The Effect of Interaction on Lexical Acquisition

Maryam Jamali

Islamic Azad University of Takestan

Abstract

This research showed that appropriate input and suitable contexts for interaction among students can lead to successful second language acquisition (SLA). This study based on Swain's (2005) notion of collaborative dialogue, aimed to study whether EFL learners participating in negotiation of meaning based tasks collaborate with each other and, if so, to investigate the role of this behavior in the acquisition of lexical meaning. This experimental study investigates the differential effects of three conditions: nonnegotiated premodified input, negotiation without "pushed output"(Swain, 1985), and negotiation plus pushed output on L2 learners' vocabulary comprehension and acquisition (receptive and productive) . The study reported here investigated the effect of emotional involvement as compared to cognitive involvement both applied to the pre-task phase of a reading- while- listening focused task on lexical acquisition as a result of engagement with the task. Emotional involvement was operationalized as a video clips shown before the main task which elicited positive affect. The findings imply pedagogical suggestions for task-based vocabulary teaching any development acquired through CMC might eventually be transferred to the oral mode. This study is twofold: the first experiment examines the potential for lexical acquisition by beginning- level learners in CMC as compared to face-to-face(FTF).Experimental 2 describes sessions between four beginning- level learners and the researcher in regards to their saved CMC chat files from Experimental 1. An analysis of their saved and stored "conversations" revealed that learners were able to identify errors, recognize reasons for instances of non-understanding that took place with their CMC partner,and spot , as well as correct problems in their interlanguage.

Introduction

There is a "general consensus" that a well-established goal in learning a foreign language is the ability to communicate effectively in that language (Hedge 2000,p.40). Lexical competence is

currently acknowledged by many vocabulary specialists to be a core component of communicative competence (Coady & Huckin, 1997; Harley,1996; Rechards & Renandya,2002). Thus, in the field of SLA how vocabulary is acquired and what the most efficient means are to promote effective acquisition are worthwhile lines of investigation. Little attention is given to productive activities and the majority of vocabulary is learned receptively. Receptive tasks may be more popular because they are easier to design, grade and complete than productive tasks. However ,it has never been demonstrated that receptive learning is more effective than productive learning. When vocabulary teaching is in focus, in many EFL classrooms learner's interaction is also neglected. The international perspective on SLA argues that conversational interaction provides opportunities for language practice in the target language and is the basis for language development.

Learning vocabulary is an incremental process (Schmitt, 2010), and as such, the development of vocabulary for both recognition and production needs, relies on a good number of cognitive processes include such as perception, attention, noticing, memory functioning, appraisal of stimuli, repetition, association and consolidation of lexical knowledge. But none of these cognitive processes takes place in void, detached from affective functioning of learner's mind and body (Dai & Sternberg, 2004). The interaction that goes on between affective and cognitive processes during such learning activities as the acquisition and processing of new vocabulary and the subsequent upheavals in language performance as a result of this interaction may be regarded as one of the main reasons why a great majority of L2 vocabulary develops through incidental encounters where there is a profitable balance between cognitive, emotional and motivational aspects of intellectual functioning. However, the collective nature of an instructional environment is somehow in conflict with individual learner's whole person involvement. A significant breakthrough in l2 teaching literature to resolve this conflict is task-based curriculum(Skehan,2003).TBLT provides an optimally authentic atmosphere to involve learners in a meaningful, goal-oriented interaction with the material, peers, instructors and the world inside themselves. TBLT does not simply engage learners in authentic cognitive gymnastics such as decision-making and problem solving. Rather, the emotional involvement exercised by individual learners in tasks will claim a massive effect on linguistic achievements from task engagement.

Negotiation of meaning is a specific form of interaction to acquire lexical meaning. It is modification and restructuring of interaction that occurs when learner and interlocutors anticipate, perceive, or experience difficulties in message comprehensibility. Negotiation of meaning has been considered as a feature of learner talk that plays an important role in language acquisition by providing opportunities for interactional modifications and increasing input comprehensibility (Long&Robinson,1998). Actually, one of the challenging ways of learning vocabulary is to encourage learners to negotiate the meanings of new words among themselves, using each other as a resource rather than relying on external assistance (Newton,2001) because while many words are not known by individuals, most are known by at least one other learner.

Laufer and Hulstijn,(2001) refined the notion of engagement with vocabulary and suggested that involvement for vocabulary learning consists of three components: need, search, and evalution. They found a support for their hypothesis: learners writing compositions remembered a set of target words better than those who saw the words in a reading comprehension task.

For Kitade (2000), the fact that there was not individual turn-taking competition in Synchronous Computer Mediated Communication (SCMC) could increase the benefit of self-correction because learners could take their time to analyze their own language and this might lead to individual learning. De la Fuente's (2003) comparison of F2F and SCMC conditions showed that the F2F environment was richer in negative feedback and self-repair opportunities than the SCMC environment.

Research has shown that negotiated interaction helps learners with comprehension and production of the language (Pica et. al, 1987) and when learners take part in two-way information gap tasks, they strive for a common communicative goal (Doughty & Pica, 1986). The act of negotiation is supposed to have a lasting effect on memory and research has shown that negotiated interaction is especially beneficial for the acquisition of vocabulary items, in particular concrete nouns.

It is argued that negotiation can promote acquisition because it allows learners to understand words and structures beyond their present level of competence and eventually, to incorporate them into their L2production: "environmental contributions to acquisitions are mediated by selective attention and the learner's developing L2 processing capacity and these resources are

brought together most usefully, although not exclusively, during negotiation for meaning"(Long, 1996, p.414).

Swain's output hypothesis (1985,1995) proposes that comprehensible input may not be sufficient for certain aspects of L2 acquisition and that comprehensible output may be needed. Mackey et al. concluded that negotiation of meaning seldom involved grammar (p.494) but rather phonological and lexical aspects: "when phonological and lexical feedback is provided in interaction,[learners] are more likely to perceive it correctly" (p.494). Ellis et al. established that negotiation resulted in better comprehension and receptive acquisition of vocabulary than premodified input, providing evidence for a link between input modified through negotiation and vocabulary acquisition. Additionally, Ellis et al. found that these learners not only acquired more vocabulary but also retained it after a period of 5 weeks. He reported that this interactionally modified input was less efficient than premodified input (in terms of words acquired per minute of input). He concluded that negotiation may facilitate vocabulary acquisition by inducing learners to notice unknown words in the input (i.e., words that they need in order to understand their interlocutor's message).

In a quantitative, longitudinal study on L2 vocabulary acquisition, Laufer observed that learner's passive vocabulary developed to a higher extent than did their active use of new words. There are 3 main arguments to support an empirical investigation of the output hypothesis (Swain, 1985) with respect to vocabulary acquisition. First, vocabulary negotiation has been shown to be a common feature of interactions between NSS and L2 learners(e.g.,Gass&Varonis,1985 b;Laufer,1998;Pica,1994;Pica,Holliday,Lewis,&Morgenthaler,1989, Pica et al.,1993). Second, L2 learner's selective attention (Long, 1996) focuses on specific identifiable units, vocabulary being the easiest part of the L2 to isolate (Gass,1997). Third, some of the functions of output proposed by swain (1995) appear to be in operation during lexical output production within negotiation. As Laufer stated, "if not pushed to use these words, they may never be activated and therefore remain in passive vocabulary only".(p.267) Ellis suggested that negotiation may benefit productive acquisition of new words, "provided that the students have the opportunity to use items they have begun to acquire and to receive feedback from other speakers".Ellis&Swain(1999) is arguably the first study to demonstrate evidence of the benefit of output production(L2 vocabulary) on acquisition of such vocabulary. They found that the

modified output group achieved higher levels of acquisition of words(both receptive and productive) than any of the other groups. Also they found no significant differences between the premodified and the interactionally modified input groups. They concluded that tasks that involve learners in collaborative, problem solving interactions, where learners can be responsible for their own output production are more effective in promoting vocabulary acquisition.

According to Swain's output hypothesis, learners engaging in interaction are' pushed ' to produce comprehensible input so that they can be understood. He suggests that pushed output enhances Fluency and causes the learner to test hypotheses about his or her metalinguistic knowledge (Swain 2005). This type of output then prompts recasts from a non-native-speaking(NNS) or (NS) interlocutor in conversation, which can lead to episodes of negotiation for meaning.Since the late 1990's , researchers have attempted to extend the potentiality for language learning from the FTF to Computer-Mediated Communication (CMC) modality. Synchronous CMC is a virtual, real time conversation that take place a cross a computer network such as the Internet .The permits behind incorporating CMC chat into the SLA classroom is that it provides students with the opportunity to practice and intract with each other in their SL, perhaps as extra practice outside of the classroom, for projects or for distance learning.

Recent vocabulary learning research has been based on cognitive interactionist theories of psycholinguistics and SLA , which emphasize the importance of input, interaction and output in the SLA process. It has also been proposed that learners can successfully integrate L2 input into their knowledge system, provided they apperceive and comprehend it. The first stage in this process is noticing input, which presupposes the allocation of attention to input, as unattended pieces of information are likely to go unnoticed, which inturn blocks the way to further stages of the language acquisition process. It has been suggested therefore that learner's attention should be directed to input by making it salient, which can be achieved through input enhancement and interactional modifications(i.e. the negotiation of input).

The interactive nature of computers,together with the potential of new hypermedia-platformed information technologies allow learners to engage in interaction with input made salient through consulting hypermedia annotations of various contents. The research in this area has manifested a great diversity. The majority of studies have investigated the potential advantage of multimodal presentation of the material in the computerised annotations comparing the effects of text,

graphics, video,and sound(Al-Seghayer,2001;Brett,1997,1998;Chanier&Shelva, 1998; Chun&Plass,1996,1997). There are also studies examining the effect of using annotations on reading comprehension as well as on incidental and intentional vocabulary learning conditions (e. g., Davis&Lyman-Hager,1997; De la fuente, 2002; DeRidder, 2002; Groot, 2000; Harrington & Park, 1997; Hulstijn, Hollander& Greidanus, 1996; Koren, 1999; Laufer& Hill,2000; Liu & Reed, 1995; Lomicka, 1998; Lyma-Hanger, Davis, Burnett & Chennanult, 1993; Martinez-Lage, 1997; Rott &Williams, 2003; Son, 1998). These studies usually yielded positive results concerning the impact of computerized glosses (esp. multimodal ones) on reading comprehension and the acquisition of L2 lexical elements , but they also pointed out that a lot more empirical research was needed on the practical benefit of using hypertext applications in language instruction. Also, there has been little research into what effect the (at least partial) computer imitation of the form- and meaning- based associations in the mental lexicon might have on the acquisition and retention of new lexical units.But the present research has a double focus investigating both a) the effect of interactional input modification through form- and meaning-focused computerized hypertext annotations on L2 vocabulary acquisition and retention when, and b) the effect of incidental and intentional learning on L2 vocabulary acquisition and retention when using form- and meaning-focused hypertext annotations. This study is predominantly text-based,and investigates the effect of various linguistic tools on the success of the acquisition and retention of L2 lexical units, rather than in the influence of multimedia elements .

Research Question

On the basis of the information presented so far, it is assumed that collaborative negotiation in dialogue may have some influence on lexical meaning acquisition during face to- face interaction.

The following research question guides the study:

Does collaborative negotiation in dialogue have an effect on the acquisition of lexical meaning?

Method

Participants:

There are 90 participants from Islamic Azad University of Tehran North Branch, 60 Iranian speaking English- as- a -Foreign – language (EFL) learners participated in this study. According to porter's study(1986),learners make more dialogues and repairs with intermediate peers than with advanced peers. Therefore, to prepare homogenous groups of participants and avoid bias, the learners were at the intermediate level based on the scores they get on the proficiency test. Then, the students were randomly assigned to one of three groups,each using a different treatment method (Form-focused hypertext, meaning-focused hypertext or no-enhancement control).

Gass and Varonis, (1986) conducted a research in which there was a greater negotiation and cooperation in mixed-sex situation. The gender of the participants was male and female. The average age of them was 22. Also a total of 54 EFL learners,42 beginning and 12 advanced, comprised the participant group that could be analyzed for this study.10 English native speakers also participated.4 of them performed the activity twice,for a total of 15 dyads with learners and native speakers. This resulted in 34 dyadic pairs being analyzed for this study.

A total of 32 volunteer l2 learners participated in the study. Participants, Whose native language was English belonged to five entact classes of intermediate Spanish in the basic language program, and all had received approximately 90 hours of forml exposure to the L2.They were randomly assigned to one of the three expremental groups: nonnegotiated , premodified input (NNPI); negotiation of input plus output(NIPO) ; negotiation of input without output (NIWO). All participants completed the first stage of the study, but only 28 completed all three post tests.

Three intact classes were randomly selected out of 8 available junior classes of EFL at Azad University ofTehran North Branch for this study. To ensure homogeneity of the three groups, a pretest was administered to the students in three classes,and those who scored below and above the range of 6-25 were left out of the data analysis. Then the three classes were randomly labeled as control group, emotional involvement (EI) group, and cognitive involvement (CI) group including 24 (16 female, 8 male) and 26 (15 female,11 male) and 29 (19 female, 10 male) students, respectively. The average age was between 21 and 36.

Based on the results of the pretest on the 36 target items conducted two days before the treatment phase, 8 learners who were familiar with the words were excluded out of the 72 Iranian high-intermediate learners previously homogenized using the grammar and vocabulary section of OPT (scoring over 31 out of 50). The remaining 18 participants were randomly assigned to three treatment groups: receptive learning (RL), productive learning (PL), and negotiated interaction (NI) . The treatment phase was carried out within four class sessions,i.e. four consecutive weeks. In each session, the participants of each group read a passage chosen from the book 1100 Words You Need to Know (Bromberg&Gordon, 2004) containing nine bold-faced target words, the meanings of which were provided in marginal glosses. The tasks which followed each passage differed for each treatment group.

Instrumentation:

Language proficiency test , a pre-test and a post-test with equal level of difficulty were used as instruments in the present study. A production test (both in oral and written) and a reception test(written), Reading - while-Listening task, Reading while listening comprehension pretest items taken from archive versions of TOEFL iBT as the overall listening and reading skills were assumed to be relevant to task performance. The post-tests were comprised of a vocabulary retention test and a vocabulary ease of activation test in the form of fill- in- the- gap sentences translation items from Persian to English,the positive and negative affect schedule (PANAS-SF) developed by Thompson (2007), Three posttreatment tests all conducted in oral format, Two vocabulary knowledge scales(one receptive, one productive and based on Wesch&Paribakth, 1996), Apple Inc.'s iChat software, version 3.1.9.,was used for the CMC group. Computer program, Hypertext/ hypermedia glosses, Tracking device and log files, Texts and stimulus words, A self- report pretest plus 12 non- words , Immediate and delayed vocabulary acquisition post-tests.

Task Types:

The investigatore used tasks(jigsaw, role-play&conversation topics) . jigsaw tasks , also known as two-way information for completion (Pica , et al.,1993). The two-way exchange is ensured by the separate pieces of information each task participant receives. It has been argued that this type of tasks provides all the necessary conditions that will allow students to negotiate twoward

mutual understanding of each other's message meaning (pica. Et al., 1993). Another task provided for learners was role- play focused on authentic situation and speech acts. The final task was conversation topics in which learners discussed about certain topics and negotiate the meanings of the vocabularies verbally. Tasks were also controlled for their level of difficulty complexity based on intermediate level of level of learners.

A jigsaw task was used in this study. This task was based on a picture story that was composed of twelve individual pictures. The picture story of the jigsaw, taken from Ondarra,(1997), describes a talkative and reveler woman. The task the researcher used involved pairs of students working to construct a story based on twelve pictures in a two way information gap activity. One learner in each pair held pictures numbered 1,3,5,7,9 and 11 and the other , those numbered 2,4,6,8,10 and 12. The learners took turns to describe their own picture without showing it to the other people in the group . The others could tasks the describer to clarify any nuclear information. After all of the learners finished describing the twelve pictures. They had to work together to discover what the story been. Then they wrote the story. As noted above, this type of task is thought to promote negotiation of meaning.

Nowadays role-play is a permanent feature in the Foreign language(FL) classroom. Role-play is seen as the activity to reinforce the connection between classroom and real life situations. This test type was performed by learners interacting with each other. Learners should have been aware of functions and the vocabularies required for communicating those meanings in actual interactions (table2).

	Role- play	Type of Discourse
Session1	At the shop	Transactional
Session2	Informal visit	Interactional/Transactional

For each situation of role-play the learners were given cards which explained their roles in L1. Based on their roles they negotiated meaning of given vocabularies. The first type of role-play situation was transactional: the task required information exchange. The second type of role-play was, to some extent, transactional (new information had to be supplied) , but it was especially interactional, the main goal persuaded participants to socialize in the classroom.

The learners were asked to play the role of a salesman/woman and a client in a well-known store. The roles were chosen randomly,One of the interlocutors was instructed to buy a present for his/her mother,but he/she had no clear idea of what s/he wanted to buy. Salesman/woman was asked to help the client to make a good decision. The salesman/woman was given some folders featuring different items, such as pens, watches, clothes, perfumes, cameras, books, jewllery .Functions such as: greeting,, asking, and giving adice, etc., asking for and providing information, expressing doubts, making decision, paying, thanking, saying goodby, etc., should emerge in following negotiation. As mentioned above, this type of dialogue was based on information exchange.

Indeed, in the FL, classroom learners are asked to play a role which is quite from what they might have experienced in real life. Each learner was given a card with instructions,in LI ,about the role to be played. The setting was described as a casual visit between two friends who had not visited each other about five years. Then they were asked to be surprised at the unexpected visit and to tell each other about their recent experiences. One interlocutor was given the following information: you lived and worked in a foreign country. You visited and enjoyed famous places. Express your feelings. You found another job in Iran . Explain about your new job. Invite your friend for dinner. The other participants was given the following information; you are an actor/actress and have lived in Iran. Given your impressions. Now you explain about yournmost recent film. Your profession is the most important thing in your life. You are a very busy person.

In these situations learners have to express themselves properly and react effectively to what the speaker says by : showing surprise, narrating, asking for information, talking about personal problems, sharing feelings, sympathizing with the one who has problems, inviting them for dinner, accepting or rejecting that invitation,etc.

Conversation was based on talking together and learning the vocabularies the researcher listed before. The researcher tried to choose different topics based on learners and their interests and experiences (table 3). Therefore, after three session instructions, learners talked about each other in the first session of practice (session1); they discussed their future or ideals (session2) and, finally, they talked about student life (session3).

	Topics
Session1	Knowing Each Other
Session2	Similarities& Contrasts
Session3	Problems & Solutions

Reading While-Listening task

Reading while-Listening task was extracted from a popular success book *Giant steps*,written and read out by Anthony Robins (Robins,1997). The 20 target words had been signified by L2 glosses within the text. The reading text was followed by a whole- class discussion of the topic of the text *the vocabulary of success*. The students were asked to use as many arguments and illustrations from the text as possible.

The pretest included reading and listening comprehension items taken from archive versions of TOFEL Ibt as the overall listening and reading skills were assumed to be relevant to task performance.

The post-tests were comprised of a vocabulary retention test and a vocabulary ease of activation test. The retention test was a test of passive vocabulary including 10 four-item multiple choice word translation questions from English to to Persian. In order to neutralize the effect of guessing , a 5th item stating 'I'm not sure was added to the response options. The ease of activation test included 10 fill-in-the-gap sentence translation items from Persian to English. The English translations of the sentences were provided except for the target words.

To elicit positive effect for the emotional involvement group, a humorous movie of about 15 minutes from the English comedy series, *My Family* was shown in the pre-task phase.

To ascertain the validity of the pre-task video in inducing positive affect for the emotional involvement group, an internationally reliable short form the positive and negative affect schedule (PANAS-SF) developed by Thompson (2007) including selective 10 items measuring positive and negative affect was employed.

To enhance L2 vocabulary acquisition by providing readers with the necessary annotational input enhancement of target words via hypermedia links a small-scale computer program was designed in the form of hypertextually-annotated web pages, which was then uploaded to a university server. Four versions of the program were prepared. On for the incidental and another for the intentional learning condition, each of which had a form-centered and a meaning –centered counterpart. In all four cases the program functioned basically in the same way,the difference being only in the texts and naturally in the contents of the belonging hypertext annotations. Students could look up a glass by clicking on the word in the text located in the upper frame of the screen.

An essential feature of the study was the application of hypertextually linked annotations instead of the traditionally applied linear text. On the basis of the previous studies(e.g., Al-Seghayer,2001; Chun&Plass,1996; Liu&Reed,1995) it was believed that through the application of hypertext and hypermedia glasses learners could have easy access to a wealth of related information.

In Form-focused hypermedia annotations the following type of information were presented:

1. The basic morphological characteristics of the word including such features as word class,countability,plural form, past tense and past participle forms;
2. The basic Hungarian equivalent(s)
3. The IPA phonemic transcription of the word
4. An audio file with the word pronounced.

In meaning-focused hypermedia annotations the following types of information were presented:

- The basic meaning(s) of the word presented in an English monolingual dictionary definition(s)
- Various sense relations of the word (synonyms, antonyms,etc)
- The Hungarian equivalent(s)
- Some contextualized examples (collocations,sentences) of word use.

A tracking device was constructed to complement the program with the aim of following the users' vocabulary learning behavior.It was assumed that if input was made salient through the use of hypertext glosses, it was assumed learners would attened to such input. Therefore, it was

necessary to make sure that all the participants really consulted all (or at least the overwhelming majority of) the hypertext glosses created to promote their learning in order to be able to conclude that their achievement was probably due the facilitative effect of these annotations. Each time a participant chose to consult a gloss by clicking on the hyperlinked word, the tracker device registered the clik in a log file.

In order to carry out the study it was necessary to find two texts that participants could learn new words from.The text had to be of the level:not too easy or not too difficult with challenging new vocabulary provided as roughly tuned input for intermediate learners of English. In order to validate the sutibility of the texts, they were analyzed with a concordance and lexical profiling software. The length of both texts was approximately identical, with 275 words in the first text and 282 words in the second. The twq text were also analysed for syntactic complexity , readability and lexical density. Concerning readability, the Gunning-Fog index of text 1 was 10.68, and that of text2 was 9.46. The two texts were very similar as far as their ease of reading is concerned,and the lexical density of both text are quit similar. However, it also shows that both texts were relatively dense lexically, which may have adversely affected the vocabulary learning process.The selected target words were also analyzed for various word features(frequently, visual complexity, grammatical category,semantic features), as these characteristics may influence the memorization of target vocabulary (see Laufer,1997).

Testing instruments:

Two types of vocabulary tests were administered in order to measure the level of previous(I,e., pre-treatment) word knowledge, as well as the immediate and delayed effects of the hypertext treatment conditions. In all three tests learners were asked to perform recognition tasks.

Pre- test

In order to make sure which words the participants were not familiar with the target words, a self-report pre-test was conducted. A list of 50 words preselected by piloters plus 12 non-words.

Immediate and delayed vocabulary aguisition post-test

A so called " banked gap filling" vocabulary testing technique was used to measure participants' receptive vocabulary learning achievement. The vocabulary tests were carried out in a

traditional paper –and- pen format in both the experimental and control groups. To enhance reliability,all post –tests were piloted by 61 students not participating in the study, and they were scored by the researcher only.

Information gap task was used for this study. For the beginner-beginner(beg-beg) and beginner-advanced(beg- Adv) . The task completed on the computer in iChat for the CMC group, and in person for the FTF group.In both modalities, days comprised of beginning-level learners and native speakers had slightly different instructions.All participants in the FTF group were videotaped with a digital camcorder so that conversations could be analyzed, while those in the CMC group had their iChat conversations saved as computer files for further analysis.

Testing instruments

To measure lexical acquisition, a production test(both oral and written) and a reception test (written) were used. For both the oral and written production tests, participants were given a sheet of paper with pictures of all of the chores. For written reception test, participants were given a list of the chores in Spanish and asked to simply write the English equivalents if they knew them.

Procedure

To start the research, the participants were first selected via a language proficiency test. In an attempt to obtain data that were more recent regarding participants' proficiency level, they were selected via a Paper Based Test of English as a Foreign Language(TOFEL, PBT) and divided into togroups, 30 as Control group and 30 as Experiemental group. Then a pretest consisted of a vocabulary test, in a form of multiple-choice taken from (TOFEL), was administered to both groups.

Having conducted the pretest, participants of control and experimental groups had to be taught the list of vocabularies involved in posttest (TOFEL), in two different approaches. For the former, defining and memorizing vocabularies were merely given,but for the later group, vocabularies were trained through tasks promoting negotiation.The participants of the experimental group attended an eight-session treatment including three-session instruction, three-session practice and two-session information gap aimed at introducing them with the concept of

negotiation of meaning in task and teaching them how to apply it collaboratively . Having finished the treatment ,the participants of both groups were provided with a posttest (TOFEL).

To choose the target words, 40 words from the reading-while-Listening text, conjectured to be less familiar to the students, were selected and then put to a survey from the students two weeks prior to treatment sessions. The survey asked students whether they signified each word as familiar or not. If yes , they were supposed to provide an equivalent or explanation in L1. 20 words which were checked as unfamiliar were selected for the study.

Both control and experimental groups participated in a text-based task preceded by a pre-task phase and succeeded by a post-task phase. The main task was a reading-while-listening task involving reading a text while listening task involving reading a text while listening to it read out by the author. The target words had been highlighted using within-text L1 glosses. The post task entailed a whole-class discussion of the information presented by the reading-while-listening text. The discussion was stimulated by a set of triggering questions that summarized the main points in the text.

While the main task and the post task were identical for all the three groups, the procedure for the pre-task phase was different for the control group, EI group and CI group. The EI group was shown the humorous video assumed to elicit positive affect following a brief introduction of the movie subject and the task succeeding it. The learners in the CI group first were read out a short text presenting a biography of Anthony Robins, the author of The Giant Steps, and the general theme of his publications. Then a whole- class brainstorming session went on about word power and effective communication in social relation and career success. Amid the brainstorming, some of the non-target words from the reading-while-listening text were written on the board and illustrated by the teacher. The control group was engaged in a different kind of activities for the pre-task phase. They read a passage on effective communication and answered 8 comprehension questions that followed. The pre-task activities took about twenty minutes for each of the three groups.

The two tests for measuring short-term retention and ease of activation of target vocabulary were administered immediately after the task completion. The tests for measuring long-term retention and ease of activation were administered two weeks later.

Based on the results of the pretest on the 36 target items conducted two days before the treatment phase, 8 learners who were familiar with the words were excluded out of the 60 Iranian speaking English as-a-Foreign-Language (EFL) learners previously homogenized using the grammar and vocabulary section of OPT (scoring over 31 out of 50). The remaining 52 participants were randomly assigned to three treatment groups: receptive learning(RL), productive learning(PL), and negotiated interaction (NI). The treatment phase were carried out within four class sessions, i.e.. four consecutive weeks. In each session, the participants of each group read a passage chosen from the book 1100 Words You Need to Know (Bromberg & Gordon,2004) containing nine bold-faced target words, the meanings of which were provided in marginal glosses. The tasks which followed each passage differed for each treatment group:

Receptive learning treatment (RL) group

Learners of the RL group had to do a recognition task. In this task there were nine sentences from each of which the target word had been deleted and replaced with a blank. Learners had to recognize the meaning of a word and write the appropriate number of each word in the blanks. In (1) the deleted target word is peruse. The learner by understanding the meaning of his word, chooses this target word from the box of words given to her and writes its number in the blank. Such activities tap the receptive vocabulary knowledge of the learners (Read,2000).

Inclement.1 .2 incipient.3 persue.4gnaw.5 tinge.6 premonition.7 desist.8 recoil.9 hysterical

(1)being warned by his father, he began to ………..(3) ……..the want ads daily.

Productive learning treatment (PL) group

The learners of this group had to write each target word in a sentence in the space provided for each word, as in according to read (2000), this task allows the learners to demonstrate several aspects of their vocabulary ability such as whether they understand the meaning of target word, how a word functions grammatically in a sentence,or more generally whether they know how to productively use this word in their writing.

Negotiated interaction (NI) group

Unlike the other the two treatment groups which required the participants to do individual tasks, the learners of this group worked in pairs. The learners of this group after reading the passages

individually had to work in pairs and retell the story.The new target words are given to one student, and she is required to retell the story using these words. She is not allowed to look back at the meaning of these new words. However, her partner does have access to the meaning of the words. When she signals or indicates non-understanding or incomplete understanding of the words, her partner has to elaborate on the words. Then after five minutes, the teacher will tell them to revers roles.

Following the findings of the pilot study, the learners were given 15 minutes to complete the treatment phase. Five minutes was allotted for reading the text and understanding the meaning of the words, and ten minutes' for doing the tasks. Only the participants of the NI group were told to reverse roles after five minutes' of doing the task. The learners were told that they would be tested after the treatments but not about the nature of the tests.

Scoring procedure

Based on Webb (2005) two levels of vocabulary knowledge (receptive and productive knowledge) were assessed using two tests (L1 translation and sentence construction, respectively). The order of the items was randomly changed on each of the tests to eliminate regency and previous assessment effects. An immediate productive posttest(15 min) was administered immediately following the treatment task in each session, and after the immediate productive posttest sheets were collected, the learners took an immediate receptive post test (10 min). Productive knowledge of the words was tested first in order to avoid test effect. Each delayed posttest was administered 7 days after the relevant immediate test. This procedure mirrored the immediate posttest procedures exactly with the exception that the target lexical items were presented in a different order. In both receptive and productive tests, the minimum score was 0 and the maximum 36. This study consisted of a pretest-treatment-immediate posttest- delayed post test design.

Procedure of data collection

The study was conducted over a period of seven weeks. Data collection took place during regular class time in three different class. The experiment was composed of three basic stages: 1) a pre-test, 2)a study and immediate post-test session, 3) a delayed post-test, which was the exact replica of the immediate post- test and a questionair. The learning sessions were computer-based

in the form-focused and the meaning-focused experimental groups, whereas the control group got the same texts in traditional paper-based hard copies. All testing sessions were done with paper and pen.

Time	Action Taken
Week1	Self-report pre-test
Week2	Tutorial session1-incidental learning condition Immediate post-test1(at the end of the study session)
Week3	Tutorial session2-intentional learning condition Immediate post-test2 (at the end of the study session)
Week4-6	Break
Week7	Delayed post-tests(the exact replicas of immediate post-tests 1 and 2)

Table 2: Schedule of data collection

This study consisted of a pretest – treatment-immediate posttest-delayed posttest design. Two weeks before the experiment,participants were pretested on a list of 22 potential lexical items. After the pretest, participants signed up for treatment session times. They performed the task either in person (FTF) with their partner, or via iChat on the computer (CMC). Before starting the task, participants were given three minute to talk with their partners either in person (FTF) OR ON THE COMPUTER (CMC) as a warm-up session. Immediately after the treatment, participants took an oral production test, a written production test,and then a written a test of receptive knowledge.The production tests preceded the receptive test to eliminate the possibility of giving students cues about the words they would need to produce. Participants then filled out a questionnaire in which they were asked for their opinions and comments on the task they had just done with their partner. Approximately two weeks later, all participants (except for the native speakers) came in to take the delayed posttests, which also consisted of an oral production, a written production, and a written reception test.

Scoring

Scors for the oral production and written production were derived from the correct oral and written answers provided by the participants, With the written recognition test, scores came from the correct English translation provided for each targeted item. One point was assigned to each

correct answer. The maximum potential score for each test was 15. However, some minor deviations from the correct form were accepted as correct answers if they did not indicate lack of the basic lexical meaning. For example, incorrect gender assignment was not considered incorrect(fregadera as opposed to the correct fregadero [sink], or trituradora as apposed to triturador [garbage disposal].)

Each group was exposed to two listening comprehension tasks (of the information gap format). Tasks were carried out in two sessions(consecutive day) of 20 minuest each, in which participants (NNSs) engaged in oral interactions with NSs (three Spanish instructors) in pairs. Interactions were conducted in each instructor's office. NSs had been previously trained with respect to treatment and data collection. To avoid an evaluator effect that could alter the results of the study, each of the three instructors was assigned to a different group during the first and second day.

Task 1. The purpose of the first task(repeated twice) was to expose participants to the basic meaning of the target words.. In both the NNPI and NIWO groups, NSs(information suppliers) gave instructions to NNSs to locate and identify the ten target words. The same order of words was followed for all learners. Thus, information was one-way,its exchange was obligatory, all participants had the same goal and there was only one correct outcome. On completion, the same task was repeated with the same limited amount of time-on-task. To avoid a task effect, the order of presentation of the items was changed. The NNPI group listened to baseline instructions at a slow rate and not allowed to ask questions.Participants in the NIWO group listened to the same instructions formulated at normal speed but were allowed to negotiate the meaning of the target items.

Task 2. To increase learners' exposure to the target item, task 2 was performed on the following day. In this slightely different task, participants had to place the objects in different part of the room. Procedures for the three groups were exactly the same as in the first task, including time-on-task and the order in which the words were presented.

Testing instruments

Three posttreatment tests were administered to measure the immediate and delayed effects of the treatment. The order of the items was randomly changed on each of the tests to eliminate effects

of previous assessment sessions. The first test was administered immediately after the treatment, the second test 1 week later, and the third test 3 weeks later. All tests,conducted in an oral format, were carried out in the language laboratory, where participants recorded their answers on individual audiocassettes. This was an important departure from previous studies, in which acquisition through oral negotiation was measured by means of written tests(e,g., Ellis et al., 1994).

Two vocabulary knowledge scales (one receptive, one productive and based on Wesche&Paribakth, 1996) were used. Productive knowledge of words was tested first and receptive knowledge later in order to avoid a test effect. In the productive part of the test effect. In the productive part of the test, the researcher gave images of the target words to each individual participant. Participants had a productive knowledge scale or "self-report scale". For the receptive part of the test, the researcher read aloud each of the target words to the participants.

Scoring Procedure

 Comprehension was measured as the ability to correctly carry out the instruction on the first part of each of the tasks by correctly identifying the target items on the map and placing them on the worksheet numbered from 1 to 10. One or zero points were awarded depending on the accuracy of each targeted item identified for a possible total of 10. Receptive acquisition scores were calculated as the number of target words each participant was able to identify (translated to English) after listening to them during the tests. Productive acquisition scores were calculated as the number of target words each participant was able to produce in the L2. In both cases , the minimum score was 0 points and the maximum score 10 points.

Results

The analysis of the obtained data using the SPSS version 16 yielded the following results:

- 1-Descriptive statistics was run on the total scores of both groups , as shown in Table, the average of control group post-test (14.8167) has very slightly exceeded the average of control group pre-test (14.3667). This increase is statistically insignificant and can even be simply ignored.

Table 5 presents different descriptive statistics of experimental group pretest and posttest. It shows remarkable increase between the average of pretest (15.7500) and the average of posttes (918.1667). This increase is statistically interpreted in later tables.

2-To observe if there is any significant difference between the two performances of our control group, a Paired Sample T-test was run among the averages of pretest and post test .

Table 6 shows that the posttest average of control group (M= 14.8167) did NOT significantly exceeded pretest average of control group (M= 14.3667) while t(44)= -1.943 and Sig. (2-tailed)= .062 . This means that the difference observed among control group averages of pretest and posttest is NOT a significant reliable difference.

1- A Paired Sample T-test was run between the averages of pretest and posttest of the experimental group to see if there is any significant difference among the averages of this group. Table 7 shows that the posttest average of experimental group (M= 18.0333) significantly exceeded pretest average of experimental group (M= 15.7167) while t(44)= -12.746 and Sig.(2-tailed)=0.000 .This means that the difference observed among pretest and posttest averages of experimental group is a significant difference.

Table: Descriptive Statistics of Control Group

		Control Group Pretest Average	Control Group Posttest Average
N	Valid	30	30
N	Mean	14.3667	14.8167
	Median	14.5000	15.0000
	Std.Deviation	1.32570	1.39261
	Skewness	.320	-.168
	Std.Error of Skewness	.427	427.
	Minimum	12.00	12.00
	Maximum	17.50	17.00
	Sum	431.00	444.50

Table5: Descriptive Statistics of Experimental Group

		Experimental Group Pre-test Average	Experimental Group Post test Average
N	Valid	30	30
N	Mean	15.7167	18.0333
	Median	15.7500	18.1667
	Std.Deviation	1.95943	1.53091
	Skewness	.-364	.-593
	Std.Error of Skewness	.427	427.
	Minimum	12.00	14.00
	Maximum	18.50	20.00
	Sum	471.50	541.00

Table6: Paired Samples Test of Control Group

	Paired Differences					t	Df	Sig.(2-tailed)
	Mean	Std.Deviation	Std.Error Mean	Lower CID	Upper CID			
Pair 1	Control Group Pretest Average	-.45000	1.26865	23162.	.92372-	.023772	-1.943	29	062.

Experimental Group Posttest Average								

Table 7: Paired Samples Test of Experimental Group.

		Paired Differences					t	Df	Sig.(2-tailed)
		Mean	Std.Deviation	Std.Error Mean	Lower CID	Upper CID			
Pair 1	Control Group Pretest Average	-2.31667	9955.4	.18176	2.6884 -1	-1.94493	-12.746	29	.000
	Experimental Group Posttest Average								

This empirical study was intended to investigate the effect of Emotional Involvement(EI) and Cognitive Involvement (CI) in task performance on four dependent variables, i.e. short-term retention (STR) , long-term retention(LTR), short-term ease of activation (LTEA) of L2 vocabulary. To detect the hypothesized differences between the three groups, a between- groups multivariate analysis of variance with pre-test as covariate (MANCOVA) was conducted using the scores on the four dependent measures. Perliminary assumption- testing was conducted to check for normality, linearity and homogeneity of variance- covariancematrices with no serious

violations noted. The MNCOVA results demonstrated an overall significant difference between the three group on the combined dependent variables.These analyses indicated a statistically significant difference between the control group and the two experimental groups in the terms of STEA and STR.However,the differences for LTR and LTEA scores were not different for the two pre-task involvement types and the control.

The results of data analysis confermed that emotional and cognitive involvement elicited through pre-task intervention had enhancing effects on STR and STEA .But this enhancing effect was not observed forLTR and LTEA . In fact,EI and CI improved both retention and ease of activation scores in the immediate post-test whereas it did not have any significant effect on the performance upon the delayed post-tests.

It can be concluded that students who received input and interaction materials performed much better than students who received input only materials. The results of this study are similar to previous studies(Gass& Torres, 2005; Ellis et al., 1994) conducted on negotiated interaction for the acquisition of vocabulary. The result of this study support Gass and Torres'(2005) claims that input and interaction materials when presented together result in greater gains for vocabulary acquisition. In this study, while negotiating the meanings of words through the interactive task,students were able to make themselves understood. In other words, they have made input comprehensible to one another by modifying their output of language which according to Swain (1985) is necessary for L2 mastery.

To measure the effects of each learning condition on receptive and productive vocabulary acquisition and their retention over time, the data were submitted to a 3 (receptive learning vs. productive learning vs. negotiated interaction)×2 (immediate posttest vs. delayed posttest) MANOVA. The depended factors were receptive and productive vocabulary acquisition and the fixed factors were type of treatment task as a between-subject factor and time as a within-subject factor. Box's M test of differences between covariance matrices justified the use of the multivariate approach (Box'Sm= 270.65,p=.103). Using Wilk's lambda, a main effect was found for Type of treatment task(F=21.49,p=.00) and for time(F=20.52,p=.00). This implied that participants in all three groups demonstrated some change in their vocabulary knowledge over time.

The first main aim of the research was to examine whether intermediate level students exposed to texts with interactionally enhanced input modifications in the form of form - and meaning – focused computer-based hypertext/hypermedia annotations would outperform the control group students, who received input in traditional paper format, without such enhancement. The results of the Kruskal- Wallis test suggested that statistically significant differences (p=0.011) exist between the acquisition achievements of the form-focused, meaning-focused and the control groups only in the intentional learning condition and on the immediate post-test.

To measure the effects of modality on the beginning learner's acquisition of lexical items, data were submitted to a repeated- measures analysis of variance(ANOVA) using a two between-subject and three within-subject factorial design. Modality (CMC versus FTF) served as the between-subject factor, while Time(Pretest vs. Immediate Posttest vs. Delayed posttest) served as the within-subject factor. The results of ANOVA showed that beg.-level learners did significantly better in the CMC mode than the FTF mode on oral production tests.Post hoc tests were conducted to further examine the main effect. They demonstrated that the differences between the FTFand CMC group significant for both the immediate posttest and the delayed posttest, with the CMC group showing significantly more gains in written production than the FTF group. In sum, this experiment shows that negotiation for meaning can contribute to vocabulary acquisition. In addition,for beginning-level stages, computer –mediated synchronous interaction may pose more benefits than interaction in the FTF mode for developing production skills. This may be due to the fact that unlike the oral mode,computer-mediated communication is slower and therefore gives the learner more time to process and formulate(or reformulate) his or her output. Also, with whom the beginning learner is paired in a dyad does not seem to make a difference.

Results provide additional empirical evidence in favor of the benefits of negotiation for l2 vocabulary comprehension, which suggests that negotiating lexical meaning is more beneficial than inferring meaning through oral nonnegotiated input.

Receptive quisition was greater when they had the opportunity to negotiate and produce the target vocabulary than when they where exposed to premodified input. Production of target words during negotiation did not appear to to have an effect on learners' receptive acquisition when compared to non-production of these words during negotiation.

Productive acquisition and retention were greater when they had the opportunity to negotiate and produce the target vocabulary than when they were exposed to premodified input. Unlike the findings for receptive acquisition, production of target words during negotiation did appear to have an effect on learner's productive acquisition when compared to nonproduction of these words during negotiation.

Conclusion

In fact, the present study brought evidence that F2F interaction could be a source of reflection. Learners using collaborative negotiation as a variable to complete tasks just as in oral interactions were able to turn their attention on language itself. This finding informs language teachers that F2F –based tasks not only help learners to use language to achieve purposeful tasks with a focus on meaning,but also promote attention from that will assist their language development. In fact, EFL learners ,created, negotiated and shared meaning of vocabularies according to the goals set by communicative tasks. In breif , collaborative dialogue based on joint effort included tasks, could promote learners' motivation and remarkable learning of vocabulary.

It has also shown that verbal interaction presented in the beginning of the tasks could also increase the chance of learners' engaging in collaborative dialogue giving them possibilities to show experiences and new opinions for language production in the frame of vocabulary knowledge.

Indeed, tasks and their accompanying instructions had effect on vocabulary learning and finally learner's collaborative work.

Interlocutors spent much time in facilitating interaction. It was observed that this negotiation produced more dialogue and showed more ways to lexical acquisition.Overemphasizing the cognitive processes over the emotional ones or the converse in instructional situations appears to be counterproductive in leading to more effective learning. Cognitive and emotional interventions in language learning activities are most conducive when there is the chance of interaction between these two aspects of intellectual functioning. Longitudinal studies focusing on the interaction between cognitive and affective processes can open a new perspective in the methdology of SL teaching.

The present research yeilded only certain tendencies that indicate the beneficial effect of such hypertext annotations. The limited frame work of the current study could be followed up with a much larger sample of participants taken from a wider more varied population of Hungarian or non- hungarian learners of english . Also further research is needed to shed light on the most effective way of using Form-and- meaning- focused hypertext/ hypermedia glasses in SL vocabulary acquisition. CMC might be a better medium than F2F to practice L2 production for the beginning- level learner,given the beg-level learners in the CMC group had significantly higher acquisition gains in terms of vocabulary than the FTF group.This might be , because CMC does not pose the same demands for an immediate response as communicative in the FTF modality does and therefore allows for potential extra processing time.

The findings of this study provide more evidence to support the interactional framework in SLA provided that the learners are pushed to negotiate with eachother,which results in L2 productive and receptive vocabulary. That will hold up over time. Output production during negotiation appears to be able to positive influence learners' ability to internalize words and activate this knowledge later on . In line with Long (1996) and Grass(1997) , it is also suggested that cognitive factors such as attention are the key to unveiling what elements in the negotiation process facilitate L2 vocabulary acquisition. Moreover, this experiment indicates that productive learning is superior to receptive learning not only in developing productive knowledge but also in producing larger gains in receptive knowledge.

Reference

De la Fuente, M.J., 2003. Is SLA interactionist theory relevant to CALL? A study on the effect of computer-mediated interaction in L2 vocabulary acquisition. Computer Assisted LanguageLearning, 16(1): 47-81

Gass ,S.M. and E.M. Varonis, 1986. Sex differences in non-native speaker/non-native speaker interactions.

Kitade, K., 2000. L2 learners'discourse and SLA theories in CMC: Collaborative interaction in internetchat Computer Assisted Language Learning, 13(2): 143-166

Laufer, B. and J. Hulstijn, 2001. Incidental Vocabulary acquisition in a SL: The construct of task- induced involvement. Applied Lingguistics, 22(1):1-26.

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

Pica, T., 1994 . Research on negotiation: What does it reveal about SLL conditions, processes and outcomes? Language Learning , 44(3): 493-527.

Pica, T.,R. Kanagy and J. Falodun, 1993. Choosing and using communication tasks for SL

Porter , P.A., 1986. How learners talk to each other: Input and interaction in task-centered discussions. In R. Day (Ed.), Talking to learn: conversation in SLA. Rowley, MA: Newbury House., pp:184-199

Swain , M., 4005. The output hypothesis: Theory and research . In E. Hinkel(Ed.), Handbook on research in SLT and learning. Mahwah, NJ:Lawrence Erlbaum.,pp:471-484

Ellis,R.(2003). Task-based language learning and teaching. Oxford:OUP.

Fitz, M.(2006). Discourse and participation in ESL face-to-face and Written electronic conferences. Language Learning &Technology, 10(1), 67-86.

Gass, S., &Varonis,E.(1994). Input, interaction, and second language production. Studies in SLA ,16,283-302.