Code-switching and learning general knowledge of vocabulary in the Iranian university context

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Abstract: This study focused on the issue of code-switching(CS) (brief switches to the first language of the learners) in the classroom and provided insight into the functions and the roles of the first language (L1) in the foreign language (FL) class for the purpose of facilitating vocabulary learning .The question this study tried to answer was whether or not using code switching (CS) affects Iranian EFL university students' vocabulary knowledge .To this end, one group of 30 junior university students was chosen from among 50 Iranian university students. Their linguistic homogeneity was established through an Oxford Placement Test (OPT). There was only one group which was on two different occasions. Once code switching was forbidden in the classroom in the process of learning foreign vocabulary and then it was allowed. In the first occasion, the teacher taught vocabularies without code switching in six sessions. Then, the whole participants were asked to participate in vocabulary tests (pre-test). In the second occasion, the teacher taught the same content during the six sessions but both the students and the teacher were allowed to shift to Persian when they faced difficulty for better explanation and making sure that they had understood the contents. After three weeks intervals the learners participated in the post-test. For collecting data from the participants on two different occasions paired-samples t-test was used. The results indicated that there was no statistically significant difference between the two conditions and this revealed that the differences between condition means are likely due to chance. Therefore, the use of mother tongue in foreign language classes cannot facilitate learning and CS environment does not have better learning results, in terms of vocabulary gains, than English-only instruction.

Keywords: Code-Switching, General Knowledge, Vocabulary Learning

1. Introduction

Code switching is one of the main aspects of bilingual development process. Alternation between languages in the form of code switching is a widely observed phenomenon in foreign language classrooms. Numan and Carter briefly define the term as "a phenomenon of switching from one language to another in the same discourse" (2001:275). Language alternation should help promote metalinguistic awareness, through the communicative use of the two languages (Coste, 1994a; Coste, 2000; Coste & Pasquier, 1992; Gajo & Serra, 1999 cited in Moore, 2002). He also continued that the two situations are intrinsically interesting because they respectively offer a monolingual and a bilingual view on bilingualism (Gajo, 2000). They accordingly develop congruous philosophies about bilingualism and the subsequent role of L1 in bilingual development. Either bilingualism is considered as the addition of two separate competences, or as the development of a composite repertoire, original and complex (Grosjean, 1982; Moore & Py, 1995), where the different languages in contact interact and combine. For Gajo (2000: 112), the bilingual view implies considering bilingualism not only as a finished product, but also as a 'partner' in the acquisition process. L1 is both a manifestation of bilingualism and a potential help to its development. On the macro level, each philosophy leads to different choices in the roles assigned to L1 in the classroom (cited in Moore, 2002).

2. Background and Literature Review

A brief review of the related literature would seem necessary to support the claims for the implementation of this study. In recent years, a growing body of literature has

emerged in which analyses of second language acquisition and the use of two languages in educational contexts has been the centre of attention (Bourgvignon et al., 1994; Nussbaum, 1991; Pekarek, 1999 cited in Moore, 2002). In particular, research bearing on the influence of L1 in L2 learning situations marked a considerable shift from earlier studies both in the way data are collected and analysed, and in the linguistic interpretation attached to the role of L1 in L2 acquisition. The prevailing view at the beginning of the 1970s was based on Lado's work (1957). Contrastive analysis was then used to reveal sources of potential difficulties for learners by identifying the linguistic gaps between the two languages involved in the learning process. Despite a rocky history (Gass & Selinker, 1994), and large amendments to the interpretation of cross-linguistic influence and transfer from L1 (Odlin, 1989), the role of L1 in the formation and use of interlanguage is still regarded as problematic, especially in the classroom context. A view still commonly shared among L2 teachers is to avoid the use of L1 in L2 classes as much as possible, and to remain highly suspicious of intra-sentential mixing of the two languages. Nevertheless, inter and intra-sentential switchings do occur in the classroom, especially with young children at early learning stages. A closer look at the phenomena at stake tends to reveal that the use of L1 in a L2-based sentence can play significant roles in the learning process. It could therefore be hasty to consider switches as no more than a mere discursive proof of lack of competence (Moore, 2002).

Regarding learners' perceptions of the teachers' code-switching in English Language classrooms, Badrul Hisham & Kamaruzaman (2009) investigated the relationship between teachers' code-switching and learners' learning success. Their study revealed that learners perceived code-switching as a positive strategy due to the various functions it has and there were significant relationships between teachers' code-switching and learners' affective support and teachers' code-switching and learners' learning success. In the same case Ting & Chen-On Then (2009), examined the functions of teacher code-switching in secondary school English and science classrooms. The results of their study suggested that code-switching is a necessary tool for teachers to achieve teaching goals.

For determining L1 and its role in L2-negotiations , Gass and Selinker (1994 cited in Moore, 2002) believed that conversational negotiations play an important role in focusing attention on areas of language that do not match with the expert's model provided. These negotiations open the path to the need for mutual adjustment, and usually lead to an attempt towards simplification or reformulation on the part of the expert. Exchanges of the sort exemplified in the next section are frequent. They show some sort of modification of the form of the speech produced by the interlocutors, and also modification of the structure of the conversation itself. Great efforts are made to ensure the flow of conversation is maintained despite sometimes limited linguistic skills on the young learners' part. At the same time, considerable effort is devoted to checking linguistic forms and encouraging proficiency in the second language. Learners need to overcome communication problems as they emerge and simultaneously they should be producing language appropriate to the situation. Teachers need to reduce the burden for the learners and assist them in understanding and in producing language appropriate to the situation. Regarding the functions of teachers' code switching Moore (2002) stated that the teachers' use of code switching is not always performed consciously; which means that the teacher is not always aware of the functions and outcomes of the code switching process. Therefore, in some cases it may be regarded as an automatic and unconscious behavior. Nevertheless, either conscious or not, it necessarily serves some basic functions which may be beneficial in language learning environments. These functions are listed as topic switch, affective functions, and repetitive functions by Mattson and Burenhult (1999:61 cited in Moore, 2002). He also claimed that

"...In order to have a general idea about these, it will be appropriate to give a brief explanation about each function. In topic switch cases, the teacher alters his/her language according to the topic that is under discussion. This is mostly observed in grammar instruction, that the teacher shifts his language to the mother tongue of his students in dealing with particular grammar points, which are taught at that moment. In these cases, the students' attention is directed to the new knowledge by making use of code switching and accordingly making use of native tongue. At this point it may be suggested that a bridge from known (native language) to unknown (new foreign language content) is constructed in order to transfer the new content and meaning is made clear in this way as it is also suggested by Cole (1998): "a teacher can exploit students' previous L1 learning experience to increase their understanding of L2". In addition to the function of code switching named as topic switch, the phenomenon also carries affective functions that serve for expression of emotions. In this respect, code switching is used by the teacher in order to build solidarity and intimate relations with the students. In this sense, one may speak off the contribution of code switching for creating a supportive language environment in the classroom. As mentioned before, this is not always a conscious process on the part of the teacher. However, one may also infer the same thing for the natural occurrence of code switching as one cannot take into guarantee its conscious application if the Maori example given in section II is considered. Another explanation for the functionality of code switching in classroom settings is its repetitive function. In this case, the teacher uses code switching in order to transfer the necessary knowledge for the students for clarity. Following the instruction in target language, the teacher code switches to native language in order to clarify meaning, and in this way stresses importance on the foreign language content for efficient comprehension".

A study was carried out by Skiba (1997), who concluded that code switching may be viewed as an extension to language for bilingual speakers rather than interference and from other perspectives it may be viewed as interference, depending on the situation and context in which it occurs. This conclusion is drawn from the notions that switching occurs when a speaker: needs to compensate for some difficulty, express solidarity, convey an attitude or show social respect (Crystal, 1987; Berthold, Mangubhai and Bartorowicz, 1997 cited in Skiba ,1997). The switching also occurs within postulated universal constraints such that it may be integrated into conversations in a particular manner (Poplack, 1980; Cook, 1991 cited in Skiba , 1997). On this basis, given that it occurs within a particular pattern, potential for code switching to interfere into a language exists. It has also been outlined above that code switching may facilitate language development as a mechanism for providing language samples and may also be utilized as a teaching method for teaching second languages (Cook, 1989; 1991 cited in Skiba , 1997). As consistent with most studies which explore the functions of teacher code-switching (e.g. Kaneko 1991; Cook 2001; Macaro 2001), much teacher code-switching appear to centre upon unfamiliar or unknown L2 lexical items. However, this known fact alone cannot provide evidence to warrant any claim related to the optimality of the functions of teacher code-switching, without actually gauging the impact of teacher code-switching by asking students directly. As Guo Tao (n.d) cited in his article, A code-switch, according to Macaro (2005), "can reduce the selective attention dedicated to a single communication breakdown, freeing up working memory capacity to work on the meaning of larger chunks of input whilst at the same time offering the hearer the opportunity of quick storage of an L1-L2 equivalent they were previously not aware of" (Macaro 2005: 74-75).

2.1. Rational behind the Use of Code Switching

According to Crystal (1987), as cited in Skiba (1997), there are a number of possible reasons for the switching from one language to another. The first of these is the notion that a speaker may not be able to express him/herself in one language so switches to the other to compensate for the deficiency. Secondly, switching commonly occurs when an individual wishes to express solidarity with a particular social group. Rapport is established between the speaker and the listener when the listener responds with a similar switch. This type of switching may also be used to exclude others from conversations who do not speak the second language. The final reason for the switching behavior presented by Crystal (1987) is the alteration that occurs when the speaker wishes to convey his/her attitude to the listener. Where monolingual speakers can communicate these attitudes by means of variation in the level of formality in their speech, bilingual speakers can convey the same by code switching. Ting & Chen-On Then (2009) cited in their study that in multilingual communities, code-switching is a widespread phenomenon that extends from

daily life and workplaces (Ting, 2002; Ting, 2007) to classrooms in which specific languages have been instituted as the official languages of instruction. As BadrulHisham and Kamaruzaman (2009) cited in their article, teachers also code-switch to repair trouble or silence in university classes (Ustunel, 2004). Alternatively, code-switching is a strategy for teachers to adapt to students' English proficiency, teaching goals, and teacher roles in a university setting in China (Yang, 2004).

2.2. Theoretical Framework

The basic theoretical assumption behind the use of code switching in second language learning comes from the idea that language switches to the native language clearly play an important part in classroom discourse structuration, and in the learning process (Mondada, 1999).

According to Richards and Schmidt (1985), code switching is a change by a speaker (or writer) from one language or languages variety to another one. Code switching can take place in a conversation when one speaker uses one language and the other speaker answers in a different language. A speaker may start speaking one language and then change to another one in the middle of their speech, or sometimes even in the middle of a sentence. Results also provide initial evidence that teacher code switching may be superior to the teacher providing L2-only information (Macaro , 2012). The L1 can fulfill a wide range of functions in the L2 classroom. These have been extensively studied by Castellotti and Moore (1997, 1999), Causa, (1996, 1997), Matthey (1992), Moore (1996), Simon (1997), Van Lier (1996), among many others (cited in Moore, 2002). Such studies analyze the roles and functions of code alternation from cognitive and linguistic as well as interactional perspectives. They show that one factor among many others determining whether language data may have an impact on the learner has to do with the degree of attention s/he paid to the data at specific time of exposure. Many reasons might lead to the data being overlooked or not noticed (among them affective variables), or being beyond comprehension of students, and most of the time the teacher has little means of knowing this. As Guo Tao (n.d) stated in his article, the complexity of attitudes toward teacher code-switching is aptly summarized in Macaro's three designations of the L1 exclusion debate, namely, the 'virtually all', 'maximal', and 'optimal' perspectives (Macaro 1997: 73). The 'virtually all' argument promotes the view that L1 has no value whatsoever and should be avoided at all costs. Similarly, the 'maximal' view does not acknowledge the role of L1, although its position in this respect is less extreme than that held by the proponents of the 'virtually all' view. The 'maximalists' perspective upholds that while the use of L1 should be avoided, in view of the fact that the ideal classroom state does not exist, the use of L2, where necessary, is inevitable. Those proponents of the third perspective, the 'optimal' view, consider the use of L1 to have pedagogical value, and as a consequence, believe that

its role should be acknowledged.

2.3. Statement of the Problem

In ELT classrooms, code switching comes into use either in the teachers' or the students' discourse. Although it is not favored by many educators, one should have at least an understanding of the functions of switching between the native language and the foreign language and its underlying reasons (Sert, 2005). Although in recent years, the teaching of vocabulary has assumed its rightful place as a fundamentally important aspect of language development (Nunan , 1999, p.103) , many teachers would assume that vocabulary learning stems mainly from the direct teaching of words in the classroom . However, vocabulary learning needs to be more broadly based than this (Schmitt, 2002, p. 39). Although to date there has been more research on teacher beliefs about first language (L1) use, its functions and its distribution in the interaction than on code switching and its effect on aspects of learning, code switching has been the issue which has drawn the attention of many researchers in the field of second language teaching and second language learning for the past few decades (Rahimi Esfahani & Kiyoumarsi, 20 10).

Most of the teachers know that the goal of testing vocabulary is to assess the subjects' knowledge of lexical items (Farhady, Jafarpur & Birjandi, 1994) but teachers in English classes especially at institutes in Iran are not aware of the impact of using code switching on learning vocabulary process before assessing students' lexical knowledge and they do not know whether or not teachers' switching to first language may be beneficial in conveying messages and clarify contents that may be difficult or problematic for learners to understand them in the foreign language. Also, empirical research is still lacking on the Iranian university learners towards the effect of code switching on learning general vocabulary English knowledge. With respect to this fact, this study intends to determine the possible impacts of code switching on learning English vocabulary as general knowledge in Iranian university context.

2.4. Research Question of the Study

The findings of the present study assisted the teacher handle their foreign language classes on the basis of the effectiveness of using code switching. Accordingly, the following research question was raised and guided this study:

RQ- Does using code switching (CS) affect Iranian EFL university students' vocabulary knowledge?

2.5. Hypothesis of the Study

In keeping with the above research question, the following null hypothesis was formulated:

H0: Using code switching (CS) does not affect Iranian EFL university students' knowledge of vocabulary.

3. Methodology

3.1. Participants

Thirty junior university students participated in this study. They were selected among fifty Iranian EFL university students with the age range of 23-30. Their linguistic homogeneity was established through an Oxford Placement Test (OPT). There was only one experimental group. Sex were controlled (all of the subjects were male). All of the participants (N= 30) took two tests as pre-test and post-test. This was done for comparing the means of each test in order to investigate the impact of using code switching on improving learning vocabulary.

3.2. Instruments

To answer the research question relevant to this study a number of materials were devised. The materials used in current study were of three sorts. For homogenizing the participants an OPT (Oxford Placement Test) was administered. It consisted of several sections including vocabulary, grammar and reading comprehension. Also two vocabulary tests as a pre-test and post-test with the same content were given to the students, each contained 20 vocabulary questions . Since the study aimed at indicating the impact of using code switching on learning general knowledge of vocabulary, these two tests were administered in two different occasions. First the students were given a pre-test of English vocabulary before receiving treatment and then a post-test was administered after receiving treatment which was using code switching(CS) in the classroom. There were three weeks intervals between pre- test and post –test. The two pre and post tests resembled in terms of time allocation and their contents. The time allowed for answering the vocabulary questions was 40 minutes. The tests designed in the multiple choice format. The whole points were twenty. The reliability of teacher-made test estimated based on inter-rater reliability (r=0.78). After administrating each test students' answer sheets were collected and were scored by the researcher. The scores in each test were calculated separately, and then the mean score in each test was calculated.

3.3. Data Analysis and Findings

The data obtained from testing the hypothesis of the study was analyzed via paired-samples t-test that will be discussed bellow.

The descriptive statistics of the study are given in table 1.

Table 1. Descriptive analysis of the data.

		Mean	N	Std. Deviation	Std. Error Means
Pair 1	NUCS	9.7000	30	1.62205	.29614
	UCS	13.2333	30	1.83234	.33454

As is seen in Table 1 there are 30 participants participated in this study (N=30). The means and standard

deviations for each of the two variables NUCS (not using code switching) and UCS (using code switching) showed in the above table. The last column gives the standard error of the mean for each of the two variables, too.

The second part of the output gives the correlation between the pair of variables:

Table 2. *Paired Samples Correlations.*

		N	Correlation	Sig.
Pair 1	NUCS & UCS	30	.326	.079

Table 3. *The inferential analysis of the data.*

	Paired Differences				95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	NUCS – UCS	-3.53333	2.01260	.36745	-4.28485	-2.78181	-9.616	29	.000

According to table 3, the difference of the two means is - 3.53 (9.7000-13.2333=-3.53333) and the standard deviation of the difference between the two variables is 2.01. The Sig (2-Tailed) value is equal 0 and is greater than 05. So, there is no statistically significant difference between the two conditions and the null hypothesis of the study which was "using code switching (CS) does not affect Iranian EFL university students' knowledge of vocabulary" is accepted.

3.4. Results of Hypothesis Testing

The findings of the present study provided significant evidence responding to the research question which was " Does using code switching (CS) affect Iranian EFL university students' vocabulary knowledge? ". According to the collected findings the null hypothesis of the study which was "using code switching (CS) does not affect Iranian EFL university students' knowledge of vocabulary "was accepted. The results of the paired-samples t-test of the study revealed that although there is difference between the means of the two tests (pre/post tests) (see table 1), it is not significant and differences between condition means are likely due to chance. As it was shown in table 2and table 3 sig is more than 0.05 therefore it confirms the null hypothesis of the study. The findings of the current study are not in line with Tian and Macaro (2012) who believe that code switching is superior to the teacher providing L2-only information. Also, the results of this study do not confirm Eldridge (1996) who claims that there is no empirical evidence to support the notion that restricting mother tongue use would necessarily improve learning efficiency, and that the majority of code-switching in the classroom is highly purposeful, and related to pedagogical goals. Accordingly, further, the results of this study in the case of using code switching in language classrooms are not compatible with Skiba (1997), who suggests that in the circumstances where code switching is used due to an inability of expression, it serves for continuity in speech instead of presenting interference in language. In contrast, the findings of this study are in line with Guo Tao (n.d) who stated that not all kinds of code-switches can be of equal assistance in reducing selective attention and

This again shows that there are 30 participants in this study. The correlation between the two variables is given in the third column which is .326. The last column shows the sig [nificance] which is.079. As usual, sig less than .05 indicate that the null hypothesis should be rejected. Since Sig is not less than or equal to .05, so we fail to reject H0. That implies that there is no sufficient evidence in the case of facilitating students' vocabulary learning by using code switching (CS).

The third part of the output gives the inferential statistics:

optimizing the processing. He continued that, some may be less facilitative, even of hindrance to the learning process and the issue of increasing/decreasing processing load may be confounded by the nature of the following refined kinds of teacher code-switching such as the exact or near exact L1 and L2 equivalent, the circumlocution of L2 lexical items in L1, and the translation of L2 definition of the lexical item in L1, L2 synonyms and L2 definition.

4. Discussion

An understanding of the functions of switching will provide language teachers with a heightened awareness of its use in classroom discourse and will obviously lead to better of instruction by either eliminating it or dominating its use during the foreign language instruction (Sert, 2005). The teacher code switches to native language in order to clarify meaning, and in this way stresses importance on the foreign language content for efficient comprehension. Code-switching can be employed as a strategy to help lighten the cognitive load (Macaro 2005).

5. Conclusion

Throughout the present study, the roles and functions of the first language in the foreign language classroom and native language as the main medium of instruction were analyzed. With respect to all points mentioned above, it may be suggested that code switching in language classroom is not always beneficial in learning a language. Some researchers believe that code switching may be considered as a useful technique in classroom interaction, if the aim is to make meaning clear and to transfer the knowledge to students in an efficient way (Sert, 2005). The whole teaching and learning experience is built on the basis of language alternation, with the fundamental idea that the alternate use of both languages reinforces awareness of the free, non fixed relationship between objects and their labels and the necessary ability to separate words and concepts. The findings of this study revealed the roles and functions of code-switches in the classroom, and emphasized the

need to understand such strategies in the learning process. Nevertheless, on the micro level, teachers in both situations seem to remain hesitant towards code-switches and old models usually prevail (Matthey & Moore, 1997). Although using first language in foreign language classes can be a communication strategy that helps students compensate for their deficiency in the second language, the results of this study showed that code switching does not facilitate language learning.

6. Suggestions for Further Research

In addition to the potential pedagogical benefits from this study, these findings also suggest a number of ideas for further research. Further researches can be carried out to investigate other concept such as grammar to shed more lights on the possible effects. In this study the numbers of subjects were limited. It is hoped that other researchers elicit information from a larger population. Since the findings of the study may not be generalized to all students, it should be interesting if future studies are advised to expand the replications of this study to other language learning situation in Iran such as schools or institutes.

References

[1] Badrul Hisham, A & Kamaruzaman, J. (2009). Teachers' Code-Switching in Classroom Instructions for Low English Proficient Learners. English Language Teaching Journal, Vol. 2, No. 2, June 2009 p.46. Retrieved from www.ccsenet.org.

[2] Eldridge, J. (1996). Code-switching in a Turkish secondary school. ELT Journal, 50,4: Mattsson, A & Burenhult-Mattsson, N. (1999). Code-switching in second language teaching of French. Working Papers 47: 59-72. 303-311. Retrieved from eltj.oxfordjournals.org

[3] Farhady, H; Jafarpur, A & Birjandi, P. (1994). Testing Language Skills From Theory to Practice, 8, p.179.

[4] Guo Tao, H. (n.d). Students' strategic reactions to their teachers' code- switching behaviours: evidence from Chinese university EFL learners. Retrieved from www .education.ox ac.uk.

[5] Moore, D. (2002) Code-switching and Learning in the Classroom. International Journal of Bilingual Education and Bilingualism Vol. 5, No. 5, 2002. Retrieved from citeseerx.ist.psu.edu

[6] Nunan, D. (1999). Second Language Teaching and Learning, 4, p.103. HEINLE & HEINLE PUBLISHERS, An International Thomson Publishing Companay, Boston, Massachusetts 02116 U.S.A.

[7] Rahimi Esfahani, F & Kiyoumarsi, F.(2010) . The Effect of Code Switching on Learning ESP Contexts in Iranian EFL Learners. The International Journal of Learning, Volume 17, Issue 7, pp.139-150.

[8] Richards, J.C & Schmidt, R. (1985). Longman Dictionary of Language Teaching and Applied Linguistics , p. 81.

[9] Schmitt, N. (2002). An Introduction To Applied Linguistics. Oxford University Press Inc., New York , 3 , p. 39.

[10] Sert, O. (2005). The Functions of Code Switching in ELT Classroom. The Internet TESL Journal, Vol. 11, No. 8, August 2005.

[11] Skiba, R. (1997). Code Switching as a Countenance of Language Interference. The Internet TESL Journal. 3,10 <ttp://iteslj.org/Articles/Skiba-CodeSwitching.html>

[12] Tian, L & Macaro, E. (2012). Comparing the effect of teacher code switching with English-only explanations on the vocabulary acquisition of Chinese university students: A Lexical Focus-on-Form study. Renmin University of China. Language Teaching Research,vol. 16 no. 3 pp.367-391.

[13] Ting, S. H & Chen-On Then, D. (2009). A Preliminary Study of Teacher Code-switching in Secondary English and Science in Malaysia. TESL-EJ, Vol 13, No 1 June2009 . Retrieved from www.cc.kyoto-su.ac.jp.