Teaching Vocabulary through Code-mixing
آموزش واژگان از طریق ادغام رمزگانی

مریم ابدالی*

چکیده: در فراگیری زبان نمی‌توان نقش مهم واژگان را انکار کرد. از طریق کلمه است که چهار مهارت زبان می‌تواند ارائه شود. برای یادگیری و تدریس واژگان در زبان دوم تکنیک‌های فراوانی ارائه شده است. یکی از آنها – که کمتر بدان توجه شده – ادغام رمزگانی (code mixing) است. ادغام رمزگانی پدیده‌ای رایج است که در آن لغت یا عبارتی از یک زبان در بین گروهی از کلمات که به ساختار زبان مجزای دیگری تعلق دارند به‌کار گرفته می‌شود. در این تحقیق سعی شده است که فراگیری لغت از طریق روش ادغام رمزگانی و روش سُنتیِ تعریف (definition) مقایسه شوند. از این‌رو، دو گروه ۲۵ نفری از بین ۱۰۰ دانش‌آموز دختر پیش دانشگاهی دبیرستان مطهری شیراز براساس نمرات امتحان سطح دانش زبانی انتخاب شدند. دانش‌آموزان هر دو گروه در ۶ جلسهٔ یادگیری لغت شرکت کردند. گروه یادگیری لغت با روش ادغام رمزگانی را آزمودند؛ یعنی متنی انگلیسی که در آن معادل فارسی کلمات ناآشنا برای دانش‌آموزان قرار داده شده بود یک‌بار برای دانش‌آموزان خوانده شد و بار دوم همان متن برای یادگیرندگان به زبان انگلیسی خوانده‌شد. به گروه کنترل کلمات از طریق معنی لغت و متضاد کلمه یا از طریق تعریف معلم یاد داده شد. در پایان آموزش براساس امتحان واژگانی که از دانش‌آموزان هر دو گروه به‌عمل آمد، گروه آزمایش نسبت به گروه کنترل برتری معناداری نشان دادند.

کلیدواژه: ادغام رمزگانی، افراد دوزبانه، آموزش واژگان، روش تعریف.

---

* مدرس پیش‌دانشگاهی الزهرا و علوم معارف، شیراز.

Maryam-abdali 1 @ itatmail.com

Abstract

Nobody can deny the critical role of vocabulary in learning a language. All four skills are rendered through vocabulary. Many techniques have been suggested for vocabulary learning and teaching. One of the techniques which has been paid less attention to is code-mixing. Code-mixing can be defined as a phenomenon in which a word or an expression from one language is used in a phrase, clause or sentence whose structure belongs to another distinct language. The present study is an attempt to find out whether vocabulary learning through code mixing can be achieved as successfully as through definition method. To this end, two groups, each of 25 female pre-university students of Motahari High School in Shiraz were screened out from a population of 100 based on their scores on an English placement test. Both subjects in the experimental and control groups received 6 sessions of vocabulary instruction. The experimental group underwent the code-mixing method. That is, a text in which new words were inserted from L1 (Persian) was read to the students. The text was read to the students once more to present the L2 equivalents. The control group was taught through synonyms, antonyms and the teacher's definition for words. Both groups took part in a vocabulary test. Data analyses indicated that the experimental group was superior to the control group and the difference was significant.

Introduction

A significant aspect of every language in both the first and the foreign language is vocabulary. Meara (1995) notes that vocabulary development is a vital part of each student's life. It affects his actions, thoughts, aspirations and often his success. Concerning the importance of vocabulary and its role in second language learning, Seal (1991, p.296) points out: "Words are perceived as the building blocks upon which the knowledge of the second language can be built." A variety of approaches to vocabulary study (i.e. definition, using pictures, translation, etymology, keyword method, etc.) is in evidence. A new and at the same time less developed technique to teach vocabulary is code-mixing.

Definition of Code-mixing

Language mixing - a widespread phenomenon, though not universal, among bilinguals - is mixing and integrating two linguistic systems. Hacken (2002) states that code-mixing (CM) refers to the mixing of various linguistic units (morphemes, words, modifiers, phrases, clauses and sentences) from two participating grammatical systems within a sentence.

According to Hacken (2002) code mixing has some linguistic and pragmatic functions such as *quotations*, *addressee specification* and *reiteration* (for emphasis or clarification). It can also have some sociopsychological functions such as personalization vs objectification for giving authority and the other functions are repair strategies (e.g. omission, insertion, and repetition). Some examples can be found in Samandar's book (1988): "æzizæm take it easy, take it easy, čera æz dideh æšk-e qæm berizi, mæšo mæd æz kesi ta kæm šævi sad ke in donya nemiærzæd   pæšizi."

Memory System in Code-mixing

A question that has been asked by psychologists is whether the L2 user has two mental dictionaries or one. Research into the processing of semantic meaning has shown that people take about the same time to say whether a "*table"* is "*furniture*" in their L1 as in their L2 (Caramazza & Brones, 1980). Hence they would seem to have one mental store of words. Other research, however, has shown that hearing another word in the same language rather than a word in the speaker's other language helps the speed of mental access to a word (Kirsner, et.al. 1984). Some investigators (e.g. Kroll & Stewart, 1994) have addressed the issue utilizing models that propose a bilingual structure composed of separate but interconnected language-specific

lexicons (i.e. mental dictionaries) and a conceptual memory store that contains information about how the words work. Thus, according to these models, the bilinguals' two languages can be activated or deactivated, to different degrees, depending on the similarities or differences between the two languages under consideration (e.g., Li, 1996).

RESEARCH QUESTION

The aim of this study is to examine the effects of the two teaching techniques (definition vs code-mixing) on Iranian High School girls learning vocabulary and to decide which way is more effective in teaching vocabulary. In this connection the following research question was formulated: Can code-mixing method lead to better vocabulary learning than the definition approach?

Based on the question, the following null hypothesis was formulated: Concerning vocabulary learning, there is no difference between code-mixing and definition methods.

Review of Literature

Studies on code-mixing have been conducted for different purposes. Riyad (1999), for example, wanted to find out why university students used code- mixing and what their attitudes were toward this phenomenon in Jordan. The findings indicted that students turned to code- mixing to fulfill certain communication

functions. But they thought it was basically because of the lack of Arabic equivalents for English terms or expressions. According to Riyad (1999) people who use CM are those who are educated and have had sufficient schooling to enable them to alternate codes in their verbal behavior. He believes that CM is one way of enhancing communication and making it more effective, especially amongst engineers, doctors, and computer programmers.

Bond and Lai (1985) in their study suggest that the switching or mixing the code may serve as a *distancing function*, permitting bilinguals to express ideas in their second language that would be too disturbing in their first. Celik (2003) used code-mixing to teach new vocabulary items to freshmen in Turkey. He chose some stories or news items and inserted L1 words instead of L2 items. The students listened to these stories and new items two times. Of course, the contexts had been prepared so that they contained both L1 words and their equivalents in L2. He found that almost all of the students used newly learned vocabulary items orally and in their writing.

Methodology

Participants:

The subjects in this experiment were 50 pre-university students selected from a total population of 100 students of Motahari High School in Shiraz. The selection was based on the administration of an English placement test with a reliability of 0.90 constructed by Zakeri (2004). Their language proficiency level was pre-intermediate. For the purpose of the study they were divided randomly into two groups; one of which underwent code-mixing treatment and the other the definition method.

Materials:

The researcher chose 30 English vocabulary items from the pre-university schoolbook to teach. They were in the texts and passages that students had for reading comprehension activities during the first semester. The passages had some kind of problem-solving topics such as health, earthquake, speech, exercise and so on.

Instrument:

Two different instruments were used in this study. The general English placement test which consisted of 50 items including structure, vocabulary and reading comprehension of the multiple-choice type. The second test that was a teacher-made vocabulary test consisted of 30 vocabulary items. Each item consisted of a stem in the form of an incomplete sentence followed by four choices. In a pilot study, the test was revised and its reliability was calculated as 0.84.

Procedure:

The underlying principle of the use of code mixing in vocabulary teaching is needs driven. That is, the teacher should be able to

anticipate vocabulary that is unknown or relatively unfamiliar to learners. It is also context-driven: the context or the story itself determines the target lexis, alongside the students' needs. Therefore a test of 60 vocabulary items was given to the students and 30 of vocabulary items, which had not been answered correctly by all students, were chosen for instruction. A text in which new words from L1 had been inserted was read to the students. The text was read to the students once more to present the L2 equivalents. For additional highlighting, the tempo was reduced when pronouncing the target lexis to indicate that it was the word that corresponded to the L1 lexis. The L2 items could be in the same syntactic function as its L1 equivalent. Here are two examples of the mixed context used in the research. *The energy within the earth usually in form of strain in rocks suddenly **azad mišævæd.** **Zelzelešenasan** try to predict when and where earthquakes will happen.* Afterwards, the students were given some questions to answer. The purpose was to check if students could match these mixed words with the English equivalents. Finally, they were asked to discuss the text with no instructions to use the newly introduced vocabulary in order to reinforce the earlier input. They were asked to

write down what they had discussed and underline the new words. This activity would help the vocabulary items to be internalized better. However, the second group was introduced the same vocabulary items through definition, that is the target vocabulary items were defined and some examples were provided. After six weeks of instruction, a vocabulary test based on the words, which had been taught, was administrated to both groups to determine which students had mastered those words better.

Scoring: The data in this study consisted of the scores of 50 learners on a vocabulary test. The participants received one point for each item answered correctly. If there was no correct answer for an item, the participant received zero.

Data Analysis: In this experiment, the statistical procedure of the T-test was applied.

Data Analysis and Results

After the administration of the general English placement test, a T-test was run on the means of the two samples of 25 students to check the homogeneity of the two groups. Table 1 shows that the means were almost equal and there was not a significant difference between the two samples.

Table1. results of the proficiency of the groups

T- test	N	Mean	Std	Se
	25	30.60	10.90	2.18
C. Group	25	29.52	9.35	1.87

The mean difference was about 0.64 and it could be assumed that the total students were homogeneous. After scoring the students' vocabulary exam papers, the mean scores of both groups were compared with each other. Table 2 shows that the means of the code-mixing group was more than the control group. The result showed that the null hypothesis which stated that there was no difference between the two groups of code-mixing and definition methods could be rejected.

Table2. the means of methods of vocabulary instruction

T- test	N	Mean	Std.	Se
Code-Mixing	25	25.36	3.87	0.77
Definition	25	22.08	5.92	1.18

The time allocated for answering the questions was about 15 minutes for each passage. It took a longer time of 5 minutes for the experimental group to recall the Persian words and match them with the English equivalents. According to Macnamara and Kushnir (1971) the input switch function at lower level of perception and the output switch can work as the higher-order mechanism that is under the bilingual's vocabulary control and responsible for the selection for the language used in producing speech. Heredia and Altarriba (1996) state that once the English linguistic system is "turned on" the other linguistic system is "turned off" because both linguistic systems cannot be active simultaneously, thus the process of code-mixing material is slowed down.

Conclusions and Implications

Based on the results and analyses, it can be asserted that using code-mixing to selectively utilize L1 words in teaching L2 vocabulary items does not negatively affect the acquisition of new vocabulary except for minor spelling problems. This practice has neither decreased fluency nor inhibited

production. Although no overt instruction was given to students to use the new vocabulary, their performance in writing indicates that they can establish links with other related words in their existing vocabulary and fit the newly learnt vocabulary into the relevant lexical field. An interesting phenomenon is that students never attempted to use L1 words in speaking or in writing. This was possibly because they were aware of the learning process, and they noticed the rule-necessary procedures for conscious learning to take place as Schmidt (1990) claims. Both preparation and implementation of this technique require minimal amounts of time. An additional benefit is that code-mixing does not require additional materials. A simple story or text can be sufficient to present the target lexis. The main constraint of using code-mixing to teach vocabulary, of course, is that learners must share the same L1. A potential drawback involves learners' production of the target lexis. Spelling may be inaccurate; especially when the lexis has been presented or introduced through oral/aural modes. The result yielded by the research suggests a wider application of code-mixing as a teaching device in the field of EFL learning. It is suggested that teachers and the syllabus designers need to be aware of the fact of applying code-mixing as a facilitative device for teaching vocabulary.

References

Bond, M.H. & Tat-Ming Lai (1985) Embarrassment and Code-Switching into a Second Language. *The Journal of Social Psychology*. 126(2) pp.179-186. [on line] Http://www.kbu.edu.hk/~ jpowers/ references .html;

Cardenas, M. & Isharyanti, N.(2003) between Yes, Ya, Si? Code-Switching (CS) and Code-Mixing (CM) in Internet Chatting. [on line] http://www. Public. iastate. Edu./~neny/5145 Final projet . doc;

Carmazza, A. & Brones, I . (1980) Semantic Classification by Bilinguals? *Canad. J Psychol.* (34) pp.77-81;

Celik, M. (2003) Teaching Vocabulary through Code-Mixing. *ELT Journal* 2003. (754) pp.36-369. doi- Le.1093, elt. 57.4.361@ 2003 by Oxford University Press [on Line] http://eltj. Oxford Journal: org/ cgi/ content/ abstract /57/4-361*;*

Development. M.A. Thesis in English Language Teaching. Tehran Azad University of Sciences and Research ;

Hacken, P. (2002) Bilingual Language Mixing Seminar Language Acquisition and University Grammar. [On line] Pages.unibus ch/Language-acquisition/Thais in der Smitten/pdf;

Heredia, R.R. & Altarriba, J. (1996) Bilingual Language Mixing: Why Do Bilinguals Code-Switch? [on line]http://www.tamiu.edu/~rheredia/ codemix. html**;**

Kirsner, K., Smith,M.C., Lockhart,R.S., King, M. L. & Jain.M. (1984) The Bilingual Lexicon: Language-Specific Units in an Integrated Network, *Journal of Verbal Learning and Verbal Behavior*, 23, pp. 519- 539;

Kroll, J.F. & Stewart, E. (1994) Category Interference in Translation and Picture Naming: Evidence for Asymmetric Connection between Bilingual Memory Representation *.Journal of Memory and Language* (33) pp.149-174;

Li, P. (1996) Spoken Word Recognition of Code-Switching Words by Chinese- English Bilinguals. *Journal of Memory and Language* (35) pp.757-774;

Macnamara, J. & Kushnir, S.L. (1971) The Linguistic Independence If Bilinguals: The Input Switch *Journal of Verbal Language and Verbal Behavior* (10) pp.480-487;

 Meara, P. (1995)The Language Teacher. The Importance of an Early Emphasis on L2 Vocabulary. University of Wales Swansea [on line]http://www.Jalt.publications.org/tlt./ Files 95/ Fb/ Meara.html;

Riyad, H. (1999) Code-Alternation among Arab College Students. *World Englishes*: July 1999 Vol.18 Issue.2 pp.281-289;

Samandar, B. (1988) *Mix Sher*. Los Angeles, U.S.A.;

Schmitt, R. (1990) The Role of Consciousness in Second Language Learning. *Applied Linguistics* (11) pp. 129-158;

Seal, B.D. (1991) Vocabulary Learning and Teaching. In M. Celce-Murcia(Ed.) *Teaching English as a Foreign Language*: Boston. Heilne & Heline;

Zakeri, J. (2004) The Relationship between Associative Learning and Iranian Learners' Lexical. ∎