The comparative effects of song, picture and the keyword method on L2 vocabulary recognition and production

Abbas Ali Zarei
(Assistant Professor, Imam Khomeini International University, Islamic Republic of Iran)
aazarei@ikiu.ac.ir

Azma Salimi
(MA, Islamic Azad University, Takestan Branch, Islamic Republic of Iran)

Abstract

The present study investigated the effects of three methods of vocabulary presentation, i.e., picture, song, and the keyword method on Iranian EFL learners' vocabulary recognition and production. The participants were 102 Iranian lower-intermediate EFL learners in Zaban Sara English language institute in Kermanshah. To make sure that they had no previous knowledge of the target words, a pretest was administered. Those words about which the participants had prior knowledge were excluded from instruction. After administering the pretest, the participants were divided into three groups. Each group was instructed through a specified method of vocabulary presentation including picture, song, and the keyword method for a whole semester. The participants' receptive vocabulary knowledge was tested through a multiple-choice test and their productive vocabulary knowledge through a fill-in-the blank test. The collected data were analyzed using two separate one-way ANOVA procedures. The results of both tests showed that the group instructed through picture had the best performance, followed closely by the group instructed through the keyword method. The group taught through the song method performed significantly worse than both the picture group and the keyword method group.

Keywords: keyword technique; song; visuals; vocabulary recognition; vocabulary production.

Introduction

Knowledge of vocabulary plays a significant role in almost all domains of language pedagogy (Alavi & Akbarian, 2008). Research justifies the fact that vocabulary is a sine qua non of reading (Nassaji, 2003), writing (Laufer & Nation, 1995; Lee, 2003; Leki & Carson, 1994), and speaking (Joe, 1998). Thanks to decades of research in the

realm of vocabulary acquisition, even novice teachers are well aware of the centrality of vocabulary to language acquisition process. However, most of the teachers act as vocabulary acquisition gardeners; they try to grow the learners' vocabulary flower to such an extent that they are able to identify the meaning of words in a multiple-choice test. They neglect to take a multi-faceted view of vocabulary knowledge. As Lee (2003) contends, word knowledge is formed along a continuum, from reception to production, consisting of the following stages: "see the word, hear the word, understand the word, say the word and use the word in the context" (p. 540). In terms of the learner's ability to recognize or produce words correctly in the context, there exists a hierarchy of vocabulary skills; that is, learners have a great difficulty in producing words, which they can recognize easily (Laufer & Goldstein, 2004).

According to Melka (1997), one's approach to vocabulary teaching should be based on the learners' requirements of vocabulary recognition and production. Since the learners' greatest difficulty is in producing the words, a language teacher should choose the method that has the greatest effect on vocabulary production. In spite of its significance, the issue concerning the effect of methods of vocabulary presentation on the learners' productive knowledge of words has not received rightfully deserved attention in research areas. Although there have been an increasing number of studies on vocabulary recognition and production in the last decade, only few of them have attempted to investigate the influence of methods of vocabulary presentation on the development of these two aspects of vocabulary knowledge. The major focus of

most of these studies has been either estimating the receptive and productive vocabulary knowledge or determining which one precedes the other in the process of vocabulary acquisition (Webb, 2005). This tells us about the discrepancy between receptive and productive mastery of words, but does not provide much help as to how to decrease this distance. Our field now is in a sore need of studies that investigate and shed some light on the ways to promote learners' partial knowledge of words to the higher and more advanced levels of vocabulary production. In response to this need, the present study aims to address the following research questions:

1. Are the any significant differences among the effects of song, picture and the Keyword Method on Iranian learners' vocabulary recognition?
2. Are the any significant differences among the effects of song, picture and the Keyword Method on Iranian learners' vocabulary production?

Review of the related literature

Since vocabulary has a tremendous effect on students' proficiency and their production and comprehension of language (Gathercole, 2006), it can be claimed that "learning a second language means learning its vocabulary" (Gass, 1999, p. 325). Studies on the essential issues in the realm of vocabulary take into account the learners, the words, and the teacher (Folse, 2006). Research concerning the learners, focuses on the strategies that they employ in learning vocabulary (Gu, 2003; Kojic–Sabo & Lightbown, 1999; Nassaji, 2003); the way in which they make gains in knowledge of vocabulary (Ellis, 1995; Laufer, 1998;

Laufer & Paribakht, 1998); and their differences regarding the acquisition of second language vocabulary (Bauer, Goldfield, & Reznick, 2002; Speciale, Ellis, & Bywater, 2004). There are also studies that investigate the kind of words that second language learners have to know (Liu, 2003). Furthermore, studies related to vocabulary teaching investigate the effect of different types of exercise (e.g., Folse, 2006) and different methods of vocabulary presentation on the vocabulary learning (Brown & Perry, 1991; Zimmerman, 1997).

The present study investigates the effect of methods of vocabulary presentation on vocabulary recognition and production of Iranian EFL learners. For setting the stage, one needs to know how recognition and production of a word are defined in these studies. Gu (2003) specifies two dimensions of knowing a word: knowledge dimension and skill dimension. The knowledge dimension is the learner's ability within the scope of recognition and knowing its form and meaning, while the skill dimension is related to the learner's dexterity to use the word correctly in context, in terms of not only form, but also meaning and usage. Laufer and Paribakht (1998) make use of the terms 'passive' and 'active' to refer to the recognition and production aspects of vocabulary knowledge, respectively. According to Oxford and Scarcella (1994), knowledge of L2 word is not limited to its recognition; it can break through the barrier of recognition, take wings and fly to the higher level of vocabulary use in an appropriate context with the aim of meaningful negotiation. According to Henriksen (1999), drawing a fine line between receptive and productive vocabulary is beyond the realm of possibility because these two aspects of vocabulary knowledge lie along a continuum rather than within a dichotomy. He contends that lexical competence has three dimensions: the first dimension is partial to precise knowledge. The second dimension is depth of knowledge, and the third one is receptive to productive use ability. In terms of the learner's ability to recognize or produce words correctly in context, there exist a hierarchy of vocabulary skills which has been supported in a study conducted by Laufer and Goldstein (2004). The results of their study showed that learners have great difficulty in producing words that they can recognize easily. In another study carried out by Laufer (1988), it was confirmed that the extent learners make gains in productive knowledge of vocabulary is much less than their gains in receptive knowledge. Similarly, Lee (2003) believes that the ability to produce vocabulary in context is much more complex and usually lags behind receptive knowledge.

The keyword method

According to Shapiro and Waters (2005), one of the mnemonic techniques that can facilitate learning foreign vocabulary, is the keyword method (KWM). Keyword is a native language word that is similar in sound or appearance to the foreign language word; it plays a key role as a retrieval cue (Hell & Mahn, 1997). Indeed, the keyword must have two major features: first, it should be familiar to the students; and second, it should be selected based on the acoustic resemblance to the target word (Avila & Sadoski, 1996).

The keyword method has two stages: The first stage is called the acoustic link in which the learner selects an appropriate keyword and learns how to create an association or acoustic link between the keyword and the new foreign language word. The second stage is called the imagery link, in which the learner develops an interactive image, which involves the keyword and the meaning of the foreign language word.

As noted by Richards and Schmidt (2002), working memory involves two systems for storing information: the articulatory loop, responsible for storing verbal information and visuospatial sketchpad, responsible for storing visual information. As Shapiro and Waters (2005) contend, the keyword method can render the visuospatial sketchpad (visual memory) strong by the interactive images, which associate the keyword with the definition of the foreign language word. Indeed, the strength of the visual memory is the result of the nature of visual stimuli, which lead to a better retention than other kinds of stimuli. That is why we remember concrete words much better than the abstract words that cannot be imaged. To corroborate this, Shapiro and Waters (2005) investigated the effect of visual imagery on the retention of words and on the effectiveness of the keyword method. Results indicated that the effectiveness of the keyword method was less for the low-imagery words than for the high-imagery ones: the degree of retention for high-imagery words was 79% and only 14% for low-imagery ones. In another study by Hell and Mahn (1997), the degree of the keyword method's effectiveness for teaching abstract words was examined. Results indicated that participants were able to recall concrete words much better and faster than abstract ones. Lawson and Hogben (1998)

investigated the effectiveness of the keyword method for learning abstract nouns. The keyword method proved to be more effective for learning concrete words.

The keyword method is an efficient technique for vocabulary learning (Wyra, Lawson, & Hongi, 2007). For those learners who have little or no experience in learning a particular foreign language, it is an influential and effective method for the intentional learning of vocabulary (Lawson & Hogben, 1998). In a study conducted by Taguchi (2006), the keyword method was shown to be beneficial for older learners in their endeavor to learn foreign language vocabulary. Avila and Sadoski (1996) reported similar results. Richmond, Cummings, and Klapp (2008) investigated the transferability of the keyword method for studying new and familiar content in comparison to other mnemonic techniques (i.e., loci, pegword) and free study. Findings showed that the keyword method was the most transferable technique for studying similar and dissimilar content.

There are also studies showing that the keyword method does not have a beneficial effect on vocabulary acquisition, especially on vocabulary production. The general conclusion of the study by Carney and Levin (1998) is that the long-term effects of the keyword method are not as strong as the immediate effects. As Richards (1976) contends, the main aim of the keyword method is the retention of vocabulary. However, the long-term process of vocabulary learning is beyond the retention of the word. In fact, it also includes the production of a word in a natural context, an aim that will not be achieved through the keyword method.

Picture and its significance in vocabulary recognition and production

For setting the tone for our discussion of picture and its significance in pedagogy, it is necessary to know the meaning of the visual literacy (VL). Visual literacy (VL) has been defined as the use of visible or mental visuals for learning, communication, conveying meaning, and having aesthetic effect (Avgerinou & Ericson, 1997). Based on this definition, picture is included within the scope of visible visuals. According to Avgerinou and Ericson (1997), the concept of image decoding is of great significance in visual literacy. There is a positive relationship between visual and verbal learning. According to Bush (2007), picture is an easy way for simultaneous attention to the building blocks of second language learning. Using picture for presenting new vocabulary has been a fundamental principle in many methods in TEFL or TESL (Richards & Rodgers, 2001). For example, in direct method, it is believed that there should be a direct association between form and meaning. According to Doff (1988), demonstration is direct, interesting, and makes an impression on the class. As Shapiro and Waters (2005) hold, "it is well documented within the cognitive literature that visual stimuli create very strong memories" (p. 131). Similarly, Richards and Rodgers (2001, pp. 81-86) believe that the visual aids are associative mediators that can show the relationships between form and meaning and contribute to learning and recall of new words. As a technique of second language vocabulary acquisition, word-picture activities can form a mental link at the early stages of second language learning, especially if it is created by the students themselves (Sokmen, 1997). Lewis

and Hill (1985) also contend that presenting new vocabulary by visual aids both clarify the meaning of the word and fix the word in the learners' mind.

In an action research carried out by Hopkins and Bean (1999), the effect of verbal-visual word association strategy on vocabulary learning was investigated. Results showed that this strategy could contribute to the conceptualization of vocabulary knowledge in an observable form. In another study conducted by Tonzar, Lotto, and Job (2009), the effect of picture-learning and word-mediated learning on the students' vocabulary development was examined. The results indicated that picture-learning method was more effective than word-mediated method.

Poetry and its significance in vocabulary recognition and production

Poems and songs have pedagogic value in language teaching. As Richards (1969) contends, singing a song can be pleasing for children because it changes the pace of the classroom and renders the experience of language learning enjoyable. Since music helps learners to unlock their imagination, it can change their mood as well. In addition, when students repeat the lines of a poem in a choral mode, their anxiety will lower (Mora, 2000). According to Moradan (2006), because of the musical rhythm and rhyme of the poem, it has an auditory effect. Widdowson (2003) mentions another pedagogic property of music, that is, repetition; a purposeful repetition can guarantee successful learning. According to Medina (1990), music and memory are interwoven and that the recall of the meaningful information is stronger than that

of less meaningful information and even stronger for verbal information learned through song and music. Hess (2003) considers vocabulary acquisition through music to be a four-step process: understanding the word, learning how to pronounce the word, learning how to spell it, and learning how to use vocabulary in sentences. Hanauer (2001) offers a coding system that describes the kinds of response which are elicited when reading a poem. Based on the coding system, initially the reader's attention is on the linguistic data and their interpretation according to which he can construct meaning, and then on the cultural issues (cultural awareness). Song can be considered as a means of incidental learning of vocabulary, the features of which are the same as the features of oral story. The result of the study conducted by Medina (1990) showed that the amount of vocabulary acquisition through either song or picture is higher than the usual practices and the highest when these two are combined.

As Webb (2005) contends, little research has been conducted to investigate both productive and receptive knowledge in a single study. It is the purpose of the present study, therefore, to investigate the effect of three techniques of vocabulary presentation on both productive and receptive knowledge of vocabulary.

Methodology
Participants

The sample of the present study consisted of 102 Iranian lower-intermediate EFL learners in Zaban sara English language institute of Kermanshah. 77 participants were male and 25 were female. They had learnt English

within the same established framework, in the same context, had studied the same course books, and had been assessed against the same measurement standards. Therefore, all of the participants were the same in terms of educational and language background. They were divided into three groups in which new words were presented through songs, pictures, and the keyword method.

Instruments

The following data collection instruments were utilized in the present study:

A. Pretest: To make sure that the participants had no previous knowledge of the words to be taught, and based on the assumption that they might know the meaning of some words prior to instruction, a pretest was administered. It included all the words to be taught during the instruction. Participants were given the words in context and were required to write the L1 translation of each word. It had 70 items.

B. Receptive word knowledge (R) test: to measure the participants' vocabulary recognition, a 40-item multiple-choice test was used in which the students were required to choose the best choice that completed each sentence.   The test was assumed to be valid since the content of the test corresponded to the content of the materials which had been covered in instructional sessions. The reliability of the test was estimated through KR-21 method, which turned out to be .78.

C. Controlled Productive word knowledge (p) test: to measure students' productive knowledge of words after instruction, a 4-item fill-in-the blank test was devised and

used, which prompted the participants to produce the target words and complete the sentences. In addition, the definition of words or the initial letter of the target words were provided which led students to the best answer. Like the recognition test, it was assumed that the test was content-valid. The reliability of the test, estimated through KR-21 method, turned out to be .69.

The following materials were also used:

Popular Songs and Nursery rhymes: In this study, the song group participants were presented with new words through 13 songs. In each session, one song with musical effect was used by the teacher; each song included at least four new words (appendix A).

Pictures: The Picture group participants were presented with new words through pictures. Attempt was made to choose the best and clearest pictures in which the focus was on the new words only. For participants to be familiar with the spelling of the words, it was considered appropriate to write the word on each picture (Appendix B).

Persian keywords and visual image: The keyword group participants received new words through 52 Persian keywords and their visual representations, drawn by the researchers (Appendix C).

Procedure

Having selected the participants, to minimize the effect of the participants' prior knowledge of the target words, the pretest was administered. Those words about which students had prior knowledge were excluded from the posttests. Each group of participants was randomly assigned to one of the three experimental conditions: In one group (no. 30), the new words were presented through songs: in thirteen sessions, thirteen songs, each including at least four new words were presented. The main methodology applied for teaching songs was repetition. The song was repeated several times. Initially, the teacher sang the song and the participants just listened. Then, the participants repeated the song after the teacher. Finally, the participants sang the song together, and then individually. In the second group (no. 25), the instruction of new words was through pictures: in thirteen sessions, fifty two (52) pictures were covered. In the third group (no. 47), the new words were presented through the keyword method, during which the teacher wrote each word on the board, wrote its Persian keyword in front of it, drew participants' attention to the picture including the keyword and the meaning of new words and then repeated it several times. At the end of the instruction, the participants' receptive vocabulary knowledge was tested through a multiple-choice test and their productive vocabulary knowledge through a fill-in-the-blank test.

Results

The first research question

The first research question sought to investigate which method of vocabulary presentation is most conducive to the learners' vocabulary recognition. To this end, an ANOVA procedure was used. Descriptive and test statistics for the ANOVA on vocabulary recognition is presented in Table 1.

Table 1: Descriptive and test statistics for the ANOVA on vocabulary recognition

Methods	N	Mean	Std.	Minimum	Maximum
The keyword method	44	45.40	4.64	33.00	51.00
Song	30	31.53	14.47	8.00	49.00
Picture	22	46.45	3.03	40.00	51.00
F = 27.056		Sig. = .001			

Based on the results in Table 1, the group instructed through picture has the highest mean, followed closely by the group instructed through keyword method. The group instructed through song has the lowest mean which is noticeably lower than that of the other groups. Moreover, The F value and the significance level show there are statistically significant differences among the three groups. Therefore, it can be concluded that different methods of vocabulary presentation have a significant effect on the learners' vocabulary recognition. To locate the differences, a post-hoc comparison (Scheffe' test) was used, results of which appear in Table 2.

Table 2: Multiple Comparisons of Means for the Learners' Recognition ANOVA

(I) Method	(J) Method	Mean Difference (I-J)	Std. Error	Sig
Keyword method	song	13.875*	2.083	.000
Keyword method	picture	-1.045	2.297	.902
Song	picture	-14.921	2.469	.000

Table 2 indicates that although the difference between the keyword method and picture groups is not statistically significant,

they are both significantly better than the group instructed through song.

The second research question

The second research question sought to investigate which method of vocabulary presentation yields better results in improving learners' productive knowledge. To his end, another ANOVA was used, the results of which are presented in Table 3.

Table 3: The descriptive statistics needed for the ANOVA procedure

	N	Mean	Std Deviation	Std Error	Minimum	Maximum
KWM	44	27.545	9.097	1.371	10.00	49.00
Song	30	15.400	12.327	2.25	2.00	40.00
Picture	22	32.818	10.390	2.215	18.00	45.00
F = 19.968		Sig. = .001				

Based on the results, it is evident that the differences among the three groups are statistically significant. To locate the differences between the means, a post–hoc Scheffe' test was used. The results appear in Table 4.

Table 4: Multiple Comparisons of Means for the Learners' production ANOVA

(I) Method	(J) Method	Mean Difference (I-J)	Std. Er	Sig
KWM	Song	12.14*	2.48	.000
KWM	picture	-5.27	2.73	.163
Song	picture	-17.41*	2.94	.000

Table 4 shows that the difference between the keyword method and picture groups is not statistically significant. However, they are both significantly better than the group instructed through song.

Discussion

The results of the present study indicate that the keyword method had a significant effect on both vocabulary recognition and production, compared with song. This finding is in accordance with many previous studies which compare the keyword method with the usual vocabulary learning strategies (such as Lawson & Hogben, 1998), with direct translation (such as Avila & Sadoski, 1996), with other mnemonic techniques, including loci, pegword, etc. as well as with free study (such as Richmond, et. al, 2008). In addition, the finding is in line with the study conducted by Taguchi (2006), which indicated that the keyword method was beneficial for the productive mode of learning.

On the contrary, there are studies which show that the productive knowledge of words cannot be achieved through the keyword method (Carney & Levin, 1998; Richard, 1976). However, as it was mentioned, the result of the present study indicates the beneficial effect of the keyword method on the subjects' productive knowledge of words. Different factors seem to have contributed to the high performance of the participants. From the psychological and cognitive points of view, the effectiveness of the keyword method is a function of providing visual imagery. According to Shapiro and Waters (2005), through providing interactive images, the keyword method provides visual stimuli

which lead to the better retention than other kinds of stimuli. Therefore, it is the nature of the visual stimuli that enable the keyword method to strengthen the visuo-spatial sketchpad.

Another factor is a kind of prerequisite for the meaningful learning which is provided by the creation of links between the new information and the subjects' schemata. According to Lawson (2005), this factor is one of the most beneficial factors which lead to the success of the keyword method in vocabulary acquisition. In addition, from the practical point of view, in this study the optimal conditions for the use of the keyword method in second language learning were met. For example, using the keyword method for teaching concrete words (according to the studies conducted by Shapiro & Walters's (2005), Hell & Mahn (1997), and Lawson & Hogben (1998)), using the keyword method for inexperienced EFL learners (Hell & Mahn, 1997).

Another finding of this study was that the students instructed through picture had the best performance in both vocabulary recognition and production. This is in accordance with such studies as Bush (2007), Avgerinou and Ericson (1997), and Hopkins and Bean (1999). The results are also in line with studies that compared the effect of picture on the students' vocabulary knowledge with explanation and translation (Lewis & Hill, 1985) and with word-mediated learning method or translation of the new words in L1 (Tonzar, et al., 2009). From the theoretical and psychological points of view, three major factors seem to have contributed to the better performance of the participants instructed through

picture. The first explanation is that picture provides a direct association between form and meaning and acts as an associative mediator (Richards & Rodgers, 2001). As a second explanation, the order of vocabulary acquisition through picture is similar to that of one's mother tongue, especially if the picture is created by the learner himself/herself. Another factor may have been the physical foci provided by the visual image. Indeed, picture highlights a particular word through associating it with a memorable image and therefore creates very strong memories and facilitates student recall (Doff, 1988; Shapiro & Waters, 2005; Richards & Rodgers, 2001).

The present study also showed that the group who learned new words through song had a considerably lower mean than the picture and the keyword method groups. The lower achievement of the learners instructed through song may be attributed to cognitive and practical factors. From the cognitive point of view, when listening to the songs and nursery rhymes, one's attention may be directed towards the whole picture rather than the elements that comprise that whole. Indeed, it could be the case of not seeing the trees for the forest, in which you get the main idea and do not see the small details, such as the vocabulary. In addition, since the language of song is conveyed through the musical devices and because of such features as rhythm and rhyme, such purposes as vocabulary learning may take a low priority. From the practical and cultural points of view, songs are not widely used in our language learning classrooms as a vocabulary learning instrument. Therefore, people are not accustomed to listening to music in order to learn vocabulary. In

addition, English nursery rhymes may not be culturally suitable for the Iranian context.

Conclusion

Based on the findings of the present study, it can be concluded that of the three techniques of vocabulary presentation, the ones that involve the simultaneous presentation of verbal and visual information (picture and the KWM) are superior to the one that presents verbal information in a rhythmic manner (song) in both vocabulary recognition and production. This finding can have both theoretical and practical implications for syllabus designers and teachers. Theoretically, it may help resolve part of the controversy surrounding the issue of (the extent of) the use of the mother tongue in L2 teaching since the KWM involves the incorporation of the L1 words in L2 lexical learning. The finding may also lend further support to the dual coded theory wherein it is claimed that receiving information through more than one channel (here verbal and visual) facilitates learning. With regard to practice, a clearer understanding of the kind and nature of the effect of each of the three techniques on vocabulary recognition and production can help teachers and syllabus designers make more informed decisions as to how to deal with words at the level of course book development as well as classroom presentation. Syllabus designers, for instance, may choose to allocate a greater space in their course books to the pictorial presentation of the lexical items, or design special vocabulary course books to teach vocabulary to learners with specific L1 backgrounds, thus making it possible to associate L2 lexical items with L1 words. This, of course, entails a more thorough

investigation into the factors under consideration here as well as others factors which may directly or indirectly relate to those studied here. For instance, the age of the learners, their proficiency level, the learning styles and preferences as well as the orientation (visual versus verbal orientation) of learners may all prove to be determining factors in the effectiveness of the variables investigated here. This study only scratches the surface of the issue, but hopes to arouse enthusiasm in interested researcher to carry out further research in this area.

References

Alavi, S. M., & Akbarian, I. (2008). Validating a self-assessment Questionnaire on Vocabulary Knowledge. *TELL*, *2*(6), 125-154.

Avgerinou, M., & Ericson, J. (1997). A review of the concept of visual literacy. *British Journal of Educational Technology*, *28*, 280-291.

Avila, E. & Sadoski, M. (1996). Exploring New Applications of the Keyword Method Acquire English Vocabulary. *Language Learning*, *46*(3), 379-395.

Bauer, D. J.,Goldfield, B. A. & Reznick, J. S. (2002). Alternative approaches to analyzing individual differences in the rate of early vocabulary development. *Applied Psycholinguistics*, *23*(3), 313-33.

Brown, Th. S. & Perry, F. L. JR. (1991). A Comparison of Three Learning Strategies for ESL Vocabulary Acquisition. *TESOL Quarterly*, *25*(4), 655-670.

Bush, M. D. (2007). Facilitating the Integration of Culture and Vocabulary Learning: The Categorization and Use of Pictures in the Classroom. *Foreign Language Annals, 40* (4), 727-743.

Carney, R. N. & Levin, J. R. (1998). Do Mnemonic Memories Fade as Time Goes By?Here's Looking Anew! *Contemporary Educational Psychology*, *23*, 276-297.

Doff, A. (1988). *Teach English*. Cambridge: CUP.

Ellis, R. (1995). Modified Oral Input and the Acquisition of Word Meanings. *Applied Psycholinguistics, 16*(4), 409-441.

Folse, K. S. (2006). The Effect of Type of Written Exercise on L2 Vocabulary Retention. *TESOL Quarterly*, *40*(2), 273-293.

Gass, S. (1999). Incidental Vocabulary Learning. *SSLA*, *21*, 319-333.

Gathercole, S. (2006). Complexities and constraints in nonword repetition and word learning. *Applied Psycholinguistics*, *27*(4), 513-543.

Gu, P. Y. (2003). Fine Brush and Freehand: The Vocabulary-Learning Art of Two Successful Chinese EFL Learners. *TESOL Quarterly*, *37*(1), 73-104.

Hanauer, D. I. (2001). The Task of Poetry Reading and Second Language Learning. *Applied Linguistics*, *22*(3), 295-323.

Hell, J. G. V. & Mahn, A. C. (1997). Keyword Mnemonic Versus Rote Rehearsal: Learning Concrete and Abstract Foreign Words by Experienced and Inexperienced Learners. *Language Learning*, *47*(3), 507-546.

Henriksen, B. (1999). Three Dimentions of Vocabulary evelopment. *SSLA, 21*, 303-317.

Hess, N. (2003). Real Language through poetry: a formula for meaning making. *ELT Journal*, *57* (1), 19-25.

Hopkins, G. & Bean, Th. W. (1999). Vocabulary learning with the verbal-visual word association strategy in a native American community. *Journal of Adolescent and Adult Literacy, 42* (4), 274-281.

Joe, A. (1998). What Effects Do Text-based Tasks Promoting Generation Have on Incidental Vocabulary Acquisition? *Applied Linguistics*, *19*(3), 357-377.

Kojic-Sabo, I. & Lightbown, P. (1999). Students' Approaches to Vocabulary Learning and Their Relationship to Success. *The Modern Language Journal*, *83*(2), 176-192.

Laufer, B. (1998). The development of passive and active vocabulary in a second language: Same or different? *Applied Linguistics*, *19*(2), 255-271.

Laufer, B. & Goldstein, Z. (2004). Testing Vocabulary Knowledge: Size, Strength, and Computer Adaptiveness. *Language Learning*, *54*(3), 399-436

Laufer, B. & Nation, P. (1995). Vocabulary Size and Use: Lexical Richness in L2 Written Production. *Applied Linguistics*, *16*(3), 307-322.

Laufer, B. & Paribakht, T.S. (1998). The Relationship Between Passive and Active Vocabularies: Effects of Language Learning Context. *Language Learning*, *48*(3), 365-391.

Lawson, M. (2005). Using the keyword method for vocabulary acquisition. Retrieved Apr. 12, 2009 from http://www.Imrc.sa.edu.au.

Lawson, M. & Hogben, K. (1998). Learning and recall of foreign language vocabulary: effects of a keyword strategy for immediate and delayed recall. *Learning and Instruction, 8*(2), 179-194.

Lee, S. H. (2003). ESL learners' vocabulary use in writing and the effects of explicit vocabulary instruction. *System, 31*(4), 537-561.

Leki, I. & Carson, J. G. (1994). Students' Perceptions of EAP Writing Instruction and Writing Needs Across the Discipline. *Tesol Quarterly*, *28*(1).81-97.

Lewis, M. & Hill, J. (1985). *Practical techniques for language teaching*. England: Language teaching publication.

Liu, D. (2003). The most frequently used spoken American English Idioms: A corpus Analysis and Its implications. *Tesol Quarterly*, *37*(4), 671-700.

Medina, S. L. (1990). The Effect of Music upon Second Languag Vocabulary Acquisition. Retrieved Jun. 17, 2009 from http://www.vocab. Music.conf.ir.

Melka, F. (1997). Receptive vs. productive aspects of vocabulary. In N. Schmitt & M. McCarthy (Ed.), *Vocabulary: Description, Acquisition and Pedagogy* (pp. 84-102), Cambridge: CUP.

Mora, C. F. (2000). Foreign language acquisition and melody singing. ELT Journal, *54*(2), 146-152.

Moradan, A. (2006). The miraculous power of poetry as a language teaching device in EFL classes. *TELL*, *1*(1), 103-121.

Nassaji, H. (2003). L2 vocabulary learning from context: strategies, knowledge sources, and their relationship with success in L2 lexical inferencing. *TESOL Quarterly*, *7*(4), 645-670.

Oxford, R. L. & Scarcella, R. C. (1994). Second Language Vocabulary

Learning Among Adults: State of the Art in Vocabulary Instruction. *System*, *22*(2), 231-243.

Richards, J. C. (1969). Songs in lagguage learming. *TESOL Quarterly*, *3*(2), 66-79.

Richards, J. C. (1976). The role of vocabulary teaching. *TESOL Quarterly*, *1*(1), 72-84.

Richards, J. C. & Rodgers, Th. S. (2001). *Approaches and methods in language teaching*. Cambridge: CUP.

Richards, J. C. & Schmidt, R. (2002).*Longman dictionary of language teaching and applied linguistics.* Pearson Education limited.

Richmond, A. S., Cummings, Rh. & Klapp, M. (2008). Transfer of the method of loci, pegword, and keyword mnemonics in the eighth grade classroom. *Resercher, 21* (2), 1- 13.

Shapiro, A. M. & Waters, D. L. (2005). An investigation of the cognitive process underlying the KWM of foreign vocabulary learning. *Language Teaching Research*, *9*(2), 129-146.

Sokmen, A. J. (1997). Current trends in teaching second language vocabulary. In N. Schmitt & M. McCarthy (Ed.), *Vocabulary: Description, Acquisition and Pedagogy* (pp.237-257), Cambridge: CUP.

Speciale, G., Ellis, N. C. , & Bywater, T. (2004). Phonological sequence learning and short-term store capacity determine second language vocabulary acquisition. *Applied Psycholinguistics, 25*(2), 293-321.

Taguchi, K. (2006). Should the keyword method be introduced in Tertiary Foreign language classroom? *Electronic Journal of Foreign Language Teaching*, *3*(1), 22-38.

Tonzar, C., Lotto, L. & Job, R. (2009). L2 Vocabulary Acquisition in Children: Effects of Learning Method and Cognate Status. *Language Learning*, *59*(3), 623-646.

Webb, S. (2005). Receptive and Productive Vocabulary Learning. The Effects of Reading and Writing on Word Knowledge. *SSLA*, *27*, 33-52.

Widdowson, H. G. (2003). *Defining issues in English Language teaching*. Oxford: OUP.

Wyra, M., Lawson, M. J., & Hungi, N. (2007). The mnemonic keyword method: The effects of bidirectional retrieval training and of ability to image on foreign language vocabulary recall. *Learning and Instruction*, *17*, 360-371.

Zimmerman, Ch. B. (1997). Do Reading and Interactive Vocabulary Instruction Make a Difference? An Empirical Study. *TESOL Quarterly*, *31*(1), 121-14.

APPENDIX A: Sample song

Little Fishes in a Brook
Little fishes in a brook,
Father caught them with his hook.
Mother fried them in a pan,
Father ate them like a man

APPENDIX B: A sample of pictures
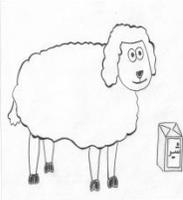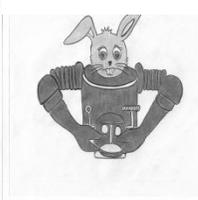

    Cottage   Carrot   Crow   Pigeon
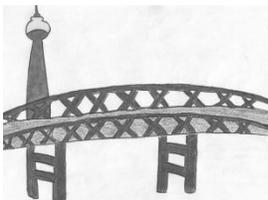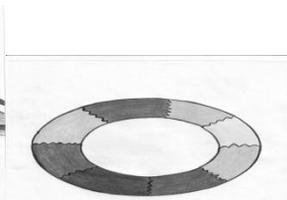
Appendix C: A sample of keywords

Gun / خان   Sheep / شیر   ربات / Rabbit   فیل / Hill
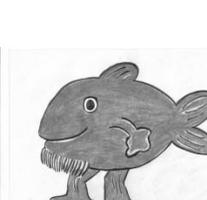

Bridge / برج   Ring / رنگ   Pan / زن   ریش / Fish

Hook / خوک   Arrow / اره   سس /Sausage