Flourishing Creativity & Literacy

Teaching Word Formation Rules and Vocabulary Knowledge Expansion: Proactive Versus Reactive Focus on Form

Mojgan Rashtchi (Corresponding author)

Islamic Azad University, North Tehran Branch, Tehran, Iran

E-mail: mojgan.rashtchi@gmail.com

Fatemeh Pirali

Islamic Azad University, North Tehran Branch, Tehran, Iran

E-mail: pirali.sara@yahoo.com

Abstract

Focus on form (FonF) instruction has been the source of much debate in the domain of SLA and different studies have addressed its impact on different language skills and sub skills. The present study employed proactive and reactive FonF instructions to teach word formation rules to enhance the learners' vocabulary knowledge. In order to obtain comprehensive results, we adopted a mixed methods design and performed the study in three phases with six different groups of learners. Two groups of the pre-intermediate learners in each phase were selected and assigned to reactive and proactive FonF instructions. The participants took a word formation multiple-choice pretest, received the treatment for 16 weekly sessions, and participated in a posttest. Moreover, we used a checklist to keep a record of the participants' attitudes, behaviors, and grammatical errors during the treatment that we believed could improve the quality of our treatment in the following phases. Another checklist helped us examine the consistency of the teachers' classroom activities with the modes of instruction. The teacher's responses to the checklists helped us to gather the qualitative data that could improve the subsequent phases. The means of the groups in each phase were compared via an independent samples t-test before and after the instruction. The results indicated that in the first and second phases there were significant differences between the word formation knowledge of the learners in the proactive and reactive FonF groups while in the third phase no statistically significant difference was observed with regard to the groups' word formation knowledge.

Keywords: FonF, reactive and proactive FonF instructions, word formation rules, vocabulary knowledge

1. Introduction

Word-formation rules contribute to the learners' lexical resources and help them build a wide range of vocabulary by learning suffixes, prefixes, and word origins. According to Balteiro (2011), word formation refers to "a set of processes for the creation of new words on the basis of existing ones" (p. 25). Thus, it could be stated that certain mechanisms such as derivation, compounding, clipping, blending, conversion, backformation, and abbreviation can play a significant role in broadening the vocabulary knowledge of L2 learners (Tahaineh, 2012). Learning morphological processes seem to be a priority for a number of reasons. Firstly, as Balteiro (2010) put forward, the knowledge of these processes guides L2 learners to construct new words or expand their vocabulary based on the words they already know. Secondly, learners need to gain the knowledge of morphological processes in order to be able to decode and encode, or simply to understand and produce the lexical items that they have not encountered previously (Balteiro, 2010).

Since the emergence of the communicative trends in ELT, attention to morphology has diminished. This, as Balteiro (2010) put forward, has given way to a disregard to the form and "accurate productive creation of words" (p. 26). However, many researchers (Folse, 2004; Laufer, 1997; Nation, 2001; Zimmerman, 1997) have considered vocabulary as an inseparable part of language teaching and have suggested utilizing different techniques and strategies that could place vocabulary at the center of learners' attention. As Folse (2004) stated, "Perhaps the recent interest in second language vocabulary research will also mean a rethinking of the way we approach the teaching of vocabulary" (p. 10). In the same frame of mind, Zimmerman (1997) stressed the importance of intentional vocabulary instruction. Thus, the crucial role of vocabulary in learning and communicating in a language calls for examining a plethora of ways that could facilitate the process of vocabulary learning. The aim of the present study was to clarify whether utilizing reactive and proactive focus on form instructions could contribute to Iranian EFL learners' vocabulary knowledge through learning the word formation mechanisms.

2. Literature Review

Long's (1991) focus on form (FonF) was a response to the problems commenced by traditional approaches to teaching grammar as well as a reaction to purely communicative approaches. Long differentiated between focus on forms (FonFs), focus on form (FonF), and focus on meaning (FonM). FonFs aims to teach specific language structures through sequentially-presented grammatical forms (Ellis, Basturkmen, Loewen, 2002; Long, 1991; Long & Robinson, 1998). However, FonF, as Long (1991) argued, "overtly draws students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication" (pp. 45-46). Drawing on Schmidt's (1990) noticing hypothesis, FonF attempts to draw learners' attention toward their erroneous productions with the help of the teacher. Although FonF emphasizes communication in the classroom and is learner-centered, explicit reference to the problematic areas of L2 structures is its focal point (Long, 1991; Long &Robinson, 1998). As Long (1991) maintained, in FonF attention to form occurs incidentally and in the context of communication and meaningful interaction.

For Long (1997) FonM involves incidental language learning through which the learners' focus is on meaning or content rather than the linguistic forms. In FonM, discrete points of language receive no particular attention (Poole, 2005); it is synthetic and is built on the assumption that learners are capable of analyzing language inductively and arrive at its underlying grammar (Long, 1991). The philosophy underlying FonM instruction, as Willis and Wills (2007) put forth, is to "encourage learners to use the language as much as possible, even if this means that some of the language they produce is inaccurate" (p. 4).

FonF attempts to create a balance between FonFs and FonM by encouraging teachers and learners to attend to language forms during classroom interactions (Long, 1991; Long & Robinson, 1998). The main principles that legitimize the use of FonF in SLA are that learners acquire new linguistic forms when they focus on the message. In fact, learners have a limited information-processing capacity, and thus they have difficulty in using linguistic forms in communication; moreover, communication provides opportunities for focusing on language forms (Ellis, Basturkmen, Loewen, 2001a). As Nassaji and Fotos (2011) maintained, optimal language learning occurs through FonF since it is learner-centered, represents the learner's internal syllabus, and happens when the learner's attention is drawn to meaning in order to solve a communication. Ellis (2005) believed that adult L2 learners should be exposed to FonF instruction if they intend to gain competence in the language because there are some linguistic structures that cannot be internalized without explicit instruction.

One way to categorize FonF is to divide it into proactive and reactive instructions (Long & Robinson, 1998). Reactive FonF occurs when learners produce salient erroneous language structures (Long & Robinson, 1998; Nasaji & Fotos, 2011). Reactive FonF, in its two versions of teacher-initiated and learner-initiated (Kamiya, 2012) plays the role of corrective feedback (Lyster & Ranta, 1997) and is a way to provide the correct language structure to the learners. According to Lyster (2007), reactive FonF instruction draws learners' attention to the structure of language during interaction and as Mennim (2003) believed, is an input given to learners in response to the output they have produced.

Proactive FonF, on the other hand, intends to provide "an array of opportunities for noticing, awareness, and practice (Lyster, 2007, p. 59). It "involves pre-planned instruction designed to enable students to notice and to use target language features that might otherwise not be used or even noticed in classroom discourse" (Lyster, 2007, p. 44). Proactive approach, as Doughty and Williams (1998) argued, is a prediction that teachers make about the problems that the students might have while practicing a new language structure. Proactive form-focused instruction is employed to provoke learners to notice the language structures and help them to restructure their interlanguage (Lyster, 2007). In proactive FonF, the problematic language structures receive more emphasis even if "no immediate error has been produced" (Loewen, 2011, p. 579). Ellis et al.'s (2001a) dichotomy of teacher-initiated and learner-initiated proactive FonF signifies the role of the teacher and the peers in each category for drawing the learners' attention. While the teacher- initiated proactive FonF points to a situation in which the teacher draws the learners' attention to a grammatical structure, the learner-initiated proactive FonF indicates a condition in which the students ask the teacher a question about a linguistic item that they find it problematic (Kimya, 2012). However, only a few studies have addressed proactive FonF (Alcon, 2007; Ellis et al., 2001a; Williams, 1999; Zhao & Bitchener, 2007 as cited in Kamiya, 2012). However, as Doughty and Williams (1998) stated, the question is whether "to be proactive or reactive in focusing on form" (p. 205). In Proactive FonF teachers make predictions regarding their learners' major grammatical problems and design tasks to confront them. On the other hand, reactive focus on form, supported by Long (1991), intends to develop an "on-the-spot" focus on form lesson in response to when learners' linguistic difficulties arise (Doughty & Williams, 1998). It is relevant to mention that for optimal efficacy, both of the approaches can be implemented in a complementary mode (Lyster, 2004a, 2004b).

2.1 Studies on Focus on Form

A review of the research conducted in the area of SLA reveals that FonF instruction has been empirically evaluated via a variety of methodologies and mostly a comparison is made between FonF and FonM instructions. For example, Jourdenais, Stauffer, Boyson, and Doughty (1995) studied the concept of textual enhancement by highlighting forms in order to raise students' attention. Think-aloud protocols reported that the experimental group that was exposed to enhanced texts focused more attentively on the Spanish verb forms than the control group. Roberts (1995), also, reported that focusing on learners' written grammatical errors was more successful when errors were contextualized and perceived by learners. VanPatten and Oikkenon (1996) who investigated the effects of processing instruction on a group of secondary students studying Spanish at the intermediate level found that explicit explanation was the least successful strategy in enabling the participants to remember the rules. Williams and Evans (1998) studied the amount of attention with which intermediate-level ESL learners used the passive voice and adjectival participles. The results demonstrated

that the experimental group that was exposed to input flooding used the passive voice more accurately than the control group, yet no significant differences were observed in the use of adjectival participles.

Kormos (2000) who examined the role of attention in monitoring second language speech production in both L1 and L2 found that different stages of mastery over L2 do not affect the learners' noticing to language structures. Ellis et al. (2001a) examined the impact of incidental and transitory focus on form on learners' uptake in twelve hours of communicative ESL teaching and concluded that reactive FonF was more influential in enhancing the participants' uptake. Ellis et al.'s (2001b) study indicated that most of their participants tended to initiate episodes containing preemptive FonF during meaning-focused instruction.

Poole and Sheorey's (2002) case study on a single participant questioned the fact that noticing language forms could end in their acquisition. Garcia Mayo (2002) investigated the effect of two FonF tasks, a dictogloss, and a text reconstruction, in the advanced level. Both tasks were found to be useful; though the results of the quantitative analysis showed that text-reconstruction was a more suitable form-focused task for this group of learners. Park (2003) in his experimental study investigated the influence of externally created salience on learners' internally generated salience and concluded that increase of the perceptual salience of the target forms did not necessarily lead to noticing the forms. In a study conducted by Sheen (2003), in an elementary school in Quebec, it was shown that the FonF group outperformed the FonM group on the two target grammar areas while the FonM group continued producing largely incorrect forms and thus allowing fossilization to develop.

Moreover, Pool (2005) conducted a number of studies to discover how FonF instruction could be implemented in a student-generated variety. His first study comprised eight ESL students of different proficiency levels. Based on the data derived from tape-recording the students' interactions in group work, Pool found that they "infrequently attended to grammar (20%) in favor of vocabulary (80%)" (p. 50). Subsequently, Poole (2005) replicated Williams' (1999 as cited in Poole, 2005) with 19 ESL students in an advanced writing class and found that the "majority of students attended to vocabulary (89.8%) instead of grammar (10.2%)" (p. 50). These findings question students' attention to L2 grammatical forms, and thus the value of FonF instruction, particularly "in its student-generated variety" (Poole, 2005, p. 50). Besides, the effectiveness of input enhancement, as a form focused activity, on learners' reading comprehension ability and learning of passive forms by Lee (2007) demonstrated that in the form correction task the Korean students who were provided with enhanced texts were more successful than the ones with the unenhanced texts. Also, Haung (2008) showed that individual learning styles could affect the degree of learners' attention to their erroneous language productions.

3. Purpose of the study

The present study aimed at teaching word formation rules through reactive and proactive FonF Instructions. As stated earlier, the vocabulary stock of a language is shaped by means of what is usually known as word-formation mechanisms of compounding, clipping, blending, conversion, and abbreviation (Balteiro, 2011). Balteiro (2011) argued that native speakers naturally acquire the ability to create words at an early age, whereas non-native speakers do not acquire them spontaneously, mainly because of the difference between the nature of exposure (classroom vs. natural settings) and the amount of exposure to language (Balteiro, 2011). Therefore, to us, it seemed necessary to study the way word-formation rules could be taught to Iranian EFL learners as we believed such rules could help the learners focus on the structure of language, broaden their vocabulary knowledge, and develop their language accuracy.

In order to achieve the purpose of the study, we decided to conduct the study in three different phases for two reasons. Firstly, we thought for coming up with generalizable results we needed to have a relatively large number of participants. Secondly, drawing a clear distinction between proactive and reactive FonF instructions was necessary for obtaining reliable results and teacher experience could play a crucial role in this regard. Thus, in order to increase the internal validity of the study, we decided to replicate the study while enriching it with the qualitative study obtained from each phase. Each phase of the study consisted of both quantitative and qualitative data collection procedures. For quantitative data collection, a quasi-experimental study with non-equivalent control group pretest-posttest design was used. Moreover, two checklists provided us with qualitative data regarding the teacher and the participants. Thus, since the study integrated the elements of both qualitative and quantitative approaches to research it could be considered a mixed methods study (Creswell, 2014). Also, in view of the fact that we used both qualitative and quantitative data and analyzed them separately to obtain a comprehensive understanding of the classroom procedure, our study can be regarded as a study with "convergent parallel mixed methods" design (Creswell, 2014, p. 221). Thus, in order to achieve the purpose of the study, we formulated the following major research question:

RQ: *To what extent do reactive FonF and proactive FonF instructions affect Iranian EFL learners' learning of the English word formation?*

We then devised the following minor research questions from the major research question to follow the direction of our study in three different phases:

RQ1: *Does the participants' knowledge of word formation differ in reactive FonF and proactive FonF in the first phase of the study?*

RQ2: *Does the participants' knowledge of word formation differ in reactive FonF and proactive FonF in the second phase of the study?*

RQ3: *Does the participants' knowledge of word formation differ in reactive FonF and proactive FonF in the third phase of the study?*

RQ4: *How does the information gathered from the student and teacher checklists contribute to the procedure of the study?*

3. Method

3.1 Participants

In each phase, two groups of learners at the intermediate level of the English language proficiency received the treatment for16 weekly sessions. In the first phase 46 learners (n1=n2=23), 20 females and 26 males, in the second phase 24 participants (n3=n4=12), 11 females and 13 males, and in the third phase, 26 learners (n4=n5=13), 14 females and 12 males participated. The groups were selected based on convenience sampling and were randomly assigned to the Reactive Experimental group (RE) and the Proactive Experimental (PE) group in each of the three phases of the study. The Reactive Experimental groups received the treatment through reactive FonF instruction while the Proactive Experimental groups were exposed to proactive FonF instruction.

3.2 Instrumentation

To collect data, we developed two parallel tests with 20 multiple-choice items based on the participants' textbook (*Select Reading*: *Pre-intermediate Level,* Lee & Gundersen, 2011). The tests were vocabulary tests that examined the participants' knowledge of English word formation rules before and after the treatment. Two experts with more than ten years of experience in the teaching and testing of English confirmed the content of the tests. Pilot testing showed B-index values between 0.07 and 0.11 for the test items. After the treatment, the B-index of the test items obtained by comparing the participants' pretest and the posttest answers showed that the test items met the required criteria (0.07 to 0.11).Furthermore, the agreement (dependability) of the achievement tests computed by estimating the threshold loss agreement through Subkoviak approach (Brown, 2005) showed an acceptable agreement index (r=0.81).

Additionally, a teacher checklist (Appendix A) recorded the classroom activities during the treatment. The checklists helped us to ensure that the teaching procedures in each of the groups were followed strictly, as they were planned. We analyzed the teacher's responses to the checklists after each session. The last instrument was a student checklist (Appendix B) utilized by the teacher who instructed the six groups of the study to record the participants' activities, attitudes, and behaviors, during the treatment. For examining the content validity of the checklists, three English teachers and two university instructors were consulted. We revised the items in both checklists based on their comments. It is worth mentioning that as the result of some modifications in the process of treatment, we had to alter some of the items (e.g., Questions 4 & 8).

We selected some short stories from *Select Reading*: *Pre-intermediate Level* (Lee & Gundersen, 2011) to use in the classes. For RE groups, five to seven comprehension-check questions and some pictures including the keywords of the passages followed the stories to initiate group discussions. We used the same stories for PE groups; however, we changed the passages to cloze format and prepared some fill-in-the-blanks with sentences extracted from the passages. Our assumption was that cloze passages would increase the learners' focus on the materials.

3.3 Data collection procedure

There were three stages in each lesson, presentation, practice, and review. In the presentation stage, in both RE and PE groups, the teacher introduced a topic, and the participants had a 10-minute discussion about it. In the practice stage, the students in RE groups read a two-page story and answered some comprehension-check questions. The questions were formulated in a way that the students needed to use different word forms to answer them. If the students' answers indicated their lack of knowledge regarding the word formation, she would implicitly direct their attention to them. However, if the answers were correct, the teacher did not spend any time on them. In the practice stage, PE groups received the same passages but in cloze format. After reading the passages, the learners discussed how to complete the sentences. Then the teacher checked the answers, drew the students' attention to the formation of the words, and explained the rules explicitly. The following session, the students in RE groups received a series of pictures that could enable them to talk about the reading passages via the newly learned words. However, for PE groups some sentences were extracted from the passages and transformed into fill-in-the-blanks and multiple-choice formats. The main classroom activity during the review stage was classroom discussion. The students in the RE groups led the classroom discussion through the questions they had prepared at home, whereas the learners in the PE groups answered the teacher's questions. The purpose of the questions was to encourage the learners to use the newly learned word formation rules.

4. Results

To answer the research questions of the study, the means of the experimental and control groups in each phase (pre- and posttest) were compared using SPSS software version 17.0. The statistical analysis employed a t-test for independent groups, with alpha set at the .05 level of significance, two-tailed test. The null hypotheses asserted that the groups performed statistically equivalent on the posttests. In addition, the Kolmogorov–Smirnov test (K-S) was run in each phase of the study before and after the treatment to examine whether the distribution of the scores enjoyed normality.

4.1 The first phase

The results obtained from the Kolmogorov–Smirnov test (K-S) for RE1 and PE1 in this phase showed that the distribution of the scores enjoyed normality before the treatment (p>.05). Table 1 shows the descriptive statistics obtained from the administration of the English word formation test to RE1 (M=10.87, SD=3.2) and PE1 (M=12.78, SD=3.6).

Table 1. First phase, descriptive statistics for the word formation pretest

Tests Groups	N	Mean	SD.	K-S
RE1	23	10.87	3.209	.2.00
PE1	23	12.78	3.618	. 2.00

An independent samples t-test was run to examine whether the groups were homogeneous with regard to their word formation knowledge before the treatment. As Table 2 shows, there was no statistically significant difference between RE1 and PE1 regarding the knowledge of word formation before the treatment; t (44) = -1.89, *p>.05.*

Table 2. First phase, independent samples t-test, pretest

	Levene's Test for Equality of Variances		t-Test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Equal Variances Assumed	.749	.391	1.897	44	.064	-1.913	1.008	3.945	.119	

As Table 3 shows, the mean of the PE1 (M=13.43, SD=3.1) is larger than the mean of the RE1 (M=11.17, SD=3.2). Additionally, the results of K-S tests show that the distributions of the scores were normal, *p>.05.*

Table 3. First phase, descriptive statistics for the word formation posttest

Groups	N	Mean	SD.	K-S
RE1	23	11.17	3.200	.2.00
PE1	23	13.43	3.174	. 2.00

As signified in Table 4, there is a statistically significant difference between the means of the two groups on the word formation knowledge; t (44) = 2.40, *p< .05*). Thus, as the results showed, PE1 group outperformed RE1 group on the word formation knowledge.

Table 4. First phase, independent samples t-test, posttest

	Levene's Test for Equality of Variances		t-Test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Dif.		
								Lower	Upper	
Equal Variances Assumed	.025	.875	-2.406	44	.020	-2.261	.940	-4.155	-.367	

In the first phase of the study, RE1 and PE1 groups received the treatment for 16 sessions. Although the posttest results showed a statistically significant difference between the groups, the information gathered from the RE1 and PE1 student checklists convinced us that the teachers' explanations were not sufficient and the statistical difference could be due to factors other than the type of treatment. Particularly, the responses gathered from questions 8, 10, 11, and 13 were not satisfactory. It seemed to us that the teacher could not sufficiently draw the participants' attention to the explanations of

the rules (Question No. 8). In addition, she had problems with time management (Question No. 10) and corrective feedback (Question No. 11). By examining the PE1 student checklists, we found that the learners considered the treatment repetitive and uninspiring (Questions No. 8 & 10) and that they seemed not to have sufficient cooperation (Question No. 2). Therefore, after some modifications to the treatment, the second phase of the study commenced enriching our findings.

4.2 The second phase

Table 5 shows the descriptive statistics obtained from the administration of the word formation pretest in the second phase for RE2 (M=11, SD=2.79) and PE2 (M=11.67, SD=2.57). The result of the K-S test showed that the distribution of the scores in the pretest was normal (p>.05).

Table5. Second phase, descriptive statistics for the word formation pretest

Groups	N	Mean	SD.	K-S
RE2	12	11.00	2.796	.102
PE2	12	11.67	2.570	. 119

As shown in Table 6, there is no statistically significant difference between the means of the two groups, RE2 and PE2 on the word formation knowledge; t (22) = -0.608, p>.05) before the treatment.

Table 6. Second phase, independent samples t-test, pretest

	Levene's Test for Equality of Variances		t-Test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Dif.	
								Lower	Upper
Equal Variances Assumed	0.09	0.767	-0.608	22	0.549	-0.667	1.096	-2.94	1.607

Table 7 illustrates the descriptive statistics in the second phase. PE2 group has a higher mean (M=15.17, SD=1.33) than the RE2 (M= 11.83, SD= 3.15).

Table7. Second phase, descriptive statistics for the word formation posttest

Groups	N	Mean	SD.	K-S
RE2	12	11.83	3.157	.200
PE2	12	15.17	1.337	. 198

The independent samples t-test, run after the treatment (Table 8) shows a statistically significant difference between the means of the RE2 and PE2 t (22) = -3.368, p< .05). Therefore, it could be concluded proactive FonF was more effective than the reactive FonF instruction in enhancing the EFL learners' word formation knowledge.

Table 8. Second phase, independent samples t-test, posttest

	Levene's Test for Equality of Variances		t-Test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Dif.	
								Lower	Upper
Equal variances assumed	4.716	0.051	-3.368	22	0.003	-3.333	0.99	-5.386	-1.281

In the second phase, RE2 followed the same procedure employed in RE1. However, the teacher tried to modify her instruction based on the data obtained from the students' checklists. As mentioned, the problem in RE1 was that the learners did not pay enough attention to the teacher's explanations. Thus, in the second phase focus on the rules was accompanied by writing them on the board using colorful markers while the learners were advised to take notes. Additionally, some questions were put forth to ensure that they had comprehended the rules thoroughly. Meanwhile, the teacher tried to trigger group discussions in the classroom to keep a balance between form and meaning (Question No. 2).

In PE2 group, the teacher provided the learners with the opportunity to discover the rules by themselves. She provided corrective feedback and monitored the learners' language production. In this phase, she tried to ask as many related questions as she could (Question No. 7) and sufficiently emphasize the forms (Question No. 8). These were the activities, which she had almost taken no notice of during the first phase of the study. The results of the posttest showed a statistically significant difference between the groups. However, a meticulous scrutiny of the checklists encouraged us to repeat the treatment. Replicating the study could enable us to increase the external validity of our study, and thus generalize the findings. In fact, by examining the participants' responses to the checklists and analyzing the teacher's teaching procedure we could also improve the quality of the treatment. Therefore, we could be able to decide upon the variables that we should implement and the ones that we should control. In other words, replication of the study could help us evaluate proactive and reactive FonF with more confidence.

4.3 The third phase

Like the groups in the first and second phases, the two groups in the last phase received the treatment for 16 sessions and afterward sat for the same posttest. The result of the K-S test revealed a normal distribution of the scores ($p>.05$). As shown in Table 9, the means of the RE3 (M= 10.85, SD= 1.86) and PE3 (M= 10.92, SD= 1.75) were not much distant from each other.

Table 9. Third phase, descriptive statistics for the word formation pretest

Groups	N	Mean	SD.	K-S
RE3	13	10.85	1.864	.279
PE3	13	10.92	1.754	. 200

Table 10 indicates the results of the independent samples t-test run on the pretest. As Table 10 shows, there was no statistically significant difference between the means of the RE3 and PE3 before the instruction; (t (24) = -.108, $p>.05$).

Table 10. Third phase, independent samples t-test, pretest

	Levene's Test for Equality of Variances		t-Test for Equality of Means					95% Confidence Interval of the Diff.	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	Lower	Upper
Equal Variances Assumed	.038	.847	-.108	24	.915	-.077	.710	-1.542	1.388

The results of the K-S test in the posttest (Table 11) showed that the distribution of the scores in both groups was normal ($p>0.05$). The means of RE3 (M=14.08, SD=1.65) and PE3 (M=15.8, SD=1.80) were not distant from each other.

Table 11. Third phase, descriptive statistics for the word formation posttest

Groups	N	Mean	SD	K-S
RE3	13	14.08	1.656	.259
PE3	13	15.08	1.801	. 200

As shown in Table 12, there was no statistically significant difference between RE and PE; t (24) = -1.47, $p>.05$. Thus, it could be concluded that proactive and reactive FonF instructions in the third phase did not create statistically significant differences on the word formation knowledge of the participants. The finding was not consistent with the results obtained from the first and second phases of the study.

Table 12. Third phase, independent samples t-test, posttest

	Levene's Test for Equality of Variances		t-Test for Equality of Means					95% Confidence Interval of the Dif.	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	Lower	Upper
Equal Variances Assumed	.003	.955	-1.474	24	.154	-1.000	.679	-2.401	.401

In this phase, we decided to intensify FonF instruction by drawing the participants' attention to the ways the target words could be used as nouns, verbs, adverbs, and adjectives. Our assumption was that including parts of speech in the classroom procedure could help the participants to gain mastery over word formation rules and be able to use them more accurately. Thus, we added the use of the correct parts of speech along with several examples and explanations of the rules to the classroom procedures. We believed that they could increase the learners' focus on the rules. Moreover, some additional tasks were designed for both groups, and minor modifications were employed in the classroom procedure. Some genuine situations related to the topic of each session were created for RE3 group discussions. Overall, it could be stated that the classroom activities in the third phase were more likely to resemble a FonF approach. In addition, the teachers' time management and mastery over the treatment played a crucial role in achieving the results.

The teacher's responses to the student checklists in the third phase were more constructive than her answers in the first and second phases of the study. It could be inferred that the learners were more active and cooperative in the classroom (Questions 1 & 2), they more tolerant (Question 4), and enthusiastically participated in the classroom discussions (Question 10). In fact, in the third phase of the study, we noticed that RE3 was more positive than RE1 and RE2 in the first and second phases. Although the learners' personality factors could be a source of difference between RE1 and RE2 on the one hand and RE3 on the other, we can attribute part of this change to the type of instruction they received.

5. Discussion

The negative answer to the first and second research questions supported proactive FonF instruction in teaching word formation rules to the intermediate level learners indicating that conscious attention to form is necessary for learning language structures. As Anderson and Beckwith (2010) put forward, any use of instructional activity that draws students' attention to linguistic forms (e.g., grammar or morphology) during the communicative process would promote language acquisition. The results of this study can find support from Nassaji and Tian (2010) who found that beginner and intermediate level learners benefit more from proactive FonF than reactive FonF instruction. Similarly, Alcon (2007) reported that proactive (or preemptive) focus on form "seems to direct learners' selective attention to vocabulary items, which results in learners' noticing" (p. 56). De la Fuente (2006) also found proactive FonF instruction to be more beneficial for the retention of new L2 vocabulary. Moreover, as the review of the literature shows, the usefulness of proactive FonF in enhancing the English language learners' vocabulary knowledge has been signified by Joghatai and Barjesteh (2016), Panahzadeh and Gholami (2014), and Sangarun (2005). However, the preeminence of proactive over reactive FonF stands in contrast to Pica (1994) who showed that negotiation played a crucial role in learning the new words in the target language.

Furthermore, the study highlighted the role of teachers in the process of instruction. As Nassaji (2015) maintained, when teachers interact with L2 learners, as in proactive FonF instruction, they can employ different strategies to draw learners' attention to language forms, and thus benefit more from the classroom. For example, teachers' corrective feedback can motivate learners to focus on the grammatical accuracy of the sentences they produce and is an inseparable component of language learning, especially in a FonF instruction mode (Anderson & Beckwith, 2010). Ellis et al. (2002) also underlined the role of teachers in paying attention to form by stating that they "need to develop a repertoire of options for addressing form in the context of communicative teaching" (p. 430).

The positive answer to the third research question, however, shows that proactive and reactive FonF instructions similarly affected the learners' knowledge gain on the English word formation. One reason for obtaining a result different from the first and second phases of the study could be attributed to the improvement of the treatment after analyzing the teacher's answers to the checklists. As mentioned, we decided to intensify FonF instruction by incorporating the parts of speech in the third phase of the study. Thus, we can claim that in teaching word formation rules frequency of the input enhanced learners' attention, and thus played a crucial role in mastering language forms. Contrary to De la Fuente (2006) who emphasized the role of "explicit focus on forms in promoting acquisition of word morphological aspects" of Spanish words (p. 263), the present study showed the prominence of FonF instruction. In fact, it can be concluded that FonF in both of its modes (i.e., reactive and proactive) can boost L2 vocabulary learning via word formation rules. This finding, as Chan and Li (2002) argued, puts on view the potential benefits of FonF instruction for developing learners' awareness of the target language. Likewise, as Lyster (2004a, 2004b) argued, for obtaining best results, both approaches could be put into practice.

Another reason that we can attribute to the results obtained from the third phase of the study is the teacher expertise. As the teacher gained experience regarding teaching word formation rules, she became more successful in drawing the learners' attention to the forms. She became more expressive, used appropriate gestures to draw the learners' attention to the rules (Kamiya, 2012), and became more efficient in conducting the classroom discussions. Further, as the data obtained from the checklists revealed, the teacher became more capable of providing opportunities for the learners to modify their output (Baralt, 2013). The efficacy of the instruction can be attributed to the effective role of the corrective feedback learners get from the teacher while engaged in communicative tasks. Swain (1998) allocated a facilitative role to teachers' feedback and argued that corrective feedback draws learners' attention to linguistic structures, and by noticing them, they recognize the gap between their interlanguage and the target language. Put differently, feedback provides learners the opportunity to focus on their output, compare the erroneous and correct forms, and produce the accurate form (VanPatten & Oikkenon, 1996).

Besides the effect of the teacher's role, we believe that the type of tasks we employed during the treatment (e.g., cloze tasks, fill-in- the- blanks, pictures) could produce a communicative environment and could encourage the learners to focus on the forms (Ellis et al., 2001a). In line with this conclusion is the argument that meaning-focused instruction solely is not sufficient for learning a language. Extreme dependence on the naturalistic and communicative methods of L2 learning can potentially be harmful in SLA instruction. The negative consequence of FoM can be training extremely fluent L2 learners who fail to be accurate. The ideal situation is to have a balance between fluency and accuracy (Swain, 2001).

However, the results obtained from the three phases of this study contradict Ellis et al., (2001a) who showed that "uptake was higher and more successful in reactive focus on form and in student-initiated focus on form rather than in teacher-initiated focus on form" (p. 281). The present study indicated that both proactive and reactive modes of FonF could change into uptake when the focus of the learners is on the language structures within the communicative classroom activities. This finding can find supported from Ellis et al.'s (2001a, 2001b) which concluded that FonF and communicative activities could operate concurrently in a classroom.

Our findings showed that the information gathered from the student and the teacher checklists contributed to the procedure of the study. Thus, we should assert that replication of the study could enrich the classroom procedures and could result in the participants' higher achievements. We recommend other researchers to replicate their treatments if they intend to achieve results that are more accurate. The affirmative answer to the last research question of the study verifies the fact that extended treatments can help researchers achieve results that are more comprehensive, and thus can increase the external validity of research findings.

6. Conclusions

The aim of this study was to explore the efficacy of FonF instruction in its two modes of proactive and reactive on the word formation knowledge of three groups of EFL learners. In both modes of instruction, the learners' attention was drawn to the form while they were engaged in meaningful and real-life tasks. The results of the first and second phases of the study appeared to contradict the results of the third phase. Thus, it could be concluded that the qualitative data collected during the study could enable us to enrich the process of instruction. Furthermore, the teacher's experience in employing the two modes of FonF instruction was influential in attaining the results.

The findings of this study have valuable implications for those who are involved in language teaching pedagogy. First, teaching grammar in EFL classes can be incorporated with communicative tasks. Additionally, EFL teachers can integrate reactive and proactive FonF instructions to gain outcomes that are more satisfactory in terms of teaching word formation rules and vocabulary. Also, syllabus designers, material developers, and practitioners can design tasks that draw learners' attention to form while they are engaged in meaning-based activities in the process of language learning.

What needs further investigation, however, is to analyze EFL learners' think aloud protocols and study the cognitive processes involved while exposed to proactive and reactive FonF. Furthermore, we need to study how Iranian EFL learners perceive FonF instructions and to what extent they think, they need to receive explicit instruction on word formation. Another subject that requires further study is the role of learning word formation rules on boosting the vocabulary recall and retention of EFL learners. In addition, a combination of the two modes of instruction can be used to enhance learners' accuracy in using newly learned vocabulary in writing.

This study suffered from certain limitations. First, to the best of our knowledge, the role of reactive and proactive FonF instructions on teaching the word formation rules have not been studied previously; thus, access to the related literature was limited to FonF instruction. Second, teaching the wide range of word formation rules required a longer duration; however, the treatment had to conform to the schedule of the language institute where we conducted the study. Consequently, we merely focused on teaching some of the word-formation mechanisms. Moreover, the long duration of the treatment could have affected the teacher's performance in both modes of teaching; yet having different teachers could add a new variable to the study.

References

Alcon, E. (2007). Incidental FF, noticing and vocabulary learning in the EFL classroom. *Journal of English Studies, 7* (2), 41-60.

Anderson, P., & Beckwith, M. (2010).Form-focused teaching for the intermediate Latin student. *Teaching Classical Languages, 2*(1), 21-52. Retrieved from http://tcl.camws.org/sites/default/files/TCL_2.1_Full.pdf#page=35

Balteiro, I. (2011). Awareness of L1 and L2 word-formation mechanisms for the development of a more autonomous L2 learner. *Porta Linguarum*, *15*(1), 25-34. doi:10.4304/jltr.3.6.1105-1113

Baralt, M. (2013).The impact of cognitive complexity on feedback efficacy during online versus face-to-face interactive tasks. *Studies in Second Language Acquisition, 35*(4), 689-725. DOI: 10.1017/S0272263113000429

Brown, J. D. (2005). *Testing in language programs*. New York, NY: McGraw-Hill.

Chan, A. Y. W., & Li, D.C.S. (2002). Form-focused remedial instruction: An empirical study. *International Journal of Applied Linguistics*, *12*(1), 24-53. DOI: 10.1111/1473-4192.00023

Creswell, J.W. (2014). *Research design (fourth edition)*. Los Angeles, CA: Sage.

De la Fuente, M. J. (2006). Classroom L2 vocabulary acquisition: Investigating the role of pedagogical tasks and form-focused instruction. *Language Teaching Research 10*(3), 263–295.

Doughty, C. (1998). *Focus on form in classroom second language acquisition*. Cambridge: Cambridge University Press.

Doughty, C., & Williams, J. (1998). *Focus on form in classroom second language acquisition*. New York, NY: Cambridge University Press.

Ellis, R., Basturkem, H., &Loewen, S. (2001a). Learner uptake in communicative ESL lessons. *Language Learning, 51* (2), 281-318. DOI: 10.1111/1467-9922.00156

Ellis, R., Basturkmen, H., & Loewen, S. (2001b). Preemptive focus on form in the ESL classroom. *TESOL Quarterly*, *35*(3), 407-432. DOI: 10.2307/3588029

Ellis, R., Basturkmen, H., & Loewen, S. (2002). Doing focus-on-form. *System, 30*(4), 419-432. http://dx.doi.org/10.1016/S0346-251X(02)00047-7

Folse, K. S. (2004). Myths about teaching and learning second language vocabulary: What recent research says. *TESL Reporter, 37 (2), 1-13*.

García Mayo, M. P. (2002). The effectiveness of two form-focused tasks in advanced EFL pedagogy. *International Journal of Applied Linguistics*, *12*(2), 156-175.DOI: 10.1111/1473-4192.t01-1-00029

Huang, S. (2008). Raising learner-initiated attention to the formal aspects of their oral production through transcription and stimulated reflection. *IRAL-International Review of Applied Linguistics in Language Teaching* 46 (4), 375-392. DOI: https://doi.org/10.1515/IRAL.2008.016

Joghatai, M., & Barjesteh, H. (2016). The effect of preemptive focus on form instruction on ESP learners' vocabulary knowledge across different proficiency level. *International Journal of Modern Language Teaching and Learning 1 (2), 36- 43*.

Jourdenais, R., Stauffer, S., Boyson, B., Doughty, C., (1995). Does textual enhancement promote noticing? A think-aloud protocol analysis. In R. Schmidt (Ed.), *Attention and awareness in foreign language learning* (pp. 183-216). Honolulu, Hawaii, Second Language Teaching & Curriculum Center.

Kamiya, N. (2012). Proactive and reactive focus on form and gestures in EFL classrooms in Japan. *System* 40 (3), 386-397. http://dx.doi.org/10.1016/j.system.2012.09.005

Kormos, J. (2000). The role of attention in monitoring second language speech production. *Language Learning*, *50* (2), 343-384. DOI: 10.1111/0023-8333.00120

Laufer, B. (1997). The lexical plight in second language reading: Words you don't know, words you think you know, and words you can't guess. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 20–34). Cambridge: Cambridge University Press.

Lee, L. & Gundersen, E. (2011).*Select readings: Pre-intermediate*. Oxford: Oxford University Press.

Lee, S. K. (2007). Effects of textual enhancement and topic familiarity on Korean EFL students' reading comprehension and learning of passive form. *Language learning*, *57*(1), 87-118.

DOI: 10.1111/j.1467-9922.2007.00400.x

Loewen, S. (2011). Focus on form. In E. Hinkel (Ed.), Handbook of research in second language teaching and learning (Vol. 2, pp. 576-592). New York, NY: Routledge.

Long, M. H. (1991). Focus on form: A design feature in language teaching methodology. In K. de Bot, R. Ginsberg, & C. Kramsch (Eds.), *Foreign language research in cross-cultural perspective* (pp. 39–52). Amsterdam: John Benjamins.

Long, M. H. (1997). *Focus on form in task-based teaching*. McGraw-Hill. Retrieved from: http://change.c4835149.myzen.co.uk/wp-content/uploads/2013/12/Focus-on-form-in-Task-Basedteaching.pdf (January 2016).

Long, M.H., Robinson, P. (1998). Focus on form: Theory, research, and practice. In C. Doughty & M.H. Long (Eds.), Focus on form in classroom second language acquisition (pp.15-41). Cambridge: Cambridge University Press.

Lyster, R. (2004a). Differential effects of prompts and recasts in form-focused instruction. *Studies in Second Language Acquisition*, *26*, 399-432. DOI: https://doi.org/10.1017/S0272263104263021

Lyster, R. (2004b). Research on form-focused instruction in immersion classrooms: Implications for theory and practice. *Journal of French language studies*, *14*(03), 321-341. DOI: https://doi.org/10.1017/S0959269504001826

Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach*. Amsterdam: John Benjamins.

Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition, 19* (1), 37–66.

Mennim, P. (2003). Rehearsed oral L2 output and reactive focus on form. *ELT Journal, 57* (2),130-138. DOI: https://doi.org/10.1093/elt/57.2.130

Nassaji, H. (2015). How to draw learner's attention to form in communicative contexts. *Contact Magazine*, *41*(4), 5-11.

Nassaji, H., &Fotos, S. (2011). *Teaching grammar in second language classrooms: Integrating form-focused instruction in communicative context*. New York, NY: Routledge.

Nassaji, H., &Tian J. (2010).Collaborative and individual output tasks and their effects on learning English phrasal verbs. *Language Teaching Research*, *14*(4), 397-419.

Nation, I.S.P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.

Panahzadeh, V., & Gholami, J. (2014). The relative impacts of planned preemptive vs. delayed reactive focus on form on language learners' lexical resource. *The Journal of Language Teaching and Learning, 4(1), 69-83.*

Park, E. S. (2003). Constraints of implicit focus on form: Insights from a study of input enhancement. *Teachers College Columbia University Working papers in TESOL and Applied Linguistics, 4* (2), 1-22.

Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes? *Language Learning, 44,* 493–527.

Poole, A. (2005). Focus on form instruction: Foundations, applications, and criticisms. *The Reading Matrix*, *5*(1), 47-56.

Poole, A. B., & Sheorey, R. (2002). Sophisticated noticing: Examination of an Indian professional's use of English. *Indian Journal of Applied Linguistics*, *28* (2), 121-136.

Roberts, M. (1995).Awareness and the efficacy of error correction. In R. Schmidt (Ed.), *Attention and awareness in foreign language teaching* (pp. 163-182). Honolulu, Hawaii: University of Hawaii: Second Language Teaching & Curriculum Center.

Sangarun, J. (2005). The effects of focusing on meaning and form in strategic planning. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 111-42). Philadelphia: John Benjamins.

Sheen, R. (2003). Focus on form–a myth in the making? *ELT Journal*, *57*(3), 225-233. DOI: https://doi.org/10.1093/elt/57.3.225

Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics, 11*(2), 129-158. DOI: https://doi.org/10.1093/applin/11.2.129

Swain, M. (1998). Focus on form through conscious reflection. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition*. (pp.64-81). Cambridge: Cambridge University Press.

Swain, M. (2001). Integrating language and content teaching through collaborative tasks. *Canadian Modern Language Review*, *58*(1), 44-63. DOI: http://dx.doi.org/10.3138/cmlr.58.1.44

Tahaineh, Y. (2012). The awareness of the English word-formation mechanisms is a necessity to make an autonomous L2 learner in EFL context. *Journal of Language Teaching and Research*, 3 (6), 1105-1113. DOI:10.4304/jltr.3.6.1105-1113

VanPatten, B., & Oikkenon, S. (1996). Explanation versus structured input in processing instruction. *Studies in Second Language Acquisition*, *18*(04), 495-510. DOI: https://doi.org/10.1017/S0272263100015394

Williams, J., & Evans, J. (1998). What kind of focus and on which forms? In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp.139-155). Cambridge: Cambridge University Press.

Willis, D., & Willis, J. (2007). *Doing task-based teaching*. Oxford: Oxford University Press.

Zimmerman, C. B. (1997). Do reading and interactive vocabulary instruction make a difference? An empirical study. *TESOL Quarterly*, *31*(1), 121-140. DOI: 10.2307/3587978

Appendix A
Teacher Checklist

Teacher: observer: date: time:

Checklist	Clearly evident	Somewhat evident	Not evident	Not attended	Groups
1. I made a balance between focusing on form and meaning.					RE
2. I achieved the goal of this session.					PE & RE
3. I reviewed the previously learned items.					PE & RE
4. I wrote the forms on the board and focused on them.					RE
5. I managed to have enough interaction among the learners.					PE & RE
6. I checked the students' comprehension.					PE & RE
7. I asked enough questions related to the topic of the session.					PE
8. I sufficiently emphasized the forms.					PE
9. My tasks were real- life like.					RE
10. I could manage the time for completing the tasks.					PE & RE
11. I corrected the students and drew their attention to the wrong forms they used.					PE & RE
12. The topics were interesting.					PE & RE
13. I worked on how the students could fit the words in the correct slot.					PE
**Type of the material used in …………… session	passages	pictures	sentences	cloze passages	PE & RE

Appendix B
Student Checklist

Teacher: observer: date: time:

checklist	clearly evident	somewhat evident	not evident	not attendant	Groups
1. Were the learners interested in the topic of the session?					PE & RE
2. Did the learners have enough cooperation?					PE & RE
3. Were the learners encouraged to assess their own and their peers' progress?					PE & RE
4. Were the learners patient enough to allow the teacher to go over their errors step by step?					PE & RE
5. Were the learners interested in the use of the pictures?					RE
6. Were the learners keen on having a negotiation?					RE
7. Were the learners able to recognize how to use the words in correct places?					PE
8. Did the learners pay attention to the teachers' explanations during the class?					PE
9. Were they given time and opportunity to take part in the discovery of the rules?					PE
10. Did they get bored during the session?					PE & RE