *form* refers to the function that a particular form performs. In addition, in FonF approach, learners view themselves as language users and the language as a tool for communication (Ellis, 2001). FonF approach to L2 instruction is an essential component of TBLT which requires a communicative task environment. FonF approach rests on the assumption that although comprehensible input is essential for L2 acquisition, it is insufficient for acquiring much of L2 grammar. This clearly contradicts Krashen's (1985) Input Hypothesis which posits that in order for second language acquisition to take place, learners should be provided with *i*+1 input, that is, input which is slightly beyond their current level of language competence.

FonF is, thus, an attempt to draw learners' attention to linguistic forms briefly during the course of a meaning-based communicative activity in which the primary focus is on meaning rather than on form. According to Schmidt (1990, 1994), learners should consciously notice the

forms and the functions that those forms realize in the input to convert input into intake for L2 acquisition. Furthermore, since learners have a limited processing capacity for simultaneously attending to both form and function during the course of a communicative task, they will naturally prioritize meaning over form (Van Patten, 1990). Consequently, their attention should be briefly drawn to form during communicative task performance. Moreover, Swain's (1985, Swain & Lapkin, 1995) Output Hypothesis constitutes another theoretical underpinning of FonF approach. According to the Output Hypothesis, when learners are pushed to produce comprehensible output, they notice linguistic elements in the L2 as they are forced into a more bottom-up, syntactic processing which is conducive to L2 acquisition. As Laufer (2005) maintained, "input, particularly reading input, alone is unlikely to be the best source of second language vocabulary acquisition. Notwithstanding the value of comprehensible input, vocabulary instruction should incorporate a FonF component" (p. 228).

A respectable body of research has been conducted to examine the effects of FonFs (word-focused) and FonF (meaning-oriented) instructional tasks on L2 vocabulary development (Hill & Laufer, 2003; Kamali, 2020; Kamali, Behjat & Bagheri, 2020; Laufer, 2003; Laufer & Girsai, 2008; Laufer, 2006; Laufer & Rozovski-Roitblat , 2011; Laufer & Rozovski-Roitblat ,2015; Paribakht & Wesche, 1997; Peters, 2007; Peters, 2012; Rosszell, 2003; Rassaei, 2015; Sonbul & Schmitt, 2010; Shintani, 2013). Although these studies did not specifically focus on examining L2 vocabulary acquisition through FonFs vocabulary instruction, they included a word-focused, non-communicative condition in which learners studied the target words in isolation.

In a pioneering study, Hill and Laufer (2003) compared L2 vocabulary learning through FonF, operationalized as an on-screen text with an electronic dictionary, and through FonFs, operationalized as selecting the meanings of target words for 4 synonyms or paraphrase options for each word. In the FonF condition, learners were required to answer comprehension questions which required the knowledge of target words. However, learners in the FonFs condition did not have to answer comprehension questions. Time-on-task was identical in both conditions. Unexpected immediate and delayed post-tests suggested the superiority of FonFs condition on both immediate and delayed post-tests by %24 and %12.2 respectively.

In the same vein, Laufer (2006) compared the effects of comprehension-based FonF and production-based FonFs on the acquisition of twelve English words by 158 high school learners of English as L2. In the first stage of her study, learners in the FonF condition read a text including the target words, discussed it in small groups, and answered comprehension questions. Learners in the FonFs condition, however, studied the target words as discrete items along with their meanings and examples of their usage. In the second stage of the study, learners of both instructional conditions received the target words with their meanings and studied them for 15 minutes for a test. As a result, the first stage of her study represented FonF instructional approach whereas the second stage represented the FonFs approach to L2 vocabulary instruction. Learners were post-tested immediately and after two weeks to measure the acquisition of target words. The results indicated that FonFs condition outperformed the FonF condition. Laufer justified the findings in view of the fact that in the FonFs condition, the target words were decontextualized and became the object of study rather than tools for communication.

Contradictory results were found by Peters (2007) who found no significant difference between incidental and intentional learning on L2 vocabulary retention. In her study, learners read a text and looked up unknown words in an electronic dictionary and answered comprehension questions. One group was forewarned of an upcoming vocabulary test while the other one was not. Results of a series of vocabulary measures indicated that the two conditions were not significantly different in terms of the number of target words they remembered.

Laufer and Girsai (2008) compared word and collocation learning from FonFs, operationalized as practicing the target lexical items through translation and pointing out the differences between learners' L1 and L2, and FonF, operationalized as performing a meaning-oriented activity including the target lexical items. Results of passive and active vocabulary knowledge measures indicated that the FonFs (translation condition) outperformed the FonF condition. Based on their findings, Laufer and Girsai suggested that words with high learning burden, such as collocations, be instructed through FonFs techniques.

Peters (2012) compared the effectiveness of two reading-based vocabulary enhancement activities on immediate and delayed word retention as measured by a recall and a recognition test while controlling for time-on-task. The tasks included a message-oriented text comprehension and a vocabulary-oriented text comprehension. All learners were required to read a text containing 14 target words and use them in either the 'message-oriented' or the 'vocabulary-oriented' task. The 'vocabulary-oriented' task consisted of two different activities in which the 14 target words appeared once. In the first vocabulary task, learners were asked to translate the target words into their L1, Dutch, in sentences taken from the text. In the second task, a multiple-choice activity, learners were required to select the correct L2 meaning of the target words. The 'message-oriented' task required participants to read a text and answer ten comprehension questions which stipulated the knowledge and inclusion of the target words in the answers. Results indicated that both conditions yielded vocabulary gains, but the 'vocabulary-oriented' condition (FonFs) led to higher word retention than the 'message-oriented' (FonF) one in the immediate as well as in the delayed post-tests.

The effects of FonFs and FonF pedagogical approaches to L2 vocabulary instruction on L2 word learning were investigated by Shintani(2013). She investigated learning a set of nouns and adjectives by L2 complete beginner learners through FonFs, operationalized as *present-practice-produce*, and FonF, operationalized through *task-based teaching*, and also through analyzing the process features involved in each condition. The results of her study indicated that while the FonFs group only demonstrated significant productive knowledge of target nouns on both immediate and delayed post-tests, the FonF group developed productive knowledge of both target nouns and adjectives. Shintani attributed the superiority of FonF on FonFs instruction to student-initiated production as a result of teacher's contextualized input in her study. However, since learners in her study were complete beginners, FonF was operationalized as comprehension-based rather than production-based tasks.

As the above literature suggests, both pedagogical task types of word-focused and meaning-oriented tasks have beneficial effects on learning and retention of target words. Furthermore, there is ample evidence that word-focused vocabulary tasks yield significantly higher vocabulary learning gains than meaning-oriented vocabulary tasks. However, it can be reasonably argued that most of these studies examined the effects of the two approaches on L2 vocabulary acquisition separately. In other words, in most studies, participants undertook either word-focused or meaning-oriented communicative tasks according to their group designation and the effects of the two task types in tandem have not been examined yet. Moreover, the possible impact of learners' level of language proficiency on task effectiveness is under-researched. Consequently, the current study seeks to shed further light on the effects of a pure word-focused task, a meaning-oriented task, and a sequence of word-focused and meaning-oriented L2 vocabulary tasks on L2 word learning and the possible mediating effect of learners' level of language proficiency on task effectiveness. To this end, the following research questions were formulated for the present study:

1.To what extent does a post-reading word-focused (WF) task including stipulated words enhance EFL learners' vocabulary acquisition?

2.To what extent does a post-reading oral reproduction (OR) plus summary writing (SW) task including stipulated words enhance EFL learners' vocabulary acquisition?

3.To what extent does a post-reading word-focused task plus OR including stipulated words enhance EFL learners' vocabulary acquisition?

4.Which of the three reading-based instructional conditions is the most effective task for enhancing intermediate and advanced EFL learners' L2 vocabulary development?

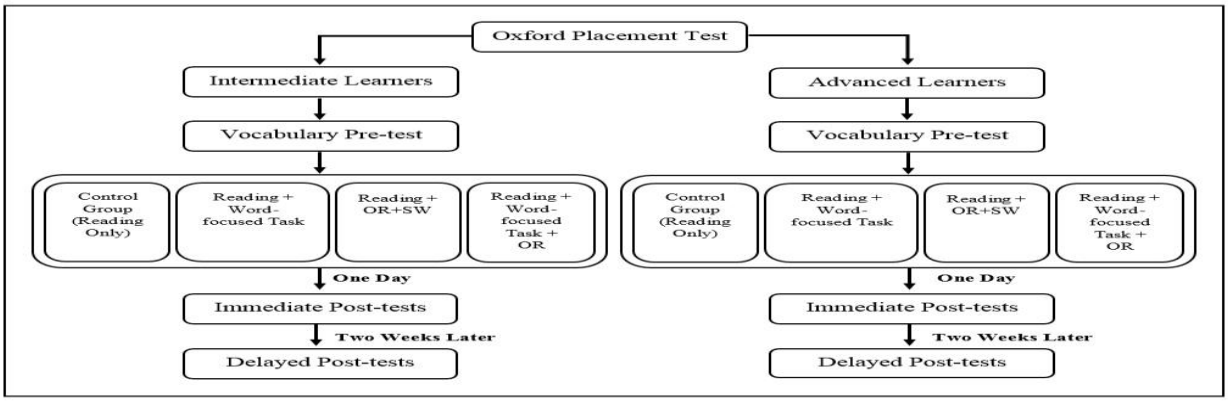
Method

Design

This study employed a 3×2 (three task types × two proficiency levels) pre-test, post-test, delayed post-test experimental design with participants being randomly selected and assigned into three different experimental conditions and one control group across two levels of intermediate and advanced language proficiency. In the beginning of the study, Oxford Placement Test (OPT) (2001) was administered to all participants to determine their proficiency levels and to place them into intermediate and advanced levels. Next, a vocabulary pre-test was administered to EFL learners to ensure that the target words were unfamiliar to all learners prior to the treatment sessions. Following participants' consent to participate in the study,176 participants were, then, randomly assigned to three experimental conditions and one control group across the two proficiency levels so that there were 22 participants in each group. Having received their treatments during eight sessions, all the participants took a multiple-choice active recognition (MCAR) and a cued response active recall (CRAR) delayed post-test one day after the last treatment session and two weeks later. Figure 3.1 displays the design of the study.

Figure 3.1

Design of the Study



Participants

A total of 176 Iranian male EFL learners participated in this study, 88 of whom were intermediate and 88 were advanced learners. Participants' ages ranged between 16 and 18 years, and they all came from the same sociocultural background. All the participants spoke Farsi as their first language and had studied English at Iran Language Institute for at least 4 years. The learners were drawn from 8 EFL classrooms who attended the general English course twice a week for two hours each session. It should be noted that the treatment sessions and data collection procedures were carried out during November and December 2019, that is, before the outbreak of the pandemic when English language institutes held their regular classes in the presence of language teachers and EFL learners.

Target Words and Reading Materials

The target words of this study were 40 words which were selected based on the following criteria. First, a list of 50 target words was presented to all participants asking them to provide the L1 translation or the L2 synonym for each word. The analysis of participants' answer sheets indicated that 40 words were totally unknown to the participants. Second, a 40-item multiple-choice vocabulary pre-test was given to participants the results of which suggested that participants had no knowledge of the selected words. The materials used in this study included a total of 16 expository passages, that is, 8 passages for intermediate and 8 passages for advanced EFL learners, taken from *The ILI English Series*: *Advanced 1 and 2 student's book* and *Intermediate 1 Students' Book* (Iran Language Institute, 2006). In each reading passage, 5 target words, the knowledge of which was essential to the comprehension of the main ideas of the passage, were carefully identified and typed in boldface followed by their L1 translations in parentheses.

Instruments

Two types of tests were developed and used for this study. The first test was a 40-item multiple-choice active recognition (MCAR) vocabulary test which aimed at measuring participants' receptive target words knowledge, and the second one was a 40-item cued response active recall (CRAR) vocabulary test intended to measure participants' productive target words knowledge. The reliability indices of the two vocabulary measures were calculated after they were administered to 40 learners across intermediate and advanced proficiency levels who were similar to the participants of the study. The reliability indices of MCAR and CRAR tests were calculated using Cronbach's alpha method, indicating 0.90 and 0.85 reliability respectively. In addition, the two tests' content validity was checked and confirmed by three experienced language teachers who had taught the course for 20 years and based on feedback from these experts, no changes were made to tests' items.

Operationalization and Procedures

For the purpose of this study, word-focused approach to L2 vocabulary instruction was operationalized as explicit instruction of the target words encountered in reading passages followed by performing two non-communicative, word-focused (WF) tasks of matching the words with their definitions and filling in sentence blanks, in which participants needed to use each target word twice in post-reading vocabulary tasks. Furthermore, meaning-oriented approach was operationalized as two types of reading-based output tasks: oral reproduction of the reading passage and summary writing of the passage incorporating target words. Thus, it was made sure that all participants met each target word only three times; once in the reading passages and twice in their post-reading tasks.

WF Condition. Participants in the first experimental condition read a passage for 20 minutes during each treatment session in which the 5 target words were typed in boldface. The teacher taught the reading, provided explanations and paraphrased the sentences which included the target words in English. Following the reading stage, participants performed two word-focused tasks: a matching task which asked participants to match each target word with its definition or synonym, and a fill-in-the-blank task in which the target words were provided in a word bank. As a result, each target word was met only three times. The reading materials were collected at the end of each treatment session. The researcher closely monitored the participants to ensure that not only words meanings were not negotiated but also no dictionary was used by participants.

OR+SW Condition. In the second experimental condition, participants read a passage for 20 minutes during each treatment session in which the 5 target words were typed in boldface

followed by their L1 translations in parentheses. In the beginning of the first treatment session, the researcher instructed the participants regarding how to prepare their summaries and orally reproduce the reading passage and modelled the required performance, using a text similar to the study's reading materials, incorporating 5 hypothetical target words. Next, participants received a reading passage to read and present their oral summaries incorporating the 5 target words only once privately to their teacher in the absence of the text.

Following the oral reproduction task (OR), participants were required to provide a written summary of the content of the passage incorporating the stipulated target words only once in 150 to 250 words. The analysis of participants' written summaries confirmed that each target lexical item was used only once. Consequently, each target word was encountered only three times. Since Hulstijn and Laufer (2001) recommended that the time needed to complete a vocabulary task be considered as an inherent property of the task, no time limit was set for task performance and participants were given enough time to present their oral summaries and complete their summary writing (SW) task. During the performance of both oral reproduction and summary writing vocabulary tasks, participants were neither allowed to negotiate words meanings with their peers nor use a dictionary while reading the passage.

WF+OR Condition. Similar to the first two experimental conditions, participants in the third experimental condition read a reading passage in which the 5 target lexical items were typed in boldface followed by their L1 translations for 20 minutes during each treatment session. In the first stage of the treatment, participants performed a matching vocabulary task in which they were required to match each target word with its L2 definition or synonym. In the second post-reading stage which immediately followed the first stage, participants were required to orally reproduce the content of each text incorporating the 5 target words only once privately to their teacher in the absence of the text. Consequently, each target word was encountered only three times; once in the text, once in the matching vocabulary task, and once used in participants' oral reproduction.

Reading Only (RO). Participants in the RO condition also read the same passages as the three experimental conditions during their routine class hours which included the 5 target words typed in boldface with their L1 translations in parentheses. As a routine teaching procedure, their language teacher taught the reading passage and explained the sentences and new words in learners' L1 and L2. Following the reading stage, participants answered two types of reading-based comprehension questions in which the 5 target words were used only once in each item. The questions included multiple-choice reading comprehension questions and true/false items on the content of the passage. Therefore, similar to the three experimental conditions, the RO condition encountered each target lexical item three times; once in the passage, and twice in the post-reading comprehension check items. These procedures were the same for both intermediate and advanced participants in the three experimental conditions and the RO groups. At the end of the last treatment session, all participants were exposed to 40 target lexical items during the eight-week study.

Data Analysis

The collected data were submitted to SPSS 24 for statistical analyses. The first set of data which were collected was intermediate and advanced participants' scores on the MCAR vocabulary pre-tests. First, one-way ANOVAs were conducted on participants' pre-test scores to ensure that there were no statistically significant differences among the groups before the experiment. Second, since two scores were obtained for each participant on each post-test, a two-way between groups multivariate analysis of variance (MANOVA) was conducted on intermediate and advanced learners' scores on MCAR and CRAR immediate and delayed post-tests to see if there were statistically significant differences among the groups following the

treatment sessions in terms of target vocabulary learning and retention. To further investigate where the differences between the groups existed, Scheffe's post-hoc test was run.

Results

Descriptive Statistics

Tables 1 and 2 present descriptive statistics for intermediate and advanced learners' scores on MCAR and CRAR immediate and delayed vocabulary post-tests.

Table 1

Descriptive Statistics for Learners' Scores on MCAR Tests

		Immediate post-test			Delayed post-test	
	Task type	*n*	*M*	*SD*	*M*	*SD*
Intermediate learners	WF	22	36	1.6	32	2.5
	OR+SW	22	34	2.1	32	3.1
	WF+OR	22	38	1.5	32	2.5
	RO	22	20	2.4	15	1.8
Advanced learners	WF	22	34	2.5	28	2.8
	OR+SW	22	32	2.6	30	2.8
	WF+OR	22	36	2.5	32	2.5
	RO	22	20	2.5	15	1.8

As Table 1 displays, mean differences are observed among different experimental and control conditions across both intermediate and advanced learners' scores on MCAR immediate and delayed vocabulary post-tests.

Table 2

Descriptive Statistics for Learners' Scores on CRAR Tests

		Immediate post-test			Delayed post-test	
	Task type	*n*	*M*	*SD*	*M*	*SD*
Intermediate learners	WF	22	34	1.5	28	3.1
	OR+SW	22	32	2.5	28	3.1
	WF+OR	22	36	2.1	30	1.6
	RO	22	15	2.2	10	1.8
Advanced learners	WF	22	32	2.3	24	2.5
	OR+SW	22	30	2.6	28	2.8
	WF+OR	22	34	2.4	30	2.6
	RO	22	14.8	2.1	10	1.8

Table 2 presents intermediate and advanced learners' mean scores on CRAR immediate and delayed vocabulary post-tests.

As we observed differences in mean scores among the four groups on immediate and delayed vocabulary post-tests, we conducted a two-way multivariate analysis of variance (MANOVA) to investigate if mean differences were statistically significant and to examine the main effect of each of the study's independent variables, that is, the three task types and learners' level of language proficiency on learning and retention of receptive and productive knowledge of target words in addition to the interaction effect of task type and proficiency on L2 word learning.

Inferential Statistics

First, preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violations noted. Second, a two-way MANOVA was run on participants' scores on MCAR and CRAR vocabulary post-tests. Table 3 presents the results of multivariate and univariate analysis of variance for learners' scores on MCAR vocabulary post-tests.

Table 3

Multivariate and Univariate Analysis of Variance for Intermediate and Advanced Learners' Scores on MCAR Post-tests

				Univariate					
	Multivariate			Immediate post-test			Delayed post-test		
Source	*F*	*p*	Partial η^2	*F*	*p*	Partial η^2	*F*	*p*	Partial η^2
Condition (C)	91.141	.000	.669	500.100	.000	.89	487.081	.000	.89
Proficiency (P)	9.044	.000	.180	18.632	.000	.10	28.300	.000	.14
C×P	2.998	.000	.067	2.333	.076	.04	4.880	.003	.08

As Table 3 indicates, there was a statistically significant effect for condition on the combined dependent variables of MCAR immediate and delayed post-tests, $F_{(12,436)} = 91.141$, $p < 0.05$, Wilk's Lambda = .036; partial eta squared = .669. With regard to the effect of task type on MCAR immediate post-test, there was a statistically significant effect, F (3,168) = 500.1, $p < 0.05$; partial eta squared = .89, while the effect of task type on MCAR delayed post-test also reached statistical significance, $F_{(3,168)} = 487.081$, $p < 0.05$; partial eta squared = .89.

In addition, there was a statistically significant effect of proficiency on the combined dependent variables, $F_{(1,168)} = 9.044$, $p < 0.05$; partial eta squared = .18. When the results for immediate and delayed MCAR post-tests were considered separately, a statistically significant effect was observed on the immediate post-test, $F_{(1,168)} = 18.632$, $p < 0.05$; partial eta squared = .10, and on the delayed post-test, $F_{(1,168)} = 28.300$, $p < 0.05$; partial eta squared = .14.

Furthermore, the interaction effect between task type and proficiency was statistically significant on the combined dependent variables, $F_{(3,168)} = 2.998$, $p < 0.053$. However, according to Cohen's (1988) guidelines, the effect size was small (partial eta squared = .06).

Moreover, the interaction effect between task type and proficiency reached statistical significance on MCAR delayed post-test, $F_{(3,168)} = 4.880$, $p < 0.05$, while it did not reach

statistical significance on MCAR immediate post-test, $F_{(3,168)} = 2.333$, $p > 0.05$. Table 4 presents the results of multivariate and univariate analysis of variance for learners' scores on CRAR vocabulary post-tests.

Table 4
Multivariate and Univariate Analysis of Variance for Intermediate and Advanced Learners' Scores on CRAR Post-tests

				Univariate					
	Multivariate			Immediate post-test			Delayed post-test		
Source	*F*	*p*	Partial η^2	*F*	*p*	Partial η^2	*F*	*p*	Partial η^2
Condition (C)	91.141	.000	.669	720.582	.000	.92	571.431	.000	.91
Proficiency (P)	9.044	.000	.180	20.121	.000	.10	6.969	.009	.04
C×P	2.998	.000	.067	1.856	.139	.03	6.762	.000	.10

As Table 4 presents, there was a statistically significant effect for task type on CRAR immediate post-test, $F_{(3,168)} = 720.582$, $p < 0.05$; partial eta squared = .92, and delayed post-test, $F_{(3,168)} = 571.431$, partial eta squared = .91. When the results for the main effect of proficiency on CRAR immediate and delayed post-tests were considered separately, a statistically significant effect was observed on the immediate post-test, $F_{(1,168)} = 20.121$, $p < 0.05$; partial eta squared = .10, and on the delayed post-test, $F_{(1,168)} = 6.969$, $p < 0.05$; partial eta squared = .04.

Moreover, the interaction effect between task type and proficiency was only significant on CRAR delayed post-test, $F_{(3,168)} = 6.762$, $p < 0.05$; partial eta squared = .10, with a non-significant effect on the immediate post-test, $F_{(3,168)} = 1.856$, $p > 0.05$; partial eta squared = .10.

Table 5
The Results of Scheffe's Post-hoc Test for Learners' Scores on MCAR Post-tests

	Task types		Mean differences(I-J)	*p*	Partial η^2
Immediate post-test	WF	RO	14.95*	.000	0.89
	OR+SW	RO	12.95*	.000	
	WF+OR	RO	16.95*	.000	
	WF	OR+SW	2.00*	.001	
	WF+OR	OR+SW	4.00*	.000	
	WF+OR	WF	2.00*	.001	
Delayed post-test	WF	RO	14.98*	.000	0.89
	OR+SW	RO	15.98*	.000	
	WF+OR	RO	17.98*	.000	

	WF	OR+SW	1.00	.314
	WF+OR	OR+SW	2.00*	.003
	WF+OR	WF	3.00*	.000

Note: *$p < 0.05$

As Table 5 displays, Scheffe's post-hoc comparison suggested that the mean differences for WF, OR+SW, and WF+OR conditions on MCAR vocabulary post-tests were significantly different from the RO group and all the three experimental conditions outperformed the control group regarding learning and retention of target words. In addition, the WF+OR condition significantly outperformed the WF condition followed by the OR+SW condition on the immediate MCAR post-test. However, the mean difference between WF and OR+SW conditions on the delayed post-test did not reach statistical significance.

Table 6 presents the results of Scheffe's post-hoc comparisons for participants' scores on CRAR vocabulary post-test. As the results indicate, the mean differences for WF, OR+SW, and WF+OR conditions and the RO group on CRAR immediate and delayed vocabulary post-tests were statistically significant. In other words, all the three experimental conditions significantly outperformed the RO condition with regard to learning and retention of target words. Moreover, the WF+OR condition outperformed both WF and OR+SW instructional conditions, while the WF condition was found to be more effective than the OR+SW condition regarding learning the productive knowledge of target words. In addition, retention of target words was highest in the WF+OR condition followed by OR+SW. The WF condition was the least effective condition compared to the other two task types in terms of retention of productive knowledge of target words.

Table 6

The Results of Scheffe's Post-hoc Test for Learners' Scores on CRAR Post-tests

	Task types		Mean differences(I-J)	*p*	Partial η^2
Immediate post-test	WF	RO	18.07*	.000	0.92
	OR+SW	RO	16.07*	.000	
	WF+OR	RO	20.07*	.000	
	WF	OR+SW	2.00*	.001	
	WF+OR	OR+SW	4.00*	.000	
	WF+OR	WF	2.00*	.001	
Delayed post-test	WF	RO	16.02*	.000	0.91
	OR+SW	RO	18.02*	.000	
	WF+OR	RO	20.02*	.000	
	WF	OR+SW	2.00*	.004	
	WF+OR	OR+SW	2.00*	.004	
	WF+OR	WF	4.00*	.000	

Note: *p <0.05

Discussion

The purpose of this study was to investigate the effects of three forms of meaning-oriented L2 vocabulary tasks namely word-focused (WF) tasks, oral reproduction (OR)+ summary writing (SW) tasks, and WF+OR vocabulary tasks incorporating target words on learning and retention of 40 target lexical items by intermediate and advanced male EFL learners and the possible mediating effect of language proficiency on task effectiveness.

The first research question posed in this study asked to what extent a post-reading word-focused task including stipulated words enhances EFL learners' acquisition of target words. The results of two-way MANOVA along with Scheffe's pairwise comparisons indicated that post-reading WF activities which represented task-related word-focused activity significantly outperformed the RO condition on both MCAR and CRAR vocabulary post-tests. In other words, the WF condition substantially promoted intermediate and advanced EFL learners' learning and retention of receptive and productive knowledge of target words. This finding is in line with the findings of Kamali (2020), Laufer (2003), Laufer (2006), Laufer and Girsai (2008),Laufer and Rozovski (2011), Laufer and Rozovski (2015), Min (2008), and Paribakht and Wesche (1997) who also found that word-focused tasks facilitated L2 vocabulary acquisition. Theoretically, the effectiveness and advantage of post-reading word-focused vocabulary tasks can be justified in terms of Schmidt's (2001) *Noticing Hypothesis*, Baddeley's (1990) *elaboration*, and Laufer and Hulstjin's (2001) *Involvement Load Hypothesis*. According to Schmidt's *Noticing Hypothesis*, learning will not take place unless the learner pays conscious attention to the input and notices a gap between what he/she already knows and what he/she does not know. Furthermore, as noted by Laufer and Rozovski (2015), "*elaboration* is associated with increased engagement with the meaning and form of the words, which in turn, facilitates retention" (p. 21). In addition, it seems that word-focused tasks in this study probably induced high degrees of *involvement*, that is, the required motivation and deep cognitive processing for learning the target words. Moreover, according to Nation and Webb's (2011) *Technique Feature Analysis* framework, which was proposed to operationalize the concept of *depth of processing*, the word-focused tasks in this study raised learners' awareness of new vocabulary learning and learners knew that there was a clear vocabulary learning goal in performing the tasks which also required retrieval of the target words by the learners.

The second research question of this study asked to what extent a post-reading OR+SW task including stipulated words enhances EFL learners' acquisition target words. The results of two-way MANOVA along with Scheffe's post-hoc test demonstrated that OR+SW condition significantly outperformed the RO group regarding learning and retention of target words. This finding is in line with the findings of previous studies (de la Fuente, 2002; Ellis & He, 1999; Kamali, Behjat, & Bagheri, 2020; Knight, 1994; Laufer, 2000; Luppescu & Day, 1993; Shintani, 2013) which also provided further evidence for the efficacy of meaning-oriented tasks in L2 vocabulary development. As Laufer (2010) maintained, "there is ample evidence that FonF is beneficial to learning new words from written and oral language and can be manipulated through task relevance and task type" (p. 20). The superiority of the OR+SW vocabulary tasks in this study over the RO can be justified with reference to the predictions of Swain's (1985) *Output Hypothesis* and Laufer and Hulstjin's (2001) *Involvement Load Hypothesis*. Since learners in the OR+SW condition used the stipulated target words in their oral and written production, they were probably engaged in deeper cognitive processing of target vocabulary since they had to produce comprehensible output and to move from top-down to bottom-up processing of the target language. Additionally, it can be speculated that a further factor which might have supported target vocabulary learning and retention in the OR+SW condition was the vocal production of target words during the performance of the OR task. The positive effect of vocal production of target words on L2 vocabulary development was confirmed by Icht and Mama (2019). The vocal

production of target words might have formed a phonological representation of new L2 words in learners' memory which probably supported the acquisition of the target words.

Another possible explanation for the advantage of the OR+SW condition over the RO group in this study concerns the fact that learners in the meaning-oriented condition of OR+SW used the target words with already known words in their oral and written production to produce novel sentences. This creative use of target words probably contributed to and promoted L2 vocabulary acquisition. Corroborating this finding, Rassaei (2015) also found that L2 vocabulary tasks which entail creative processes such as predicting promote L2 vocabulary acquisition on account of the fact that they require learners to evaluate the suitability of target words in new learner-generated contexts. In addition, this finding can be also justified in light of the predictions of the *Involvement Load Hypothesis* which postulates that vocabulary tasks which induce higher degrees of cognitive processing in terms of the three components of *need*, *search*, and *evaluation* result in higher degrees of learning and retention of target words.

The third research question in the present study asked to what extent a post-reading word-focused + OR task including stipulated words enhances EFL learners' vocabulary acquisition. The results of two-way MANOVA and Scheffe's post-hoc comparisons demonstrated that the WF+OR condition significantly outperformed the RO condition on both immediate and delayed MCAR and CRAR vocabulary post-tests across both proficiency levels. This finding can be examined from several perspectives. First, having encountered the target words in a meaningful context, participants first matched the target words their definitions or synonyms in a word-focused task which explicitly directed their attention to target words' meanings. This, according to the *Technique Feature Analysis* revealed to the learners that there is a clear vocabulary learning goal. As Schmitt (2008) maintains, "at the beginning, establishing the meaning-form link is essential, and intentional learning is best for this" (p. 353). In addition, the matching task required receptive retrieval of target words and avoided interference with other semantically related target lexical items. Second, having explicitly noticed the target words and established the initial form-meaning link, participants were given the opportunity to use the target words in the meaning-oriented stage of the treatment in the form of OR of the content of the passage in which they had to use the stipulated words in a meaningful context. The OR task, thus, acted as the last *p* in "ppp", that is, a three-stage lesson involving the presentation of a linguistic structure, in which the target grammatical or lexical structure is first presented, then practiced in controlled exercises, and finally produced freely. Put differently, the first stage of WF+OR condition represented the "presentation" and "practice" components of the "ppp" teaching technique while the second stage represented the "production" component. Third, as mentioned earlier, when learners are pushed to produce comprehensible output (Swain, 1985), or in Swain's terms, *pushed output*, they are encouraged to move from semantic (bottom-up) to syntactic (top-down) processing. This *pushed output* encourages *noticing* and rehearsal of target words in a meaningful context which furthers acquisition.

The last research question posed in this study asked which of the three reading-based instructional conditions is the most effective task for enhancing intermediate and advanced EFL learners' L2 vocabulary development. With regard to the initial learning of target words, the results of two-way MANOVA and Scheffe's post-hoc test indicated that the WF+OR instructional condition outperformed both WF and OR+SW conditions for both intermediate and advanced EFL learners on receptive and productive measures of target words knowledge followed by the WF and the OR+SW conditions. Regarding retention of target words as measured by the MCAR and the CRAR tests, which aimed at measuring receptive and productive aspects of target words knowledge, WF+OR condition retained more target words than the WF and OR+SW conditions. In other words, participants in the WF+OR condition recognized and

produced more target words than their WF and OR+SW counterparts regardless of their proficiency levels. In contrast, the analysis of Scheffe's post-hoc test suggested that the WF and the OR+SW conditions resulted in equal target vocabulary retention among intermediate learners and both instructional conditions were equally effective for enhancing L2 vocabulary acquisition. The advanced learners, however, benefited more from OR+SW than from WF instruction in terms of retention of target words.

Based on the findings of the present study, it can be argued that both word-focused and meaning-oriented pedagogical approaches effectively lend themselves to teaching new L2 target words to intermediate EFL learners whereas meaning-oriented approach, operationalized as output tasks of OR+SW incorporating target words which require learners to use the target words in their free production, may be more conducive to L2 vocabulary acquisition by advanced EFL learners. This can be justified in terms of *Skill Acquisition Theory* which distinguishes three stages of learning a new skill or language: declarative or factual knowledge, procedural knowledge responsible for knowing what is to be done with language data, and automatization of procedural knowledge, that is, using language according to rules without thinking about them (Anderson, 1982; De Keyser, 1998). Since intermediate learners can be said to have departed from declarative knowledge stage and moved toward procedural knowledge of the target language, and yet have not reached automatization of the procedural knowledge, they most probably benefited from the explicit instruction of target words by their teacher along with performing word-focused tasks more than advanced learners.

Conclusion

Several major conclusions can be drawn from the results of the current study. First, as the results suggested, both word-focused and meaning-oriented pedagogical approaches to L2 vocabulary acquisition were effective in terms of initial learning and long-term retention of target words. While the word-focused vocabulary tasks catered to explicit instruction of target words through focusing learners' attention to and noticing the target words which, in turn, facilitated L2 vocabulary acquisition, the meaning-oriented tasks catered to incidental attention to target words during the performance of communicative tasks of OR and SW incorporating target words. Second, the WF+OR condition in which the target words were first explicitly presented and practiced and then freely produced in learner-generated output stood the highest chance of learning and retention compared to both word-focused and meaning-oriented conditions regardless of participants' levels of language proficiency. Third, while both pedagogical approaches of word-focused and meaning-oriented to L2 vocabulary development significantly enhanced intermediate and advanced EFL learners' vocabulary learning, the results indicated that task effectiveness was mediated by learners' proficiency regarding only long-term retention of target words since word-focused and meaning-oriented conditions were equally effective in promoting retention of L2 word knowledge among intermediate learners while meaning-oriented output tasks were more conducive to L2 word learning among advanced learners.

As a result, we argue that the two forms of form-focused instruction (FFI) should be considered and applied in a complementary rather than a dichotomous way. As Schmitt (2008) aptly indicated, "it is also clear that intentional and incidental approaches are not only complementary, but positively require each other" (p. 353). However, it should be made clear that in this study, L2 vocabulary learning occurred incidentally since participants were not forewarned of the upcoming vocabulary post-tests. In addition, participants did not commit the new words to their memory for any following test. Therefore, any vocabulary gains demonstrated on vocabulary measures were the result of incidental vocabulary acquisition.

The findings of the present study yield certain pedagogical implications for language teachers and language materials developers. Language teachers are recommended to include both

word-focused and meaning-oriented vocabulary tasks in their classes to teach new L2 words. As mentioned earlier, the two approaches to FFI should be used in a way that one approach complements the other one. As far as materials developers are concerned, it is suggested that integrating both task types, that is, word-focused exercise and meaning-oriented, communicative, and authentic post-reading vocabulary tasks such as OR and SW incorporating previously explicitly instructed words in teaching materials could probably result in higher degrees of L2 vocabulary acquisition. In addition, the findings of this study support the tenets of Schmidt's (2001) *Noticing Hypothesis*, that is, learning will not occur unless the learner pays conscious attention to the input and notices a gap between what he/she already knows and what he/she does not know. Furthermore, the findings support the predictions of Swain's (1985) *Output Hypothesis*, Laufer and Hulstjin's (2001) *Involvement Load Hypothesis*, and Nation and Webb's (2011) *Technique Feature Analysis* regarding L2 vocabulary acquisition which were discussed earlier.

This study also suffers from a number of limitations. First, since this study was conducted on intermediate and advanced EFL learners, the results cannot be generalized to learners across other levels of proficiency. Second, due to some logistical issues regarding the design of this study, it was not feasible to determine the contribution of WF and meaning-oriented stages separately in the WF+OR experimental condition to learning and retention of target words. Finally, a further issue which should be taken into account while interpreting the results of this study is that we do not argue that participants' learning and retention of target words in this study means that their language proficiency in general, and lexical competence in particular was enhanced on account of the fact that L2 vocabulary knowledge is a multi-faceted , multi-dimensional construct whose development requires frequent exposure to and, in particular, using the new L2 words in a variety of meaning-oriented communicative contexts. Corroborating this argument, Laufer and Rozovski-Roitblat (2015) maintained that "what learners do with the word may be more important than how many times they come across it since it is the nature of the task that determines how effective multiple encounters will be" (p. 21).

Future research is needed to address the following issues. Since knowing a word entails knowledge of various aspects of that word, it is suggested that future research use more sensitive and communicative measures of L2 vocabulary knowledge. In addition, more studies are needed to examine whether similar results will be obtained with learners of other proficiency levels. Finally, further research is needed to shed light on EFL learners' perceptions and strategies that they employed during the performance of word-focused and meaning-oriented vocabulary tasks.

References

Anderson, J. (1982). Acquisition of cognitive skill. *Psychological Review, 89*, 369-406.

Al-Homoud, F., & Schmitt, N. (2009). Extensive reading in a challenging environment: A comparison of extensive and intensive reading approaches in Saudi Arabia. *Language Teaching Research*, *13*, 383-401.

Baddeley, A. (1990). *Human memory: Theory and practice*. Needham Heights, MA: Allyn and Bacon.

Bley-Vroman, R. (1988). The fundamental character of foreign language learning. In W. Rutherford and M. Sharwood-Smith (Eds.), *Grammar and Second Language Teaching: A Book of Readings*, (pp. 19-30), New York: Newbury House.

Cohen, J. W. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.).Hillsdale, NJ: Lawrence Erlbaum Assiciates.

DeKeyser, R. M. (1998). Beyond focus on form: Cognitive perspective on learning and practical second language grammar. In C. Doughty and J. Williams (Eds.), Focus on Form in

Classroom Second Language Acquisition (pp. 42-63) Cambridge: Cambridge University Press.

De la Fuente, M. J. (2002). Negotiation and oral acquisition of L2 vocabulary: The roles of input and output in the receptive and productive acquisition of words. *Studies in Second Language Acquisition*, *24*, 81-112.

Ellis, R. (2001). Form-focused instruction and second language learning. *A Supplement to Language Learning* (pp. 1-46). *51*: supplement 1.

Ellis, R. & He, X. (1999). The roles of modified input and output in the incidental acquisition of word meanings. *Studies in Second Language Acquisition*, *21*, 285-301.

Ghorbani, M. R. (2009). ELT in Iranian high schools in Iran, Malaysia and Japan: Reflections on how tests influence use of prescribed textbooks. *The Journal of Reflections on English Language Teaching*, *8*, (2), 131-139.

Henriksen, B. (1999). Three dimensions of vocabulary development. *Studies in Second Language Acquisition*, *21*(2), 303-317. http://dx.doi.org/10.1017/S0272263199002089.

Hill, M.M. & Laufer, B. (2003). Type of task, time-on-task and electronic dictionaries in incidental vocabulary acquisition. *International Review of Applied Linguistics 41*, 87-106.

Hu, M., & Nassaji, H. (2012). Ease of inferencing, learner inferential strategies, and their relationship with retention of word meanings inferred from context. *Canadian Modern Language Review*, *68*, 54-77.

Hulstijn, J. (2001). Intentional and incidental second language vocabulary learning: A reappraisal of elaboration, rehearsal and automaticity. In P. Robinson (Ed.), *Cognition and Second Language Instruction* (pp. 258-286). New York: Cambridge University Press.

Hulstijn, J.H. (2013). Incidental learning in second language acquisition. In Chapelle, C.A. (Ed.), *The encyclopedia of applied linguistics* (pp. 2632-2640). Chichester: Wiley-Blackwell.

Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language Learning*, *51*(3), 539-558

Icht, M., & Mama, Y. (2019). The effect of vocal production on vocabulary learning in a second language. *Language Teaching Research*, 136216881988389. https://doi.org/ 10.1177/1362168819883894.

Iran Language Institute (2006). *The ILI English Series: Intermediate 1 student's book*, Tehran: Kanoonchap.

Iran Language Institute (2006). *The ILI English Series: Advanced 1 student's book*, Tehran: Kanoonchap.

Iran Language Institute (2006). *The ILI English Series: Advanced 2 student's book*, Tehran: Kanoonchap.

Kamali, M. (2020). *Technique feature analysis: A case of three reading-based tasks on Iranian intermediate and advanced male EFL learners' vocabulary uptake* (Unpublished doctoral dissertation). Islamic Azad University, Shiraz Branch, Shiraz, Iran.

Kamali , M., Behjat, F., & Bagheri, M. S.(2020). Examining the effects of oral reproduction and summary writing vocabulary tasks on L2 word learning: Technique feature analysis on trial, *Cogent Education*, *7*(1), 1795966, DOI: 10.1080/2331186X.2020.1795966

Knight, S. (1994). Dictionary use while reading: The effects on comprehension and vocabulary acquisition for students of different verbal abilities. *The Modern Language Journal*, *78*, 285-299.

Krashen, S. (1985). *The input hypothesis: Issues and Implications*. New York: Longma

Krashen, S. (2003). *Explorations in language acquisition and use: The Taipei lectures*. Portsmouth, NH: Heinemann.

Laufer, B. (2000). Electronic dictionaries and incidental vocabulary acquisition: Does technology make a difference? In U. Heid, S. Evert, E. Lehmann and C. Rohrer (Eds.) *Proceedings of EURALEX 2000* (pp. 849-854). Stuttgart University: EURALEX.

Laufer, B. (2003). Vocabulary acquisition in a second language: Do learners really acquire most vocabulary by reading? *The Canadian Modern Language Review*, *59*, 565-585.

Laufer, B. (2005). Focus on form in second language vocabulary learning. In S. H. Foster-Cohen, M. Garcia-Mayo, & J. Cenoz (Eds.), *Eurosla yearbook* (Vol. 5, pp. 223-250). Amsterdam: John Benjamins.

Laufer, B. (2006). Comparing focus on form and focus on formS in second language vocabulary learning. *Canadian Modern Language Review*, *63*, 149-166

Laufer, B. (2010). Form focused instruction in second language vocabulary learning. In Chacón-Beltrán, R., Abello-Contesse, C., Torreblanca-López, M.M., López-Jiménez, M.D. (Eds.), *Further Insights into Non-native Vocabulary Teaching and Learning* (pp. 15-27). Bristol: Multilingual Matters.

Laufer, B. & Girsai, N. (2008). The use of native language for improving second language vocabulary: An exploratory study. In A. Stavans and I. Kupferberg (Eds.), *Studies in Language and Language Education* (pp. 261-275). Jerusalem: The Hebrew University Magnes Press.

Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics*,*22*(1),1-26. https://doi.org/10.1093/applin/22.1.1.

Laufer, B., & Rozovski-Roitblat, B. (2011). Incidental vocabulary acquisition: The effects of task type, word occurrence and their combination. *Language Teaching Research*, *15*(4), 391-411

Laufer, B., & Rozovski-Roitblat, B. (2015). Retention of new words: Quantity of encounters, quality of task, and degree of knowledge. *Language Teaching Research*, *19*(6), 687-711.

Long, M. (1991). Focus on Form: a design feature in language teaching methodology. In K. de Bot, R. Ginsberg & C. Kramsh (Eds.), *Foreign Language Research in Cross-Cultural Perspective* (pp. 39-52). Amsterdam: John Benjamins.

Luppescu, S. & Day, R. (1993) Reading, dictionaries, and vocabulary learning. *Language Learning*, *43*, 263-287.

Min, H. T. (2008). EFL vocabulary acquisition and retention: Reading plus vocabulary enhancement activities and narrow reading. *Language Learning*, *58*, 73-115.

Nagy, W. E., Anderson, R. C., & Herman, P. A. (1987). Learning word meanings from context during normal reading. *American Educational Research Journal*, *24*(2), 237-270.

Nagy, W. E., Herman, P., & Anderson, R. C. (1985). Learning words from context. *Reading Research Quarterly*, *20*(2), 233-253.

Nagy, W. E., & Herman, P. A. (1987). Breadth and depth of vocabulary knowledge: implications for acquisition and instruction. In M. G. McKeon, & M. E. Curtis (Eds.), *The Nature of Vocabulary Acquisition* (pp. 19-35). Mahwah, NJ: Lawrence Erlbaum Associates.

Nassaji, H. (2003). L2 vocabulary learning from context: Strategies, knowledge sources, and their relationship with success in L2 lexical inferencing. *Tesol Quarterly*, *37*(4), 645-670.

Nassaji, H. (2004). The relationship between depth of vocabulary knowledge and L2 learners' lexical inferencing strategy use and success. *The Canadian Modern Language Review / La revue canadienne des langues vivantes*, *61*(1), 107-134.

Nassaji, H., & Hu, M. (2012). The relationship between task-induced involvement load and learning words from context. *International Review of Applied Linguistics in Language Teaching* (*IRAL*), *5*, 69-86.

Nation, P., & Webb, S. (2011). *Researching and analyzing vocabulary*. Boston: Heinle. Oxford Quick Placement Test (2001). Oxford: Oxford University Press.

Paribakht, T.S. & Wesche, M. (1997). Vocabulary enhancement activities and reading for meaning in second language vocabulary acquisition. In J. Coady and T. Huckin (Eds.), *Second Language Vocabulary Acquisition: A Rationale for Pedagogy* (pp. 174-200). Cambridge: Cambridge University Press.

Peters, E. (2007). Manipulating L2 learners' online dictionary use and its effect on L2 word retention. *Language Learning and Technology*, *11*, 36-58.

Peters, E. (2012). The differential effects of two vocabulary instruction methods on EFL word learning: A study into task effectiveness. *International Review of Applied Linguistics*, *50*, 213-238

Rassaei, E. (2015). Effects of three forms of reading-based output activity on L2 vocabulary learning. *Language Teaching Research*, *21*(1), 76-95.

Richards, J. C., & Rodgers, T. (2014). *Approaches and methods in language teaching*. Cambridge: Cambridge University Press.

Rosszell, R. (2003). *Combining extensive reading and intensive vocabulary study*. Paper presented at AAAL conference, Arlington.

Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, *11*, 17-45.

Schmidt, R. (1994). Deconstructing consciousness in search of useful definitions for applied linguistics. In J. H. Hulstijn & R. Schmidt (Eds.), *Consciousness in Second Language Learning* (pp. 11-26). Special issue of *AILA Review*, *11*.

Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3-32). Cambridge, UK: Cambridge University Press.

Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research*, *12(*3), 329-363.

Shintani, N. (2013). The effect of focus on form and focus on forms instruction on the acquisition of productive knowledge of L2 vocabulary by young beginning-level learners. *Tesol Quartely*, *47*, 36-62. https://doi.org/10.1002/tesq.54.

Skehan, P. (1996b). Second language acquisition research and task-based instruction. In J. Willis, & D. Willis (Eds.), *Challenge and Change in Language Teaching.* (pp. 17-30). Oxford: Heinemann.

Sonbul, S., & Schmitt, N. (2010). Direct teaching of vocabulary after reading: Is it worth the effort? *English Language Teaching Journal*, *64*, 253-260.

Sternberg, P. (1987). Most vocabulary is learned from context. In M. G. McKeon, & M. E. Curtis (Eds.), *The Nature of Vocabulary Acquisition* (pp. 89-105). Hillsdale, NJ: Lawrence Erlbaum Associates.

Swain, M. (1985). Communicative competence: some roles of comprehensible input and comprehensible output in its development. In S. M. Gass & C. G. Madden (Eds.), *Input in Second Language Acquisition* (pp. 235-253). Rowley, MA: Newbury House.

Swain, M. & Lapkin, S. (1995). Problems in output and the cognitive processes they generate: a step towards second language learning. *Applied Linguistics*, *16*, 371-391.

Van Patten, B. (1990). Attending to content and form in the input: an experiment in consciousness. *Studies in Second Language Acquisition*, *12*, 287-301.