INTERNATIONAL ORGANIZATION OF
IOAS
ACADEMIC STUDIES

The Effects of Picture-based Storytelling on Vocabulary Learning of Iranian Intermediate EFL Learners

Zahra Rahnama

Deapartment of English Language , Faculty of Humanities , Islamic Azad University of Shiraz, Shiraz, Iran

zara1335@gmail.com

Abstract

Vocabulary learning is an important part in second/foreign language learning and language teaching. The present study investigated the effect of using storytelling, especially picture-based storytelling, as a new technique in vocabulary knowledge development. Telling stories in language classes can stimulate the learners' mind, and also foster understanding and acceptance of the foreign language and culture. This study aims at investigating the effect of teacher's storytelling on vocabulary acquisition of Iranian EFL learners. The sample was consisted of 60 male and female students at intermediate level who were selected based on availability and their English proficiency level. They were randomly assigned into experimental and control groups, 30 in each. In the experimental group, vocabularies were taught by telling stories and using pictures, while in the control group, the teacher used stories without any pictures. Data was collected via a pre-post-delayed post-test design. The analysis of the collected data through applying some t-tests revealed that telling story has a positive effect on learning vocabulary, and the experimental group outperform the control group significantly on the measure. In other words, there was a significant difference between the two groups in terms of the acquisition of vocabulary.

key words: Storytelling, Picture-based storytelling, Learning vocabulary, Iranian EFL learners

Introduction

Vocabulary is one of the central elements in English language teaching and learning since without enough vocabulary knowledge English language learners are unable to understand others or to express their own ideas. Wilkins (1972) wrote that ". . . while without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (pp. 111–112).

McCarthy (2001) points out that vocabulary constitutes the largest part of the meaning of the languages. Therefore, vocabulary learning is at the centre of learning a second or foreign language. In addition, Meara (1996) argues that vocabulary competence has the most important role in communication. This is particularly true, because however learners are good at grammar or pronunciation, they will not have a meaningful communication in case of lacking a certain command of vocabulary. Also, McCarthy (2001) considers successful language learners as those who have developed techniques and disciplines for vocabulary learning, like, keeping a notebook, using a dictionary frequently and properly or keeping reading much out of class. Conclusively, it is crystal clear that learners are required to improve their vocabularies on their own, since

it is understandable that the students cannot acquire all the vocabulary they need all at once in the classroom. However, in other words, the teachers' current task is to aid students to be autonomous in acquiring vocabulary.

Different language teaching methods have been introduced with the aim of improving the quality of teaching and achieving the desired impact on students. Storytelling by using pictorial aids is among essential methods to accelerate students' learning vocabulary.

Pictorial storytelling are useful, and they formed early in classroom and are resistant to forget. It is closely connected to what the students watch, listen, and, think (Mc Drury & Alterio, 2003).

Researchers have proved that using stories in the language teaching and learning is a powerful and effective way in both improving and developing the four basic skills of language: speaking, writing, listening, and reading. Furthermore, helping language learners to take active part in such activities can motivate them and make them active learners and developing constructive approach towards second/ foreign language learning (Cameron, 2005; Isabel, et al, 2004; Haven, 2000). Isabel et al (2004) stated that "stories are a very promising and influential educational means for foreign language teaching and learning" (p.158). Story attracts language learners' attention to new vocabulary and help them to recreate new vocabulary through "spontaneous, energetic performance assisted by participation and interaction" (Isabel et al, 2004, p. 158). This is the reason of replicating this model of learning in young learners' classrooms around the world widely (Isabel et al, 2004).

Using stories for young learners has a powerful and motivating effect (Haven, 2000). He (2000) declared that "factual and conceptual information is learnt faster, remembered longer, recalled more readily, and applied more accurately, when that information is delivered as a well told story." (p.75). He also added that teachers working with young students must always consider such a strategy in their vocabulary teaching process. He argued that, to make the class more motivational and fun, such a strategy can be used by different types of aids including musical instruments, pictures, real objects, computers, internet and textbook (Isabel et al, 2004).

Review of literature

However, vocabulary is central in every language, it has been ignored by scholars and instructors in the field of applied linguistics (Zimmerman, 1997). Grammatical competence has received more attention compared to second language vocabulary instruction for decades (Read, 2000) and scholars focused more on syntax and morphology for theorizing (Richards, 1976) as opposed to exploring ways to advance effective vocabulary learning strategies.

Recently, vocabulary learning has begun to receive increased attention in Second Language Acquisition (SLA) and started to take a place among priorities in the field. The need for strong theoretical foundations in vocabulary learning methodology was realized by researchers, practitioners and curriculum developers (Read, 2000). The recent shift in attention to vocabulary acquisition has been the result of the recognition of the significant role of vocabulary in both first and second/foreign language. For native speakers, the most intense period of vocabulary growth occurs during childhood. As the individual enters adulthood, her/his vocabulary continues to grow as she/he encounters new ideas and social trends and opens herself/himself to varied learning opportunities (Read, 2000). Sternberg (1997) claimed that a native speaker's vocabulary size is highly predicative of level of reading comprehension. Besides, Sternberg regarded vocabulary as the best single indicator of a person's overall level of intelligence and it is

typically a reliable predictor of one's overall score on a psychometric IQ test (1997).

The instructors and researchers accept and examine the role of vocabulary instruction in second language learning (Richards, 1980; Laufer, 1986; Nation & Coady, 1988, Nation, 1990), as a result, professionals must confront the issue of how to define vocabulary knowledge and what knowing a word entails to declare specific goals for vocabulary instruction and choose appropriate methods for boosting language learners process toward those goals.

The foreign language teachers should try to engage learners in storytelling activities taking care of more than just language forms and present language skills in its natural way (Cameron, 2001). In an empirical study, Karlsson (2012) showed that listening to stories can naturally lead to storytelling, while reading stories can equally naturally lead to story writing. He declared that, stories are the most valuable resource teachers have through which they can present their learners a world of supported meaning. Besides, teachers can use stories to "help children practice listening, speaking, reading, and writing." (Karlsson, 2012, p. 22).

Hui-Ling Huang (2006) conducted a study to investigate the impact of contextualized storytelling on EFL readers' reading comprehension and word retention. Utilizing Dual-Code Model and the multiple sensory approaches, it was figured out that the multi-sensory approach, by means of storytelling, would be a better intervention method compared to Dual-code Model in EFL reading and vocabulary recall.

Abdulla (2012) indicated that English language learners cope with many difficulties in learning vocabulary because they have to memorize a long list of words each day.

Some researchers have focused on the impact of pictorial storytelling on language development and vocabulary learning, for example, Abdullah (2012) investigated the effect of storytelling on vocabulary acquisition and his result has shown that using storytelling has a major role in improving the vocabulary learning.

Isbell, Sobol, Lindauer and Lowrance (2004) investigated the effect of storytelling on improving reading comprehension among young learners. The result of their research showed that storytelling is effective to improve the comprehension skills among the children. In Gallet's (2005) research, the effects of storytelling and story reading were compared on primary school children. Half the learners read the stories and the other half was told the same stories. The data showed that both groups improved on most measures. However, the storytelling group improved more than the reading group on some measures such as recall ability.

In Iranian context, Soltani, Khalaji and Azizmalayeri (2015) investigated the effect of using pictorial storytelling as a new technique in language teaching. Their results indicated that pictorial storytelling helped to improve learning vocabulary, and it was an effective way for EFL learners.

As the review of the literature indicated, a bulk of studies have concentrated on developing vocabulary knowledge of EFL learners, while little research has focused on using storytelling as an effective way to boost learners' vocabulary knowledge. The research on the effect of utilizing picture-based storytelling on learner acquiring and boosting vocabulary knowledge seems to be fruitful. Therefore, The aim of this study was to combine storytelling with pictures which are two learner-centered issues to see whether it can make the process of vocabulary learning more interesting, memorable and retainable or not. The present tried to focus on this issue to help bridge the divide in research and, hopefully, establish a precedent for future research in on the issues.

In order to address the purpose of study, the following research questions were formulated:

1. Does storytelling enhance intermediate EFL learner's vocabulary learning?

2. Does picture-based storytelling enhance vocabulary learning of Iranian intermediate EFL learners?

3. Is there any significant difference between the effectiveness of storytelling with or without picture on intermediate EFL learner's vocabulary learning?

Methodology
Participants

A total of 60 male and female EFL learners participated in the present study. They were learning English at a private language institutes in Genave, named Molaeii institute. They were all at intermediate level. Their age ranged from 10 to 14; they were all native speakers of Persian. They were selected based on their English proficiency level.

Materials

Five stories were worked on through the five-session-treatment. These stories were downloaded from http://www.rong-chang.com site. This is an international project-Internet site with a global objective to provide free access for good EFL/ ESL educational content. It offers various stories in different levels which teachers and students can use in English classrooms. These stories were selected according to the degree of difficulty (suitable for 10 to 14 year old students at intermediate level).

Data Collection Procedure

A total number of 60 homogenous EFL learners of Molaeii institute were asked to take part in this study. Participants' age ranged from 10 to 14. The first group (experimental group) received vocabulary instruction through pictorial story, while the other one (control group) received this instruction through stories

without pictures. At the outset of the study, a multiple choice vocabulary knowledge test consisting 30 words from several stories were administered to learners in order to see whether they were familiar with the words or not. The participants were taught through 5 weeks. At the end of each session, a test was administered to the participants. Besides, a post-test was administered two weeks after the experiment finished.

Through each treatment session the teacher in the experimental group teach vocabulary by telling a story and using pictures and then the teacher asked the students to retell a story using the pictures. The target words with their meanings were provided for learning along with their pictures. The control group were go through the same instruction process but they do not provided with pictures and they retell the story without using any picture.

Instruments

Three tests were utilized in this study in order to elicit the required data. Different language tests were utilized in the present study as pre- and post-tests.

Pre-test: At the outset of the experiment, the participants of both groups took a vocabulary test in order to make sure that the participants did not know the meaning of the words of the stories going to be thought through the experiment. The pre-test included 30 multiple choice vocabulary test.

Immediate post-tests: in order to assess the immediate effects of the treatment on vocabulary learning, at the end of each treatment session all participants participated in a multiple choice test. These tests included words were taught in that treatment session through the treatment task. For this test, learners were provided with the 10 vocabulary multiple choice questions. It should be noted

that the mean score of these tests was regarded as the post-test score.

Delayed post-test: Two weeks after the last treatment session, a multiple choice vocabulary test were administered aiming at investigating the long-term effects of treatment sessions on the students' vocabulary learning; this test was the same as the pre-test.

Data Analysis Procedure

The data for this study were collected through scores obtained from pre-test and post-tests, and delayed post-test. The SPSS software version 23 was used for analyzing these obtained raw scores. For analyzing data, both descriptive and inferential statistics were used. Descriptive statistics included mean, variance, standard deviation, and range. The researcher ran three different t-tests including one independent sample t-test for comparing post-tests of both groups, and two paired sample t-tests for comparing each group pre-test and post-tests scores.

Results
Descriptive Statistics

The purpose of this study was to find out the impact of using storytelling as a teaching strategy on EFL learners' vocabulary acquisition and to investigate if there is a significant difference in students' achievements between traditional method and picture-based storytelling method. The data were collected through a pretest-treatment-post-test and delayed post-test design for equivalent groups and analyzed via the statistical package SPSS. The following table is devoted to all three tests descriptive statistics results.

Table 1 - Descriptive statistics of tests

	groups			
	experiment		control	
Tests	M	S. D	M	S. D
Pre-test	4. 73	.77385	4. 78	.93480
Post-test	7.4667	1.31263	6.0806	1.00910
Delayed post-test	7.2667	1.29810	5.6167	1.08026

Table 1- shows that the mean score of experimental group in pre-test was 4.73, while the control group's mean was equal to 4.78. The standard deviations were .77385 for experimental group and .9348 for control group.

Besides, the experimental group mean score in post-test increased to 7.4667 and that of control group was increased to 6.0806. The standard deviations in post-test were 1.31263 and 1.0091 for experimental and control groups, respectively.

In the delayed post-test, the experimental group mean score was equal to 7.2667 and the standard deviation was 1.2981, while the mean score of control group was 5.6167 and the standard deviation was 1.08026.

As the above table signifies, however, both groups' mean scores were improved in post-test and delayed post-test, the delayed post-test experienced a decrease compared to post-test.

The Homogeneity of Participants' Vocabulary Knowledge

The researcher used the pre-test of both groups to scrutinize the homogeneity of participants before starting the experiment. In order to compare these groups mean scores, to find out whether their difference were statistically

significant or not, an independent sample t-test was run. Table 2 reports the results.

Table 2 - The independent samples t- test of pre- test

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.000	.987	1.037	58	.304	.25000	.24119	-.23279	.73279
Equal variances not assumed			1.037	57.617	.304	.25000	.24119	-.23285	.73285

As the above table signifies, there was no significant difference in mean scores of these two groups (t=-1.037, p=.304, two tailed). Conclusively, the experimental and control groups were homogeneous with regard to their vocabulary knowledge before starting the experiment.

The Effect of Storytelling on Vocabulary Learning

In order to determine if there were any significant differences in the students' achievements between pre- and post-tests among the control and experimental groups due to storytelling strategy, the researcher used paired samples t-test. Table 3 reports the results.

Table 3 - Paired Samples Test of pre and post-tests

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
	Mean	Std. Deviation	Std. Error Mean	95% Interval Difference Lower	Confidence of the Upper			
experimental	-2.7333	1.09649	.20019	-3.14277	-2.32390	-13.654	29	.000
control	-1.2903	.92893	.16684	-1.63106	-.94959	-7.734	29	.000

Table 3- shows that there was a significant difference between the pre-test and the post-test among the students of both the experimental group and the control group in favor of the post-test. This indicates that using storytelling in English language instruction to the students has a positive effect on students' acquisition of vocabulary.

The Effect of Picture-based Storytelling on Vocabulary Learning

In order to find out if picture-based storytelling was an effective strategy compared to traditional storytelling as shown by mean scores in the post-test, the researcher used an independent samples t- test which is represented in Table 4.

Table 4 - Independent Samples Test of post-test mean scores of experimental and control groups

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	1.452	.233	4.774	58	.000	1.43333	.30026	.83231	2.03436
Equal variances not assumed			4.774	53.946	.000	1.43333	.30026	.83134	2.03532

According to the above table, there was a significant difference between experimental group and control group on the post-test (t=-4.774, p=.000, two tailed). In other words, the experimental groups receiving picture-based story telling outperformed their counterparts who were instructed through traditional model of storytelling.

The Delayed Effect of Storytelling on Vocabulary Learning

In order to scrutinize the delayed effect of different types of storytelling, an independent sample t-test was run on the mean scores of both groups delayed post-test. The related results are represented in the following table.

Table 5- Independent Samples Test of delayed post-test mean scores of experimental and control groups

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper

Equal variances assumed	.718	.400	5.351	58	.000	1.65000	.30833	1.03281	2.26719
Equal variances not assumed			5.351	56.147	.000	1.65000	.30833	1.03238	2.26762

Based on Table 5, there was a significant difference in scores of these two groups (t=5.35, p=.000, two tailed). The experimental group outperformed in the delayed post-test.

Discussion
The first research question concerned the impact of storytelling instruction on vocabulary learning. Both descriptive and inferential statistics were utilized in answering the first research question. The use of both types of analyses were necessary in order to provide a more complete picture of how the vocabulary knowledge of the learners' changed through the course of the study depending on the treatment.

Based on the obtained results of Table 1 and 3, all participants received storytelling treatment, regardless of being picture-based or not, experienced an improvement in their vocabulary knowledge which is portrayed in their scores of post-test.

To summarize the findings, regardless of the treatment group in which the participants received treatment, change in learner vocabulary knowledge occurred after participants participated in vocabulary learning treatment sessions. Consequently, the storytelling learning style had an overall positive impact on all the participants.

The results of the present research confirmed that the strategy of storytelling can be regarded as a potential contributing factor in increasing participants' vocabulary knowledge. Many researchers (Cameron, 2005; Isabel, et al, 2004; Haven, 2000) have pinpointed the influential effect of story on

second language achievement, since making students participate in such activities can make them to be more active learners, and contribute them in constructing approach towards English language learning.

Besides, this finding lends support in Abdullah's (2012) study, which investigated the effect of storytelling on vocabulary acquisition and its result has revealed that using storytelling has a major role in improving the vocabulary learning.

Other research such as Moon and Maeng (2012) and Saxby's (2015) research, which revealed that stories can make young learner's learning meaningful and memorable (as cited in Abasi and Soori, 2013).

The second research question sought to determine the influence of picture-based storytelling on vocabulary learning. To answer this question, the difference in the experimental group's mean score of pre-test survey and the post-test survey served as the numerical value representing the amount of growth that took place with regards to vocabulary knowledge. The paired samples t-test enabled the researcher to measure the difference in vocabulary learning between two sets of tests (pre- and post-tests). Based on the findings reported through table 3, the experimental group participants, receiving picture-based storytelling instruction, outperformed in their post-test compared to their pre-test. In other words, the picture-based storytelling can be regarded as an influential strategy in vocabulary learning.

An explanation can be provided for the increase in vocabulary achievement of

learners who performed picture-based storytelling been the effect of storytelling by using pictorial aids which are the essential method that promote students' learning vocabulary and contribute in speaking, listening and even writing a story book with the items that they have been taught during the sessions of learning. It can be argued that accompanying words with pictures increased learners understanding and processing of unknown words.

The third research question compare the effects of storytelling instruction with and without pictures on EFL learners' vocabulary acquisition. The results indicated that the participants of the experimental group who received picture-based storytelling outperformed the in control group that experienced storytelling in their treatment both in their post-test and in their delayed post-test. This result is supported by Soltani, Khalaji and Azizmalayeri's (2015) research which stated pictorial storytelling, as an effective way for EFL learners, assisted improving learning vocabulary.

In sum, it can be concluded that the visual memory of the young learners played an important role in both comprehension and remembering of the vocabulary learnt through the story for a longer period of time.

Conclusion

The outcome of this study provided evidence for the positive effect of storytelling on facilitating young learners' vocabulary learning. It is also concluded that picture-based storytelling, if the pictures and stories are appropriately selected and organized, can offer a great range of opportunities to develop their vocabulary knowledge in a playful and enjoyable context which last for longer time compared to traditional storytelling methods.

The positive results of picture-based storytelling could be due to some reasons. The use of picture-based stories might have motivated the children and promoted their concentration which in turn focused children's attention on their received pictorial input.

One important implication of the findings for language learners is that they meet to learning vocabulary learning items in contexts that possibly include pictures. In this way the effectiveness of vocabulary learning enhance. With regard to language teachers important implication is to teach vocabulary through pictures in language classrooms. As the present study indicated that combining stories with pictures will enhance the efficacy of vocabulary instruction.

Another important implication of the findings is for educational policy-makers to consider the applicability of the pictorial storytelling in Iranian school context, for EFL teachers to take into consideration the recent methodological developments in vocabulary teaching and learning, and for local FL textbook writers to produce and prepare text books along pictorial storytelling lines.

Another implication that can be drawn involves selection of an appropriate learning style to yield increased development of vocabulary knowledge. Data from this study showed that the difference in reported growth in vocabulary knowledge was statistically significant based on the storytelling model. Because the pictorial storytelling treatment group showed a significantly higher amount of growth in vocabulary knowledge compared to the non-pictorial group, second language instructors should consider making use of collaborative techniques to enhance their own students' development in knowledge of the target vocabulary.

Some limitations to this study must be noted. These limitations concern the number of participants, the test design and the data collection time, and involve issues of reliability and authenticity of content. One limitation of the study was the low number of participants involved in the study. The study

was limited to a sample of 60 EFL learners. It would have been more comprehensive if more learners were included in the sample.

Another limitation involved the treatment time which was short (five sessions) and the amount of material which only consisted of five short story. So, it appears that further research with larger groups and in longer period treatment time with greater amount of materials might shed more light on the process of learning vocabulary of EFL learners.

Based on the results, several recommendations can be made for future studies on the effects of various learning styles on learners' vocabulary acquisition in second language vocabulary teaching.

A proposal for future research cab be involve investigating the effectiveness of computer-assisted vocabulary learning activities which can also greatly benefit the field of second language learning.

References

1. Abasi, M., & Soori, A. (2013). Is storytelling effective in improving the English vocabulary learning among Iranian children in kindergartens? International Journal of Education and Literacy Studies, 2 (3), 1-5.

2. Abdullah, E. (2012). The effect of storytelling on vocabulary acquisition. Adabol Fraahidi Journal, 2 (10), 21-28.

3. Cameron, L. (2001). Teaching Language to Young Learners .Cambridge: Cambridge University press.

4. Cameron, L. (2005). Teaching languages to young learners. U.K. Cambridge University Press.

5. Gallets, M. (2005). Storytelling and story reading: a comparison of effects on children's memory and story comprehension. Unpublished M.A. Thesis, East Tennessee State University, Tennessee, USA.

6. Haven, K. F. (2000). Super simple storytelling: a can-do guide for every classroom, every day. Englewood, Colo.: Teacher Ideas Press.

7. Hui-Ling, H. (2006). The Effects of Storytelling on EFL Young Learners' Reading Comprehension and Word Recall, English Teaching & Learning. National Yunlin University of Science and Technology, 30(3), 51-74.

8. Isabell, R., Sobol, J., Lindauer, L., & Lowrance, A. (2004). The Effects of Storytelling and Story Reading on the Oral Language Complexity and Story Comprehension of Young Children. Early Childhood Education Journal, 32 (3), p. 157-163.

9. Karlsson, P.A. (2012). Storytelling as a Teaching Strategy in the English Language Classroom. Unpublished M.A thesis University of Iceland School of Education.

10. Laufer, B. (1986). Possible changes in attitude towards vocabulary acquisition research. International Review of Applied Linguistics in Language Teaching, 24, 69-75.

11. Mc Drury, J. and Alterio, M. (2003) Learning Through Storytelling in Higher Education. London: Kogan Page.

12. McCarthy, M. (2001). What is an advanced level vocabulary? Studies in English Language and Linguistics, 3 (1), 41–58.

13. Meara, P. (1996). Performance and Competence of Second Language Acquisition. Cambridge: Cambridge University.

14. Moon J, Maeng U. (2012). A comparison study of the effect of reading instruction using storytelling and storysinging. Proceeding of 17th conference of Pan-Pacific Association of Applied Linguistic. School of Education, Ajou University.

15. Nation, I.S.P., & Coady, J. (1988). Vocabulary and Reading. In R. Carter & M. McCarthy (Eds.). Vocabulary and Language Teaching, (pp. 97-110). London: Longman.

16. Nation, P. (1990). Teaching and Learning Vocabulary. New York: Newbury House Publishers.

17. Read, J.A.S. (2000). Assessing Vocabulary. J. C. Alderson & L. F. Bachman (Series Eds.). Cambridge: Cambridge University Press.

18. Richards, J. (1976). The role of vocabulary teaching in the English syllabus. TESOL Quarterly, l0 (l), 77-89.

19. Richards, J. C. (1980). The role of vocabulary teaching. In K. Croft (Ed.), Readings in English as a second language: For teachers and teacher trainers (2nd ed., pp. 424-438). Cambridge, MA: Winthrop.

20. Soltani, N., Khalaji, H. R., & Azizmalayeri, F. (2015). The Effect of Pictorial Storytelling on the Development of Vocabulary Learning of Iranian EFL Primary Learners. International Journal of Educational Investigations, 2 (1), 239-248.

21. Sternberg, R. J. (1977). Intelligence, information processing, and analogical reasoning: The componential analysis of human abilities. Hillsdale, USA: Lawrence Erlbaum.

22. Wilkins, P. (1972). Linguistics and Language Teaching. London: Edward Amold. Zimmerman, C. B. (1997) Historical trends in second language vocabulary instruction. In J. Cody & T. Huckin, Second Language Vocabulary Acquisition: A rationale for pedagogy (pp. 5-19). Cambridge: Cambridge University Press.