A Survey on the Effectiveness of Mother Tongue on Learning L2 Vocabulary by Iranian Pre-intermediate EFL Learners

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Abstract

This study investigated the role of mother tongue on learning English vocabulary by Iranian pre-intermediate EFL learners. For this purpose, 30 female pre-intermediate learners were chosen. After administering a Nelson test participants were selected from the intact classes at Foreign Language Institute in Babol. These 30 partners were randomly allocated to 2 gatherings (one laboratory and the other control) each comprising of 15 partners. The participants received a pre-test comprising 70 English words to ensure that they did not have previous information of objective structures. Experimental group received their instruction, meaning of each target word, and translation of target words with their mother tongue (Persian). But control group just received target language (English) for all activities or instructions. Both teacher and students in this group didn't allow using Persian. After the treatment, the same pre-test was given to the participants as a post-test to measure the effectiveness of therapy gained. After collecting the data, to respond the research proposal, a t-test was conducted. The results indicated that first language had significant effect on learning English words. The findings of this study are considered to be useful in methodology issue.

Keywords: vocabulary, mother tongue, first language, foreign language

1. Introduction

Language is meaning human characteristic. Children learn their mother tongue as quickly and efficiently as possible. But learning second or foreign language needs more attention because learners must learn new language which is different from their mother tongue.

Learning every language around the world needs 4 abilities: Speaking, Reading, Writing and Listening. The basis of each skill is vocabulary. Because a perfect and continuum communication without suitable and enough vocabulary is impossible. Vocabulary is a crucial section of language and, as such, it gives the sense to be able to evaluate the learners' experience of it. That is fairly true either we are eager in pedagogical evaluation in classes or language acquisition investigation. Furthermore, knowing vocabulary for learners in lower levels is necessary to learn language and master on four skills. But there are many problems in this way. The most important problem for foreign or second learners is remembering target vocabulary. As foreign or second learners tend more to use of their first language to learn target vocabulary, logical solution is to use learners' mother tongue in translation or meaning of each word to learn and remember target vocabulary. Jiang (2000, as cited in Golaghaei & Sadighi, 2013) proposed a psycholinguistic model with the aim of elaborating on the cognitive distinctions between first and second language vocabulary acquisition. He classified the differences into two primary categories: The first category deals with the contextualized input available to children. It is worth mentioning that the presence of such a contextualized input facilitates the extraction and combination of lexical meaning for children. In contrast, the amount of contextualized input available to the adult language leaner is scarce. The second view however, refers to the adult L2 learners' access to an already established conceptual and lexical system of their L1 which makes the action of translating the objects from L2 to L1 possible.

Studies done in this way showed that many students and teachers are willing to use initial language when doing pair work and tasks. For instance, Ma (2009) examined the attitude of adult Chinese- background

students and an ESL teacher towards L1 employed in an Adult Migrant English schedule class in Australia. Data examination showed that both teacher and students respect to use of L1 in their class and believe that it is a valuable pedagogy and cognitive source.

On the other hand, some studies showed that some teachers and students were unwilling to use of L1 in foreign or L2 classrooms. However, these arguments against using L1 couldn't provide essential evidence to reject it. Cook (2001) mentioned that language teaching education managed to neglect or even suppress the use of L1 for long time.

All in all, today's analysis has revealed that the original language of students can play a helpful role in some of these strands and the intention of this paper is to look at some of this analysis and to recognize precisely whether use of mother tongue facilitates the learning of English vocabulary or impedes it.

2. Research Question

The present study aims at finding use of L1 in learning English vocabulary at lower intermediate level in English Institute. So this study was motivated by the following research question.

Does mother tongue have any significant effect on learning English vocabulary by Iranian pre- intermediate learners?

3. Research Hypothesis

To answer the research question, the following research hypothesis made.

Mother tongue has no any significant effect on learning English vocabulary by Iranian pre-intermediate learners.

4. Review of Literature

Over the language education history, there has been a heated debate within learners and practitioners who attend an "intra-lingual policy," i.e., a monolingual method that denies original language application, or a "cross-lingual policy," which lets a judicious application of students' mother tongue (Stern, 1992, cited in Ostovar-Namaghi & Norouzi, 2015).

Cook (2008) advocates that teachers might fall back on students' L1 for 2 fundamental reasons: 1). expressing meaning of lexical items or sentences, 2). conducting classroom, giving instruction for explaining activities, and resting. Lourie (2010) observed teachers who used L1 to translate texts, and to facilitate communicative activities. Brooks-Lewis (2009) investigated that both teacher and students have general positive attitude toward use L1. Burden (2000) mentioned that majority of his pupils asked the teacher to utilize L1 to process knowledge. Another investigation by Oxbrow & Rodrigues (2008) showed that most of students said using L1 to explain grammar point is very helpful to improve their L2. But teachers in this study were unwilling to give instruction or carry out activities in the L1. Bouangeune (2009 as cited in Wafa Abdo Ahmed Al Sharaeai, 2012) managed a research on the effectiveness of the original language in Laos to promote the learners' English training. He managed two teams, laboratory and control groups, to accompany his research. The original language was utilized as a means of guidance and to translate new statements and vocabulary for the laboratory group whereas the control group did not receive original language guidance and translation. The outcomes revealed that the laboratory group designated a higher development in English than the control one. Bouangeune assigned this improvement to the efficient utilization of original language guidance and proper translations of the new statements and vocabulary.

In contrast, there are theoretical believes and empirical studies that reject monolingual progress to language guidance on several other objectives. A state of this kind was listed by Nunan (Ostovar-Namaghi & Norouzi, 2015) representing a state where an EFL lecturer in China required fines on his pupils in positions they spoke Cantonese in the class. The findings were not interesting, and the students became entirely silent. Neither did they utilize the mother tongue, nor did they use English. The teacher got his dream of no Cantonese, however ironically he did not get any English from his pupils either (p. 158).

To summarize, based on Cook (2001) none of the three cases from L1 learning, compartmentalization of languages and the requirement of L2 use firmly support the view that the L1 should be avoided. They rely partially on a comparison of things that are eventually disproportionate—L2 training is not L1 purchase, and L2 users are not the same as L1 ones- notably on increasing the maximal terms of L2 to an escape of the L1. Helpful as it may be to use the L1 sparingly; this has no outspoken intellectual rationale. The pressure from this, frequently unacknowledged, the anti-L1 approach has restricted language education from looking reasonably at methods in which the L1 can be included in the class. It has managed to put an L2 strait jacket

in the class which has stifled any systematic application of the L1. If avoiding the L1 is the hardly practical proposition that pupils should encounter as much of the L2 as possible, new avenues are opened for language education which involves the active systematic application of the L1.

5. Methodology

This study was conducted at the Foreign Language Institute, Babol and focused on pre- intermediate level. For conducting this study, researchers needed two intact classes as one experimental group and one control group. Since the treatment was provided after the usual class time and the researchers were of the teachers in that institute, the researchers received the Foreign Language Institute's approval and the participants' consent. The researchers managed these two intact classes so that the classes met twice a week on Saturday and Wednesday after usual class time for half an hour. Number of class time was 10 sessions. For purpose of this study, researchers chose a book named "English Time 5". Chosen vocabulary from this book was 70 words. Each session, students have been taught 7 words. The method of this study was direct approach such as learning words through word lists. Then, participants used those words into the context. For experimental group, students have learned meaning of each English word which was translated into Persian. Control group have been not allowed to use of meaning of each word translating into Persian. They had to learn the meaning of each word only English to English. Then, they used those words into the context. After treatment, as a post-test, experimental group had 70 English words listed to translate into their first language, and control group had the same post-test, but they asked to translate English words into second language.

6. Population and Sampling

The people from which the partners were chosen for this research involved Iranian pre-intermediate EFL students, who entered in language institute. The participants were from two intact classes at Foreign Language Institute, Babol in the spring of 2016. Each class consisted of fifteen female pupils and their age varied from 15 to 17. Based on obtaining scores on Nelson proficiency test, these 30 students were selected as homogenous subjects.

7. Procedure

At the outset of the study, Nelson English Language Examination 200A, adjusted from Coe & Fowler (1976) devised for pre-middle and middle level employed as a learning test to ensure the homogeneity of the gatherings.

After establishing the homogeneity of the learners in terms of grammatical knowledge through the proficiency test, i.e., the Nelson Test, another test as a pre-test consisting of 70 isolated words which is listed to translate into Persian. The objective of this analysis was to produce clear that the students didn't have previous information of target vocabulary. As a part of the examination development method, attending a pilot review and doing an analytical study to assure the quality of the test objects are determined before the estimation device is employed with the real subjects in the analysis. A leader testing was fulfilled by an intact group of students including twenty students of Enqelab Shokouh Institute, Babol. The students were at the same level and age as participants of current study. For experimental group, researcher used students' mother tongue to teach and translate English vocabulary. For control group, researchers just did not use direct method to teach and translate English vocabulary so neither teachers nor participants used Persian language. Both classes had context after learning English vocabulary to better understanding of the meaning of each word.

At the end of the study, i.e., after a ten-session treatment, a post-test was administered in order to measure the participants' vocabulary knowledge gained and also investigate the effect of mother tongue in learning English vocabulary. Post- test for experimental group was to translate isolated English words into Persian, but post- test for control group was to translate isolated English words into English.

8. Data Analysis

After collecting data from Nelson Proficiency Test, to estimate homogeneity of the participants a t-test was run. In addition, to confirm whether the variations among individuals' scores in the pre-test were notable, another t-test was conducted on the pre-test rates.

After the administration of the post-test at the end of the study and the computation of the participants' scores on the post-test, appropriate statistical tests were employed in order to answer the research hypothesis. In order to answer the research hypothesis, G2 mean score on the post-test was compared with the mean score of the experimental group, i.e., G1 mean score. In order to do so a t-test was run.

9. Results

In this part the result of the Nelson Proficiency Test administered at the outset of the study is reported. The test was given to all the participants of two classes whom were chosen for the aim of this investigation at Foreign Language Institute. The descriptive analysis of this proficiency test is given in table 1 below.

Table 1. Descriptive analysis of the homogeneity test

	N	Minimum	Maximum	Mean	Std. Deviation
G1	15				
G2	15	7	27	15.67	6.544
Valid N (listwise)	15	8	28	16.83	7.123

To find out that partners were at the same level of knowledge and estimate the homogeneity of the participants the mean scores of G1 and G2 were compared. The best inferential statistical test for this purpose is independent t-test. Table 2 presents the result.

Table 2. Independent t-test for G1 and G2 performance independent samples test

	Levene's test for Equality of variances		t-test for Equality of Means					95% Confidence interval of Difference	
	F	Sig	t	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumec	.994	.346	7.827	34	.08	7.08	.905	5.165	9.002
Equal variances not assumec			7.827	6.825	.000	7.08	1.076	4.527	9.640

As above table shows, sig exceeds 0.05, that is sig> 0.05 (0.08 > 0.05). Hence, all the participants of this study were at the same level of proficiency.

After establishing the homogeneity of the students in terms of language proficiency, the researchers administered another test was developed by herself as pre-test. The purpose of this test was to assure that there is no significant difference between the participants at the outset of the instruction. This test was developed and piloted by the researchers. The results of this pre-test are reported in the table 3 below.

Table 3. Descriptive analysis of the pre-test

Pre-test	N	Minimum	Maximum	Mean	Std. Deviation
G1	15				
G2	15	3	11	6.22	2.157
Valid N (listwise)	15	2	12	6.50	3.034

To show inferential statistics of this test, the mean scores of G1 and G2 were compared. A t-test is the best inferential statistical test for this aim. Table 4 presents the result.

Table 4. Independent t-test for G1 and G2 performance on the pre-test independent samples test

	Levene's test for Equality of variances		t-test for Equality of Means					95% Confidence interval of Difference	
		Sig	t	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumec	2.449	.137	2.144	34	.07	5.56	2.594	5.165	11.062
Equal variances not assumec			2.144	10.442	.000	5.56	1.023	4.527	7.828

As the table 4 shows sig exceeds 0.05, that is sig > 0.05 (0.07 > 0.05). Therefore, there is no significant difference between the participants at the outset of the instruction. So these participants are suitable for this study.

After giving own treatments to each group a post-test developed by the researcher was given to the participants in order to measure their gains. The results of this post-test are presented in the table.

Table 5. Descriptive analysis of the post-test

Post-test	N	Minimum	Maximum	Mean	Std. Deviation
G1	15	8	20		
G2	15	4	20	14.56	3.807
Valid N (list wise)	15			11.89	4.849

Before answering the research hypothesis, the researcher used two matched t-test in order to see if the groups had gained any improvements over the different instructional approaches in the two groups. In the following section each group's improvement from pre-instruction to post-instruction is shown the following tables.

Table 6 shows a comparison between pre-test and post-test of G1 in order to see if any possible improvement has occurred due to the instruction with using mother tongue given to this group. For so doing, the pre-test mean score and the post-test mean score are compared in this group. Matched t-test is the appropriate statistical test for this purpose. The descriptive analysis of pre-test and post-test along with the results of the matched t-test are shown below.

Table 6. Descriptive analysis pre-test post-test G1

	Mean	N	Std. Deviator	Std. Error Mean
Pair 1 pre-test	6.22	15	2.157	.508
Post-test	14.56	15	3.807	.879

Based on the Table 7, since sig value turned out to be less than 0.05 that is, sig (2-tailed) < 0.05 (0.006 < 0.05) we can conclude that the difference between pre-test and post-test is significant and mother tongue is significantly helpful in improving the learners' English vocabulary.

Table 7. Pre-test and post-test comparisons for G1: matched t-test paired instances test

Paired Differences								
	average	standard Deviation	Standard Error average	95% Confidence Interval of variation		t	DF	Sig. (Two-tailed)
				Lower	Upper			
G1 Pre & Post-test	-8.33	1.847	.435	-9.25	-7.41	-19.147	17	.006

To answer research hypothesis which was investigated the effect of mother tongue on learning English vocabulary, Table 8 presents the descriptive analysis for G1 and G2.

Table 8. Descriptive analysis for G1 and G2

	Mean	N	Std. Deviation	Std. Error Average
Post-test G2	11.89	15	4.849	1.143
	14.56	15	3.807	.897

As shown in table 9 since sig value came out to be less than 0.05 that is, sig (2-tailed) < 0.05 (0.000 < 0.05) and hence the null hypothesis is rejected and we can conclude that mother tongue has significant effect on learning English vocabulary.

Table 9. Independent t-test for G1 and G2 Action on the post-test (H01) independent instances test

	Levene's test for Variances Equality		t-test for Means Equality					95% Confidence interval of Difference	
	F	Sig	t	df	Sig (Two-tailed)	Average Difference	Standard Error Difference	Lower	Upper
Equal variances assumes	5.478	.33	6.161	34	.000	6.58	1.069	4.318	8. 849
Equal variances not assume			6.161	14.977	.000	6.58	1.069	4.638	8.529

10. Conclusion and Discussion

The main aim of this study is to investigate the use of L1 in the EFL classroom at pre-intermediate level of proficiency. The outcomes of this investigation showed the effectiveness of mother tongue in the students' retention of the meaning of the English words. With respect to the results obtaining from the analysis of data related to learning English vocabulary through the L1 use and learning English vocabulary through the L2 use, the students' performance was better in L1. In other words, the students acted better when they received their mother tongue to have instruction, to translate meaning of target new vocabulary. Therefore, the foreign learners may tend to rely on this established L1 lexicon system in learning new words. To support current study, following research had the same results (Machaal, 2012; Salah & Farrah, 2012; Nation, 2003; Tang, 2002; Al-Nofaie, 2010; Shama, 2006; Storch &Wigglesworth, 2003, as cited in Bhooth, Azman, & Ismail, 2014) in the contexts of Nebal, Australia, Saudi, Palestine, and China. According to Cook (2001), who argues that teaching L1 as a classroom resource opens up numerous plans to manage it. The supervisor can use L1 to convey meaning, explain grammar, and organize the class. So collaborative learning and individual strategy use can be part of students' L1 use. Thus, the teacher can use L1 as a pedagogical tool to facilitate the education and training of English as a foreign language. The results indicate that Persian was generally employed in the EFL class for understanding the meaning of English words and reducing students' anxiety to learn new words, and to check for comprehension. These studies revealed that students use and prefer their teachers to use L1 for targeted purposes. Therefore, the study suggests that the use of the Persian may be beneficial in the EFL class, especially when students have difficulty in understanding target new words.

Hence, the finding of the study reported the role of the L1 as a supportive and facilitating tool. According to the findings, it could be found that L1, in this case the Persian language, could be used by students as a learning strategy i.e. translate new words, define concepts and help each other in their groups.

Moreover, L1 could be used by the teacher as a pedagogical strategy to facilitate students learning and to improve their engagement in the classroom.

This research, nevertheless, has some shortcomings that should be declared and that could serve as lines of future education and research in this area. The sample size, list of English words, context, sample age and sex, various variables such as students' level of knowledge, teacher ability and skill, and individual variations are restrictions that could be built in future studies.

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