



Accepted: January 2024

Published: June 2024

Research Article**A Multicultural Study: Input Enhancement and Jigsaw Impacts on Reading Comprehension of Immigrant ESL Learners in Iran**

Masuma Alavikhah: Freelance Instructor, English Language Department, Qom Branch, Islamic Azad University, Qom, Iran

alavi.khah@gmail.com

<https://orcid.org/0009-0008-1022-2439>

Seyed Abdolmajid Tabatabaee Lotfi: Associate Professor, English Language Department, Qom Branch, Islamic Azad University, Qom, Iran

majidtabatabaee1@gmail.com

<https://orcid.org/0000-0001-7992-5230>

Seyed Amir Hosein Sarkeshikian: Assistant Professor, Qom Branch, Islamic Azad University

dr.sarkeshikian@gmail.com

<https://orcid.org/0000-0003-3958-6216>

ABSTRACT

Focused instructions in language teaching have gained weight during recent decades. As reading is a powerful tool for vocabulary growth, knowing which instructions have more effect on it is necessary. The effectiveness of focused instructions has been examined in empirical studies. But few inquiries compared the impacts of form-focused instruction like input enhancement with meaning-focused instruction such as Jigsaw on L2 development. Therefore, this research tried to examine a comparison between the impacts of input enhancement and jigsaw on reading comprehension of non-Iranian ESL learners. 50 elementary ESL learners in an international primary school were chosen in three intact classes. In the first experimental group (EG1), input enhancement was used for presenting the target words; in the second experimental group (EG2), the jigsaw was used. The control group (CG) learned the parallel target words giving the participants a word list (traditional). Before applying the treatment all the subjects were given the teacher-made pretest. After five sessions of treatment, the posttest was administered. One-way ANOVAs were used to analyze the data collected from the learners' performance



on the pretest and posttest. The results announced that there was not any notable distinction between the post-test marks of the three groups. However, the paired samples t-test results revealed that the input enhancement and control group had reading comprehension development after the treatment. This research can inform teachers and syllabus designers about the efficiency of input enhancement and word lists on reading comprehension.

Keywords: input enhancement, focused instruction, meaning-focused instruction, reading comprehension.



1. INTRODUCTION

The techniques and methods for improving reading comprehension outcomes have received a lot of attention in recent years (RAND Reading Study Group, 2002). It can be considered the first motivating reason behind the major of the next future research in the domain of literary agenda. Reading research has changed obviously in recent years. Vocabulary proficiency can be considered the most effective component of reading comprehension and developing a larger vocabulary should be considered a necessary element to improve reading comprehension. However, there is insufficient attention to the value of vocabulary to achieve fluency in reading comprehension (Joshi, 2005). In addition, the hypothesis of lexical quality should be maintained which emphasizes the critical effect of lexical representations to develop and express reading skills (Perfetti & Hart, 2001). But how should improve the lexical quality of a new word?

Teaching vocabulary explicitly and through focused instructions would be more effective for learning new word vocabulary rather than receiving unenhanced input through reading text materials (Laufer, 2005). Most recent studies claimed that the key role of second language vocabulary knowledge could not be ignored, however, it also should be considered that L2 vocabulary development as a result of 'reading only' is insufficient. In other words, it should be noted that EFL learners need to benefit from some kinds of structures which are more explicit particularly word-focused instructions (Kang & Han, 2015).

The current study is additional research that will examine the impressions of one sort of focus-on-form instruction that names input enhancement (vocabulary as linguistic items) in comparison with a jigsaw which is another type of it (meaning-focused instruction), specifically on the attainment of new vocabulary and to investigate the possible effects that approach applied will bring on L2 development of reading comprehension in non-Iranian elementary students.

Therefore, the findings of this research may be noticeable for various groups of people; it can be highly beneficial for English teachers whose students have many problems with traditional vocabulary learning methods. It seems that even some English language teachers do not believe in the real capacity of these instructions. As a result, this thesis may familiarize them with the practical properties of these instructions in English classes. To this end, the following research attempted to determine whether there is any statistically notable distinction between the impacts of input enhancement (vocabulary) and Jigsaw on reading comprehension by non-Iranian ESL learners.

2. REVIEW OF LITERATURE

Many evidences emphasize reading proficiency as a powerful means to improve vocabulary knowledge. According to an estimation which was published by Nation (2006), each EFL learner should know at least 8,000 to 9,000 word families to overcome authentic texts. This huge vocabulary development doesn't occur through usual and limited language learning class activities, since there is a command of vocabulary knowledge that involves some necessary elements like spelling, grammatical rules, meaning, and usage. As a result, there is a necessary demand for EFL learners to engage with target lexical items in different variations of authentic contexts which helps them to achieve a high degree of acquisition of new vocabulary items. In the realm of language learning, reading for vocabulary gains. As there is a great acknowledgment that determines the effectiveness of reading to develop L2 vocabulary, most of the researchers (Long, 1991, Krashen, 1982) have suggested several manners such as providing comprehensible input to increase the efficiency of reading.

Although the positive effects of vocabulary instructions promote the growth of reading skills, it seems that the critical role of explicit vocabulary instruction has not been considered as much as it should be during



class activities(Nation,2013). It seems that new trend methodologies to English language teaching like CLT could play one of the most necessary factors in persuading teachers not to pay enough attention to explicit vocabulary instruction in reading classes since these current methodologies encourage independent, self-access, and task-based learning. Vocabulary teaching seems to be the traditional one compared with other current methods, which focus on discrete-item learning with little attention to creative teaching or affective factors. The development of vocabulary knowledge almost is regarded as the main factor. However, it has been noticed in the character of a goal and incidental learning for extensive reading rather than a critical part of explicit instruction (Grabe&Stoller,2018). Within the domain of language learning research, there is a similar reciprocal link between reading comprehension and vocabulary gains for both first and second languages (L1; e.g., Anderson & Freebody, 1982) and L2 reading (e.g., Bossers, 1992).

According to several recent studies, incidental vocabulary learning can be considered one of the crucial points that promote the process of vocabulary learning. Arai and Tokizawa (2024) maintained that L2 reading as much as L1 is the most effective component of second language learning among different input modifications.

Some analyses of L2 vocabulary instructions do not encourage direct vocabulary teaching. It seems that most of the teachers seriously have been influenced by the results of recent research which claim a vast majority of vocabulary knowledge is gained only through the incidental learning process (extensive and contextual reading). These studies maintain that only a few groups of words should be taught more saliently to achieve fluency levels in reading skills.

On the other hand, a preponderance of research suggests specific options for vocabulary instruction that are more creative and engaging rather than formal types of instruction. Moreover, explicit vocabulary instruction can even convert into new versions that respect affective factors and students' roles, also in line with noticing the importance of innovation and the support of reading goals(Grabe&Stoller,2018).

Toomer, Elgort, and Coxhead (2024) argued that developing vocabulary knowledge from reading (contextual learning) can be considered one of the key components of L2 learning. Contextual learning doesn't occur unless the context is enriched by meaning-focused instructions. However, this type of language acquisition is mentioned as incidental vocabulary learning in most studies.

Second language learning instructions can be divided into two types: the first focuses on meaning, and the other emphasizes linguistic forms. Meaning-focused instructions (MFI) maintained the most usage of the second language should be as a device to communicate (not as the purpose of learning itself). Therefore, English teachers should consider a communicative approach to emphasize the role of meaningful communication during class activities. Several studies of MFI claim that learners cannot achieve enough success by learning linguistic items and grammatical rules that are out of context and separately(Loewen,2011).

The crucial goal of meaning-focused instruction is to present learning opportunities that allow learners to engage in the second language or academic subjects using L2. Recent studies discussed that salient emphasis on linguistic items could not help EFL learners improve procedural and implicit L2 knowledge. Therefore, input enrichment and a communicative approach would promote second language learning development without any specific teaching about language. Incidental learning has presented a principle that claims that language development is meaning-focused, not form-focused. This principle is derived from the learning method emphasizing the role of meaning-focused activities. Incidental learning claims that L2 development doesn't occur unless the language input presents a matter of "understanding" which has noticed the role of emphasis on the meaning (not the form of the words). Therefore, its principle suggests that teachers should provide learning opportunities that attract learner's attention through communicative and problem-solving activities rather than grammatical exercises (Kumaravadivelu,2006).



Kumaravadivelu (2006) declared that in the first step language input is introduced to the learner and for the next step the input should be modified as it would just motivate learners to follow the underlying parts. In other words, form-based input modifications can facilitate the development of linguistic knowledge/ability but not definitely pragmatic knowledge/ability both of which are required for successful language communication. Following Krashen's input hypothesis, all language learners don't learn a language unless its messages are understood. In other words, language acquisition develops by absorbing comprehensible input. Comprehensible input is defined as $i + 1$ and includes the structures that are only somewhat over the EFL learner's present level of knowledge/ability. Therefore, vocabulary learning gains important in the absence of any explicit focus on grammar and it can help to achieve more comprehension. On the other hand, when more comprehension happens, so more language development can be acquired. And also following his theory of second language learning, the teacher should provide 'comprehensible input'. Comprehensible input can be considered one of the initial steps to promote L2 acquisition and learning the mother tongue. It means that the input presented to the EFL learners should be manipulated and simplified through context and additional verbal hints. A preponderance of activities can simplify the input using high-frequency vocabulary items, gestures, images, and even drawings to make input simplified and easier to understand. For this reason, teachers should present comprehensible input using mechanical exercises rather than an explanation of grammatical rules. In other words, a good language input may be defined as a device that supplies language learning opportunities through hearing and reading the L2 in the communicative contexts that require the learner's needs to process its meaning. The instruction of EFL learners in communicative activities can serve as enough opportunities to interpret, negotiate, and express meaning in the L2 contexts. Two main features are required to have comprehensible input: the right difficulty level and a high level of learner engagement (Benati, 2021).

The education researchers, L2 in particular, have been extremely interested in cooperative learning approaches. Wang, Alavi, & Izadpanah (2023) maintained that Jigsaw as one of its noted strategies focused on several affective factors like student collaboration, engagement, and autonomy. While doing Jigsaw, the role of students is cooperating in small groups, so that they can direct their peers after overcoming the focused parts. Many advantages can be mentioned for this strategy. Supporting social connections, motivating students to learn, and success in academic issues are considered as some main examples.

The preponderance of recent studies has suggested that cooperative learning could be considered an important factor in engaging learners in class activities and encouraging them to work with the instructed material. (e.g. Zuo, 2011). Esnawy (2016) claimed that Jigsaw could help learners practice a task as a teamwork which allows them to have enough opportunities to interchange ideas with peers and learn from each other rather than the teacher. This strategy changes the usual form of the teacher's role from a model to a facilitator. In this case, students play the major role and carry on the class work independently which made doing class activities enjoyable. Besides the above mentioned, JCL has been well-documented in affecting learner's responsibility, positive autonomy, and the skills of group work. Furthermore, Jigsaw could play a main role in improving some important aspects of personal development like critical thinking, as each group member engages with the instructed material in all parts of the activity and has to use all four language skills while completing the task.

The jigsaw method based on a communicative language approach can provide an excellent learning environment. It should be considered that Jigsaw can affect L2 development effectively through relevant content. Also, the Jigsaw approach results in improving academic skills during planned reading and writing exercises and supplying relevant content purposefully in a class conversation (Coelho, 1992).

In the same vein, Rolheiser & Stevahn (1998) connect the Jigsaw with Wittrok's hypothesis. In his theory, he tried to highlight the gravity of linking data to existing cognition, which is necessary to improve long-term memory and it can happen by explanation and elaboration on the course material.



FONF has been defined as a response to linguistic troubles which take place during communicative activities. It may act on absorbing the attention of EFL learners in linguistic features when they emerge incidentally in cases that focus on meaning/communication (Long, 1991). For this reason, a major part of the grammatical rules can be learned incidentally by drawing the learner's attention to meaning (Long, 2000). In this case, FONF should be short and infrequent, since EFL learners should follow the text for meaning, so focusing on many different target elements may result in negative effects on the learning process. However, the next studies have extended the conception of FONF to involve two types: incidental and predesigned. Furthermore, FONF can occur on a more expansive scale depending on the manner and the time in which is conducted. (e.g., Spada, 1997; Williams, 2005).

Input Enhancement as a Form-Focused Instruction

In the sphere of L2 learning, contextual vocabulary learning can be considered an effective factor in improving L2 vocabulary by input manipulation which presents to the EFL learner (as cited in Toomer, Elgort, & Coxhead, 2024), since learners use general learning mechanisms to extract structures and patterns from the language input they are exposed to. From this perspective, the basic idea is that grammatical rules and other formal aspects of language 'emerge' from language use and experience. Influencing this process are many factors. They grouped into input-related factors (e.g. Frequency and saliency of target features in the L2 input) and learner-related mechanisms (e.g., associative learning and L1 transfer). L2 input are coded for a range of physical and linguistic characteristics, including, for example, frequency (how often the item occurs in the input), salience (how prominent/easy the feature is to hear), redundancy (whether the item is essential or not, for conveying meaning) and the lexical and semantic contexts in which the feature occurs (Marsden, Mitchell, & Myles, 2013).

The term input enhancement originally refers to the notion of consciousness-raising. To enhance input noticeability, the perceptual salience of linguistic items must increase. This processing instruction is called input enhancement and could be one effective way of promoting the learner's attention to the form (Nassaji & Fotos, 2011).

Second language acquisition doesn't occur unless EFL learners are exposed to input. However, it seems that this process isn't enough. For this reason, teachers should reinforce some linguistic elements with the help of some form of formal instruction. This reinforcement may help to increase the chance of EFL learners noticing the specific forms in the input (Benati, 2021).

Textual enhancement has been defined as an external form of input enhancement. This process of physically manipulating linguistic forms of a text may help EFL learners notice. Textual enhancement could be considered an implicit form of input enhancement since drawing the learner's attention doesn't occur unless the focus remains on meaning. Furthermore, textual enhancement can be presumed to be maintained as a positive form of input enhancement as it only highlights the correct form of linguistic elements. On the other hand, both written and oral texts can be carried out through textual enhancement. A text can use underlying, bold, italic, capitalized, color coding, or a combination of these forms to reinforce the written input. (Nassaji & Fotos, 2011). Moreover, input modifications like textual enhancement should be used before structured output to improve both the processing and proficiency of L2 learners to take advantage of their evolving system and make the target form (Benati, 2021).

Empirical Studies on Textual Enhancement

Recent studies on textual enhancement follow these academic hypotheses. (e.g., Chung and Révész, 2024; Vu, 2020). Individual target words are the items that implement input enhancement for vocabulary development. Kim (2006) inquired about the impacts of lexical saliency and textual enhancement on vocabulary learning of Korean learners. The outcomes revealed that there are no positive impressions of textual enhancement unless it is combined with lexical saliency.

Vu & Peters (2020) examined the impacts of reading only, reading-while-listening, and reading accompanied by textual enhancement on the language development of EFL learners. The results revealed that all mentioned reading strategies positively affected vocabulary development. However, reading



accompanied by textual enhancement resulted in more gains than reading-only, while the other groups did not differ significantly.

Nahavandi and Mukundan (2014) aimed to investigate the impacts of input enhancement as a focus on form instruction on Iranian EFL learner's vocabulary development. The pair groups were exposed to five passages and then directed to answer some comprehension questions. The members of the experimental group were exposed to the input which was enriched textually (bolding), however, the persons who participated in the control group read the parallel text while did not implement any form-focused instruction. The outcomes indicated that the TIE positively affected the participant's vocabulary gains.

However, Chung and Révész (2024) claimed that there are fairly mixed findings to reveal the impacts of textual input enhancement. Null results, in addition, have been reported because of several reasons like affective factor, frequency of enhanced items, and using input enhancement simultaneously with other strategies:

Masoudi (2017) explored the vocabulary self-selection strategy and input enhancement impacts on the L2 vocabulary development of Iranian EFL learners. The target words have been selected according to the preference of the vocabulary self-selection members and they could select them from their favorite text. For this reason, the input enhancement group started the treatment one session after the first group to expose the target words according to the first group's preference. The results showed that there are positive impacts of both strategies which affecting significantly the vocabulary development of Iranian EFL learners.

Rare investigations that were conducted with young EFL learners also showed several positive effects of textual enhancement on L2 grammar (e.g. Simard, 2009; Moradi&Farvardin,2016; White, 1998)

3. METHODOLOGY

3.1. Design

The design of this study is quasi-experimental in nature. It used a pretest posttest design with a control group. Furthermore, the participants were selected based on the convenient sampling.

3.2. Participants

The participants in the current research were 50 (n females=33; n males=27) elementary ESL learners in an International Primary School of Qom, Iran registering during the academic year of 2018-2019 who studied in the first grade. However, 6 students who did not attend all treatment and posttest sessions were eliminated from the whole population. Hence, the results of only 44 students, the control group (17), the first experimental group (14), and the second experimental group (13) have been reported here. All of the students were foreign students. All of them were bilingual in different languages such as Urdu, Indian, Turkish, Arabic, and Persian, and their age ranged from 7 to 8. This school is a private school and attracts students from a wide range of socio-economic backgrounds (Africa, Afghanistan, India, Pakistan, Turkey ...) and also it is affiliated with Al Mustafa International University. To select the participants who are certainly at the parallel level of language proficiency, the Nelson Placement Test (intermediate 200 A), was conducted. The results did not reveal a meaningful dissimilarity between the three groups. Primary school constraints were avoided to assign students randomly to experimental groups; therefore, the researcher had to do the study with intact classes.

3.3. Instruments and Materials



To conduct this study, the researcher resorted to some materials. In the following, the instruments applied for data collection explained: Nelson Placement Test, a multiple-choice recognition test (researcher-made, with 25 questions), Oxford Elementary Learner's Dictionary 2002, along with five reading comprehension questions, and target vocabulary items.

A multiple-choice recognition test was developed to monitor the student's reading comprehension, both in pre and post-tests. The researcher made the parallel version of the multiple-choice vocabulary test for both pre and post-test, with 25 questions.

Five reading passages were selected from 'Steps to Understanding' by Hill (1988). The textual enhancement group had the target words underlined. The Jigsaw group did not receive whole passages during the activity, thus each team only had 1/3 of each passage. However, everyone received whole the passage at the end of the class. The passages that were given to the control group did not change and the students received the original text.

Five target vocabulary words were selected from each passage. All of the vocabulary items that the researcher selected composed the pretest items which were administered to determine the words that our elementary participants did not know. Finally, twenty-five words in the text including ten verbs, seven nouns, seven adjectives, and one adverb were selected: report, terrible, worth, absolutely, column, desire, advertisement, frequent, agent, claim, coast, ashore, qualified, pretend, steer, navy, annoy, temper, dare, courage, decide, passenger, burst, fright, and trembling.

3.4. Data Collection and Analysis Procedures

To attain the aims of the current research, certain processes were done:

A Nelson proficiency test [2000A] extracted from Nelson English Tests by Fowler and Coe [1976] was administered to the students to ensure the participant members were all at the parallel level of English language proficiency. The test consisted of 50 items. The persons who participated in this research were assigned into three intact groups (Input enhancement, Jigsaw, and control group).

Then, a multiple options test was developed to check the students' reading comprehension, both in pre and post-tests. The researcher made the parallel version of the multiple-choice vocabulary test for both pre and post-test, with 25 questions.

Moreover, the researcher selected fifteen stories covered in treatment sessions from the Steps to Understanding book (Hill, 1988). Meanwhile, the learner's first composition constituted the pre-test at the first session. The treatment sessions lasted over three weeks with a whole of 5 sessions were entailed. All three groups expended an equal amount of time on each received text. All the students were given a pretest when one day remained to start the onset of the treatment. Also, the post-test was administered to all the students when one day passed since the last treatment session was held.

During each treatment session, five new words taught and explained to the learners by reading a story but the way which was presented these new words to the students was different among the three experimental groups of this research.

In the first experimental group (textual enhancement), the researcher used form-focused instruction for presenting the target words that underlined them during the treatment sessions.

In the second experimental group (Jigsaw), the researcher used meaning-focused instruction for teaching the target words.

The third group (control group) also studied the same reading passages and learned the same target vocabulary items. Nevertheless, the method of teaching the target vocabulary items was traditional, giving the participants a word list. The teacher wrote the word list including ten new words of reading texts with their synonyms on the board and students had to follow the teacher and write them in their notebooks. Thus, the participant members of the control group did not undergo any type of focused



instruction and also were exposed to wide input.

To gain the final result, the parallel exam was held for all the members of the three groups at the seventh session.

The scoring procedure was based on the number of errors that the students had in each question

Finally, the collected data were subjected to a statistical analysis.

Data analysis was done in IBM SPSS 16.0. Several descriptive and inferential analyses were conducted on the data. Mean and standard deviation were used to analyze descriptively the data. The researcher used one-way ANOVA to draw a comparison between the achievement of the three groups after the treatment sessions.

4. RESULTS AND DISCUSSIONS

The normality of the distribution of the test marks can be checked in several ways (i.e., graphically or statistically). The most used analyses for this purpose are the Shapiro-Wilk and One-Sample Kolmogorov–Smirnov Test.

Therefore, the researcher ran these tests on the collected scores to ensure that this assumption has been met. Tables 1,2 and 3 present the results of this test.

Table1

Shapiro-Wilk and One Sample Kolmogorov-Smirnov Tests for checking Normal Distribution of Scores in the EG 1

Table4.4. 1

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest in EG1	.19	14	.17	.90	14	.11
Posttest in EG1	.14	14	.20*	.96	14	.74

a. Lilliefors Significance Correction

Table2

Shapiro-Wilk and One Sample Kolmogorov-Smirnov Tests for Checking Normal Distribution of Scores in the EG2

Table4.5.

Table4.5. 1



Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest in EG2	.16	13	.20*	.93	13	.38
Posttest in EG2	.23	12	.06	.93	12	.46

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Table3

Shapiro-Wilk and One Sample Kolmogorov-Smirnov Tests for Checking the Normal Distribution of Scores in the CG

Table4.6. 1

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest in CG	.21	17	.04	.91	17	.12
Posttest inCG	.12	17	.20*	.95	17	.49

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

As reflected in Tables 1, 2, and 3, the p-values for each set of scores in both tests are greater than 0.05. Thus, all sets of marks are normally distributed and the parametric test of One-way ANOVA is allowed to be run. The normality of the distribution of the scores in the two tests (i.e., pretest and posttest) in the three groups is shown graphically in the below Q-Q plots.

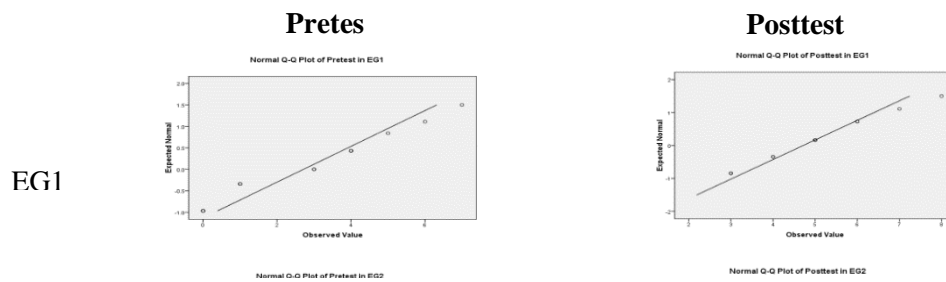
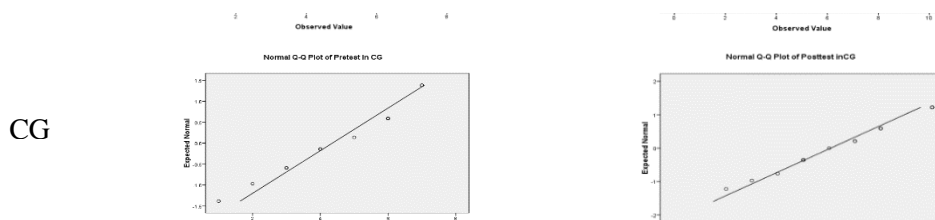


Figure1. Q-Q Plots to check the normal distribution of the scores



The Results Regarding the Research

Hypothesis The research question approached the distinction between the impacts of input enhancement, Jigsaw, and no focused



instruction on the reading comprehension of non-Iranian first-grade students. One-way ANOVAs had to be run on the scores obtained from the pre-and post-tests to answer this research question. But, to administer the One-way ANOVA one assumption must be met which is a normal distribution of the data. This assumption was checked in the previous section.

Therefore, the One-way ANOVAs were performed. Table 4 and Table 5 present the findings of these analyses.

Table4

Analysis of One-Way ANOVA CONSIDERING the Participant's Pretest Scores

ANOVA					
pretest					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	27.212	2	13.606	2.790	.073
Within Groups	199.970	41	4.877		
Total	227.182	43			

As reflected in Table 4, the p-values are equal to 0.73 which is greater than 0.05; hence, there was no notable distinction between the pretest marks of total groups.

Table5

Analysis of One-Way ANOVA Considering the Participants' Posttest Scores

ANOVA						
posttest						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	14.691	2	7.346	1.247	.298	
Within Groups	241.491	41	5.890			
Total	256.182	43				

As reflected in Table 5, the p-value is equal to 0.29 which is greater than 0.05, hence there was no notable distinction between the post-test marks of total groups, and the null hypothesis was accepted.

The Post Hoc Tests were conducted on the results serving the intention, the data of which are illustrated in Table 6 and Table 7.

Table6

The Post Hoc Tests of Pretest Scores

Multiple Comparisons							
pretest							
Tukey HSD							
(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	



CG	EG1	1.63866	.79705	.112	-.2995	3.5768
	EG2	-.10860	.81368	.990	-2.0872	1.8700
EG1	CG	-1.63866	.79705	.112	-3.5768	.2995
	EG2	-1.74725	.85062	.112	-3.8157	.3212
EG2	CG	.10860	.81368	.990	-1.8700	2.0872
	EG1	1.74725	.85062	.112	-.3212	3.8157

Table7
The Post Hoc Tests of Posttest Scores

Multiple Comparisons						
posttest						
Tukey						
HSD						
(I)	(J)	Mean	Std.	Sig.	95% Confidence Interval	
gro	gro	Difference	Error		Lower	Upper
up	up	(I-J)			Bound	Bound
CG	EG	1.34454	.87589	.285	-.7853	3.4744
	1					
	EG	.90498	.89418	.574	-1.2693	3.0793
	2					
EG	CG	-1.34454	.87589	.285	-3.4744	.7853
1	EG	-.43956	.93477	.886	-2.7126	1.8335
	2					
EG	CG	-.90498	.89418	.574	-3.0793	1.2693
2	EG	.43956	.93477	.886	-1.8335	2.7126
	1					

The Results of Paired-Samples t-test

Based upon the results presented in Table 5, the posttest scores in the EG1, EG2, and CG did not differ significantly ($p=0.73>0.05$) and there was no notable distinction among the three groups. Hence, it was necessary to run a Paired-Samples t-test to locate the difference between the pretest and post-test of each group to ensure that all three groups had reading comprehension development after the treatment sessions. Table 8 indicates the data of the Paired-Samples t-test for the EG1 participants.

Table8

Results of Paired-Samples T-Test in the EG1

Paired Samples Test							
Paired Differences					t	df	Sig.
Mean	Std.	Std.	95% Confidence			(2-	
an	Deviation	Error	Interval of the			tailed)	
		Mean	Difference				



		Paired Differences			t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		
					Lower	Upper	
P	EG1	-2.0000	2.7456	.73380	-3.5852	1.0588	.017
ai							
r							
l							

As indicated in Table 8, the p-value equals 0.01 which is less than 0.05; hence there was a notable distinction between pretest and posttest marks in the EG1 and also EG1 had reading comprehension development after the treatment sessions.

Table 9 indicates the data of the Paired-Samples t-test for the EG2 participants.

Table9

Results of Paired-Samples T-Test in the EG2

Table4.12. 1

As indicated in Table 9, the p-value equals 0.40 which is greater than 0.05; hence there was no notable distinction between pretest and posttest marks in the EG2, and EG2 had no reading comprehension development after the treatment sessions.

Table 10 indicates the data of the Paired-Samples t-test for the CG participants.

Paired Samples Test		Paired Differences				t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
					Lower	Upper		
P	EG2	-.69231	2.89783	.80371	-2.44345	1.05884	-.861	.406
ai								
r								
2								

Table10

Results of Paired-Samples T-Test in the CG

Paired Samples Test		Paired Differences				t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
					Lower	Upper		
Pa	CG	1.703588	2.51905	.61096	3.00106	-.41071	2.792	.013
ir								
3								

As indicated in Table 10, the p-value equals 0.01 which is less than 0.05; thus there was a notable distinction between pretest and post-test scores in the CG, to put it in another way, CG had reading comprehension development after the treatment sessions.

The present research compared the significance of two various instructions (form-focused and meaning-



focused) on the reading comprehension of non-Iranian ESL learners. The research questions investigated the existence of statistically notable distinctions between the impacts of input enhancement, jigsaw, and no focused instruction on reading comprehension by non-Iranian ESL learners.

The results of one-way ANOVAs indicated that there was not any notable distinction between the pretest scores as well as the post-test scores of the three groups. Therefore, the null hypothesis was accepted. However, the data of the Paired-Samples t-test indicated that the input enhancement and control group had reading comprehension development but the Jigsaw group did not have any development in reading comprehension.

Ellis (2006) argues that input enhancement can provide some opportunities to facilitate the language learning process since it can provide several situations where the EFL learners concentrate on the target forms. Hence, we would conclude that the results of the current research may highlight the effectiveness of input enhancement instruction in EFL educational settings. Moreover, this study confirms his recommendations, regarding the usage of explicit knowledge and indicates that we do not achieve success in teaching complicated structures of

the target items unless the teachers hold their classes by using explicit knowledge rather than implicit one.

Certain target words were used for testing, so the study affirmed that there is a positive impact of input enhancement on L2 target items learning and confirmed Shook's (1994) clarification that input enhancement items were effective in developing learners' vocabulary gains and this input has a positive efficiency on students' vocabulary progress.

The results of the current research were following the findings of White (1998) who indicated that textual enhancement did not cause a notable impression on developing learners' knowledge of the target structures. The findings of this research were consistent with Kim (2006) in the case of showing that there are no positive impacts of textual enhancement when it is implemented alone. Furthermore, TE did not lead to better results in learner's recognition of target items unless it was combined with lexical elaboration. Moreover, the results of this research support recent studies which results revealed that there were no statistically remarkable distinctions between experimental and control groups. In other words, the employment of the jigsaw strategy did not lead to the development of L2 vocabulary or reading comprehension (Adams,2013; Shabban;2006).

On the other hand, the findings of the current research were in strict contrast with the results of the study conducted by Peters (2012). He inquired about the impacts of input enhancement on the procedure of learning the formulaic language when the German language was learned as a second language. She found that increasing the typographical salience of the target vocabulary resulted in notably higher scores on the target sequences. This conflict between the results may be due to the differences in the background mother tongue of the persons who participated in the two studies.

Additionally, it should be noted that textual enhancement's impacts in this research were incompatible with some studies (Masoudi,2017; Nahavandi & Mukundan, 2014; Motlagh and Nasab,2015).

As previously stated, the results of this research demonstrated that Jigsaw could not be impressive in improving the reading comprehension of ESL learners, to put it in another way, the students did not have any reading comprehension development after the treatment sessions. In conclusion, it appears that young ESL learners could achieve more success in teacher-guided instruction rather than jigsaw strategy since they could not engage in instructed material unless their teachers provided enough guidance and assistance through class activities.

Richard & Rogers (2014) maintained that jigsaw and other class activities of the CLT method could achieve different amounts of success in each culture of the educational domain. Due to the various nature of the teaching process in Asian settings, English classes were often less implemented CLT activities. It seems that the varieties of learner's needs and goals resulted in such different effects.

Concerning the effectiveness of Jigsaw instruction, the results of this research were in strict contrast with



the findings of the research done by several studies (e.g., Sabbah,2016; Gomleksiz 2007; Ghaith&Abd-ELMalak,2004; Kazemi,2012; Nozohouri, Mahmoodi, Adhami, & Rasouli,2016; Adhami, Marzban, Garmsar & Ghaemshahr,2014). Sabbah,2016 found a positive impact of Jigsaw on ELS student's performance in reading comprehension with the experimental group outperforming the control group notably.

5. CONCLUSION

This research examined the impacts of two types of focused instruction (form-focused and meaning-focused) on learning target vocabulary items and especially reading comprehension by non-Iranian first-grade ESL learners. The results of this research demonstrated that there is no notable distinction between the impacts of these two various sorts of focused instruction on reading comprehension. In addition, textual enhancement which is a form-focused instruction caused the reading development of the participants. However, Jigsaw which is a meaning-focused instruction did not cause any reading development after the treatment sessions. The results of this experiment demonstrated that input enhancement was effective in reading comprehension. The enhanced input provided to the students and making the target vocabulary items more salient allowed them to notice the target features in input-based activities. Also, the results of the present research confirmed that when the learners focus their attention on certain noticeable structures in the text, they learn them much easier than just exposing them to ample input. Furthermore, providing learners with opportunities to practice vocabulary target items through meaningful contexts would enhance the learning of reading comprehension.

However, the findings suggest that the Jigsaw as a meaning-focused instruction and cooperative method might be efficient to assist higher order rather than young and elementary learners. Moreover, the findings imply that particular individual learner characteristics such as background culture and age can affect the school experience in ways that can have educational implications. Considering the traditional classroom, noticed that the teachers should not deride the traditional teaching methods completely. That is to say, this study signifies that learners should be exposed to the input through the pre-reading part of class activities while the instructors are using the traditional mode of reading comprehension. Also, translation equivalents proved more desirable, since the scope of the notions is not always and necessarily alike in first and second languages. Teachers should encourage students to ask for clarification of each part of the material that they do not understand completely or even about how they should use the class material in the context.

This study can present numerous suggestions for English learners, teachers, instructional, curriculum design development, and classroom settings. The results of this research firstly support the assertion that believes in implementing FONF as a fruitful way which is based on cognitive theories and noticing hypothesis of L2. The outcomes of this research are supposed that afford beneficial inferences for those who are learning and teaching L2 during the long process of learning vocabulary. This study was carried out filling a gap in input enhancement research into vocabulary instruction. It is expected that teaching new vocabulary follow-up underlying target words will result in statistically more efficient learning of L2 vocabulary. This research might be advantageous for whom is teaching and learning L2 since these input enhancement instructions firstly help students to overcome vocabulary comprehension problems and also will present a broad vision with high self-confidence to teachers to work out solutions for having a better understanding of new and target words of a text through input enhancement.

REFERENCES



- Adhami, M., Marzban, A., Garmsar, I., & Qaemshahr, I. (2014). The effect of jigsaw task on reading ability of Iranian intermediate high school EFL learners. *Journal of Academic and Applied Studies*, 4(2), 13-24.
- Anderson, R. C., & Freebody, P. (1982). Reading comprehension and the assessment and acquisition of word knowledge. *Center for the Study of Reading Technical Report; no. 249*.
- Arai, Y., & Takizawa, K. (2024). Text and reading task variables in incidental L2 vocabulary learning from reading: A methodological synthesis. *Research Methods in Applied Linguistics*, 3(2), 100110.
- Benati, A. (2021). Beyond methods: Towards an evidence-based approach to language instruction. *Iranian Journal of Language Teaching Research*, 9(2), 1-11.
- Bossers, B. H. (1992). *Reading in two languages: A study of reading comprehension in Dutch as a second language and in Turkish as a first language*. Vrije Universiteit te Amsterdam.
- Chung, Y., & Révész, A. (2024). Investigating the effect of textual enhancement in post-reading tasks on grammatical development by child language learners. *Language Teaching Research*, 28(2), 632-653.
- Coelho, E. (1992). Jigsaw: Integrating language and content. *Cooperative language learning*, 129-152.
- Ellis, R. (2006). Researching the effects of form-focussed instruction on L2 acquisition. *AILA review*, 19(1), 18-41.
- Esnawy, S. (2016). EFL/EAP Reading and research essay writing Using Jigsaw. *Procedia-Social and Behavioral Sciences*, 232, 98-101.
- Ghaith, G. (2004). Correlates of the implementation of the STAD cooperative learning method in the English as a foreign language classroom. *International Journal of Bilingual Education and Bilingualism*, 7(4), 279-294.
- Gömleksiz, M. N. (2007). An evaluation of engineering students' perceptions towards the English language teaching-learning environment at engineering faculties in Turkey: The case of Firat, Ataturk, Inonu, and Dicle Universities. *Architecture*, 304, 19-5.
- Grabe, W., & Stoller, F. L. (2018). How reading comprehension works. In *Teaching English to Second Language Learners in Academic Contexts* (pp. 9-27). Routledge.
- Hill, L. A. (1980). *Steps to understanding*. Oxford University Press.
- Kang, E., & Han, Z. (2015). The efficacy of written corrective feedback in improving L2 written accuracy: A meta-analysis. *The Modern Language Journal*, 99(1), 1-18.
- Kazemi, M. (2012). The effect of Jigsaw technique on the learners' reading achievement: The case of English as L2. *The modern journal of applied linguistics*, 5(3), 170-184.
- Kim, Y. (2006). Effects of input elaboration on vocabulary acquisition through reading by Korean learners of English as a foreign language. *Tesol Quarterly*, 40(2), 341-373.
- Krashen, S.D. (1982). *Principles and practice in second language acquisition*. Routledge.
- Kumaravadivelu, B. (2006). *Understanding language teaching: From method to postmethod*. Routledge.
- Laufer, B. (2005). Focus on form in second language vocabulary learning. *Eurosla yearbook*, 5(1), 223-250.
- Long, M. H. (1991). Focus on form: A design feature in language teaching methodology. *Foreign language research in cross-cultural perspective*, 2(1), 39-52.
- Long, M. H. (2000). Focus on form in task-based language teaching. *Language policy and pedagogy: Essays in honor of A. Ronald Walton*, 179-192.
- Loewen, S. (2011). Focus on form. In *Handbook of research in second language teaching and learning* (pp. 576-592). Routledge.
- Joshi, R. (2005). Vocabulary: A critical component of comprehension. *Reading & Writing Quarterly*, 21(3), 209-219.
- Marsden, E., Mitchell, R., & Myles, F. (2013). *Second language learning theories*. Routledge.
- Masoudi, G. (2017). The effect of vocabulary self-selection strategy and input enhancement strategy on



- the vocabulary knowledge of Iranian EFL learners. *English Language Teaching*, 10(8), 32-42.
- Moradi, M., & Farvardin, M. T. (2016). A comparative study of effects of input-based, meaning-based output, and traditional instructions on EFL learners' grammar learning. *Journal of Research in Applied Linguistics*, 7(2), 99-119.
- Motlagh, S. F. P., & Nasab, M. S. B. (2015). Assessing input enhancement as a positive factor and its impact on L2 vocabulary learning. *Advances in Language and Literary Studies*, 6(1), 227-237.
- Nahavandi, N., & Mukundan, J. (2014). The impact of textual input enhancement on Iranian elementary EFL learners' vocabulary intake. *Asian Social Science*, 10(21), 216.
- Nassaji, H., & Fotos, S. S. (2011). *Teaching grammar in second language classrooms: Integrating form-focused instruction in a communicative context*. Routledge.
- Nation, I. (2006). How large a vocabulary is needed for reading and listening?. *Canadian modern language review*, 63(1), 59-82.
- Nation, P., & Meara, P. (2013). 3 Vocabulary. In *An introduction to applied linguistics* (pp. 44-62). Routledge.
- Nozohouri, R., Mahmoudi, F., Adhami, N., & Rasouli, S. (2016). Investigating the effectiveness of the jigsaw 2 model and traditional learning on reading comprehension of Iranian learners. *Research in English Language Pedagogy*, 3(2), 71-79.
- Perfetti, C. A., & Hart, L. (2001). The lexical basis of comprehension skill.
- Peters, E. (2012). Learning German formulaic sequences: The effect of two attention-drawing techniques. *The Language Learning Journal*, 40(1), 65-79.
- RAND Reading Study Group. (2002). Reading for understanding: Toward an R&D program in reading comprehension.
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching*. Cambridge University Press.
- Rolheiser, C. A. R. O. L., & Stevahn, L. (1998). The role of staff developers in promoting effective teacher decision-making. *Professional Development for Cooperative Learning Issues and Approaches*, 63-78.
- Sabbah, S. (2016). The effect of jigsaw strategy on ESL students' reading achievement. *Arab World English Journal (AWEJ) Volume*, 7.
- Simard, D. (2009). Differential effects of textual enhancement formats on intake. *System*, 37, 124-135.
- Spada, N. (1997). Form-focussed instruction and second language acquisition: A review of classroom and laboratory research. *Language teaching*, 30(2), 73-87.
- Shook, D. J. (1994). FL/L2 Reading, grammatical information, and the input-to-intake phenomenon. *Applied Language Learning*, 5(2), 57-93.
- Toomer, M., Elgort, I., & Coxhead, A. (2024). Contextual learning of L2 lexical and grammatical collocations with and without typographic enhancement. *System*, 121, 103235.
- Vu, D. V., & Peters, E. (2022). Learning vocabulary from reading-only, reading-while-listening, and reading with textual input enhancement: insights from Vietnamese EFL learners. *RELC journal*, 53(1), 85-100.
- Wang, M., Alavi, M., & Izadpanah, S. (2023). The Impact of jigsaw cooperative learning on academic motivation, academic hardiness, and self-efficacy of English foreign language learners. *Learning and Motivation*, 84, 101940.
- White, J. (1998). Getting the learners' attention: A typographical input enhancement study. *Focus on form in classroom second language acquisition*, 85-113.
- Williams, J. (2005). Form-focused instruction. In *Handbook of research in second language teaching and learning* (pp. 695-716). Routledge.
- Zuo, W. (2011). The effects of cooperative learning on improving college students' reading comprehension. *Theory and Practice in Language Studies*, 1 (8), 986 - 989.

