MOBILE- BASED LEARNING VS. PAPER-BASED LEARNING AND COLLOCATION WORDS LEARNING

Malahat Yousefzadeh
Department of Teaching English as a second language
Ardabil Branch, Islamic Azad University, Ardabil,Iran
Yousefzadeh5351@yahoo.com

Abstract

This study investigated the superiority of mobile-based collocation words learning in comparison with classical paper-based collocation words learning. 80 students from a high school in Ardabil were chosen randomly. After the pre - test 10 participants were excluded from study, because of their partial knowledge of collocation words. Then they were divided into two groups: mobile-based(n=35) and paper-based(n=35). The pre-test was administered in order to identify the level of participants' prior knowledge of collocation words. The result of pre-test showed that there was no significant differences between the participants . In treatment sessions, the mobile-based group received a list of unfamiliar collocation words via SMS while, the paper-based group received the same list on sheets of paper. After treatment sessions, the result of post -test indicated the superiority of mobile –based group over paper based group.

Key Words: Mobile –based learning, paper-based learning, SMS (short message service), collocation words.

INTRODUCTION

Nowadays the dominant language teaching/learning debates is, using technology in second language teaching/learning. We have a vast body of research devoted to effects of technology on SLA, but a small number of them devoted to the effect of cell-phone on SLA. Although SMS is being widely used by Iranian youth today as a means of communication , few researchers have interested in the application of the SMS in second language learning. Jarke , keing , Lam & McNaught (2008) state SMS (short message service) has been use quite widely in educational institutions. The majority of the uses, however, are for administrative issues rather than for teaching and learning. As SMS is technologically and functionally very simple, it can be considered to be a relatively primitive technology. However, viewing it from another angle, we see that SMS ranks very highly in terms of user convenience. The software and hardware required to make SMS work are by far more popular than other mobile strategies. According to Peters (2005, as cited in Hashemi & Ghasemi 2011) a mobile technology device should meet three criteria: it must be capable of providing communication and/or information functions, be small enough to be easily carried and be used, at least part of the time , without a physical connection to a fixed power source or telecommunications services. Mobile, to most means portable and movable. Wanger and Wilson (2005) state that Mobile –learning can bridge formal and informal learning experiences. With the rapid growth of wireless and mobile learning technology, the use of mobile phone and other portable devices are now beginning to have an impact on language teaching and learning throughout the world. Similarly, the development of language learning technologies recently has tended to be mobilized, portable, and personalized. These trends have led to learning forms changing from traditional classroom learning to electronic learning (E-learning), mobile learning (M-learning) or ubiquitous learning (U-learning). Among these noble learning forms, mobile learning is effective and flexible; that is, mobile learning can overcome restrictions of time and space, enabling learners to study whenever and wherever possible (Chen and Chung, 2007 as cited in Roksana 2011). As Cavus and Ibrahim (2009) mention there is an increase use of wireless technologies in education all over the world. In fact, wireless technologies such as laptop computers, palmtop computers and mobile phones are revolutionizing education and transforming the traditional classroom-based learning and teaching into anytime and anywhere education. According to Ozok and Wei(2007) the high acceptance of SMS by youth people generates a large number of potential SMS- based learning users.

The importance of collocation words learning
Motallenzadeh, Beh Afarin and Daliry Rad (2011) mention collocations are rarely learned and experienced and most of the items ignored in language classes in Iran. The stating fact here is that just the tiny percent of

learners will ever pay attention to collocations. The result whatsoever whether young teachers are not aware of collocations' important role or the students unconsciously ignore learning them, lead to incomplete English learning, which to be influent though they have passed several intensive course. Skyzypek (2009) indicates the importance of collocation by stating that one of the criteria for knowing a word is being aware of other words with which it keeps company. Maghsodi(2010)states that even though memorizing terms with their respective translation is quick and preferred by learners, it is superficial and doesn't let students use the needed vocabulary correctly in context. It is widely accepted idea that collocations are very important part of knowledge of second language acquisition and they are essential to non native speakers of English in order to speak or write fluently and accurately.(Jaean, 2007 as cited in Ozgul and Abdulkadir 2012). According to McCarthy 'in vocabulary teaching there is a high importance of collocation and the relationship of collocation is fundamental in the study of vocabulary, and collocation is an important organising principle in the vocabulary of any language' (1990:12). learners are often not aware that collocation knowledge is important for their language learning. For many students, learning vocabulary simply equals learning the meaning of new words (Woolard 2000).

The aim of the study
The goal of this study is to find out whether learning collocation words via SMS will result in better learning than learning collocation words using classical techniques such as memorizing.

Research question
Does learning collocation words via SMS result in a better learning of these words than learning them using classical techniques (memorizing)?

Alternative Hypothesis
H1: There are significant differences between mobile –based learning and paper-based learning in collocation words learning of second language learners.
Independent and dependent variables
Independent variable was the learning type (SMS- based and paper-based) and dependent variable was students' scores measured by post test.

METHODOLOGY

Subjects: 80 students in Ardabil high school were chosen randomly. Any participants who indicated even partial knowledge of the collocation words was excluded from experiment. After pre test 10 participants were excluded from the study. Then they were divided into two groups. The two groups, in which there were (n=35) mobile based group and (n=35) paper based group were placed in two treatment conditions.

Procedure
In order to identify the subjects' collection words knowledge before experiment a pre test was administered. This test included 60 multiple choice items , with its reliability to be 0.85 using Kr-21 formula. 45 collocation words were unfamiliar to all participants. Only the collocation words from those participants who demonstrated absolutely no prior knowledge of them included in this study. The result of pre test showed that except 10 participants , all of them are homogenous. Before the beginning of the treatment sessions it was checked if all the mobile based participants had mobile phones. During treatment sessions the list of unfamiliar collocation words was delivered to mobile based group via SMS . Each message contained a collocation words followed by descriptions and examples. Each students received the same SMS , but never got the same SMS twice. The same list was delivered to paper based on sheets of paper. The paper based group received the collocation words on one class day in the participants' regular classroom during their regularly scheduled classes, while the mobile based group received these words via SMS after school. (Time=30 minutes for both group) After nine sessions for investigating the effects of mobile-based and paper-based techniques on the learning collection words all students were given 40 minutes to complete the post test. It was included 40 multiple choice questions. Both groups answered the post test on the answer sheet.

Data analysis

All of the 70 participants were homogenous based on pre-test that was administered before starting the study . Results obtained by participants in the post-test were compared for the paper-based and mobile-based in order to determine each of their effects of on collocation words learning outcomes. A t-test was run to test the alternative hypothesis. The data were the score of two groups after the two types of learning condition (mobile –based and paper-based).

Table (1) shows groups descriptive statistics ,from this we can see that x= 17.45 and SD= 1.46 (Mobile-based group) and x= 14.5 and SD= 2.47 (Paper-based group).

Table 1: t-test result

Descriptive Statistics			
	Mean	Standard Deviation	n
Group A	14.5	2.4764	35
Group B	17.4571	1.4671	35
Independent Samples t-Test			
t-Statistic	-6.078	Result	
Degrees of Freedom	68	Reject the null hypothesis.	
Critical Value	1.9944	Conclusion	
95% Confidence Interval	[1.1418, 4.7725]	Group A is significantly different from Group B, t(68) = -6.078, p < .05. We are 95% confident that the mean difference lies between 1.1418 and 4.7725.	

Group A: Paper-based   Group B: Mobile-based

Also table (1) indicates the result of the t-test . In this table we can see that t(68)= -6.07, p< 0.05, therefore mobile –based group is significantly different from paper-based group, and we can support the alternative hypothesis.
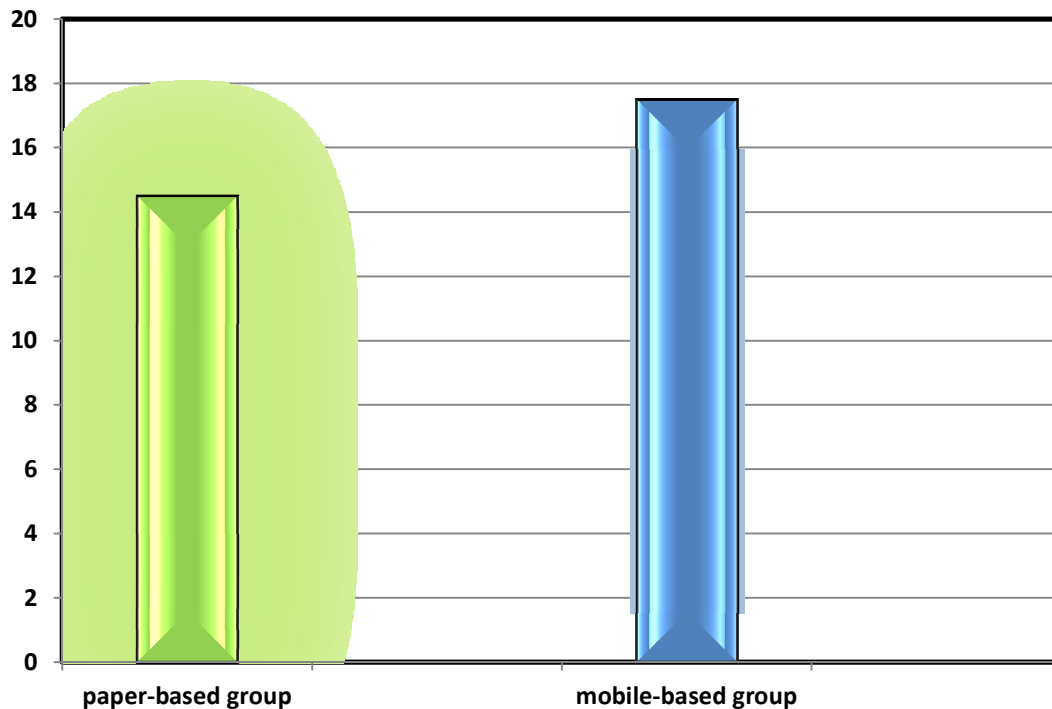
Figure 1:comparison of means obtained in posttest by two groups

The mean differences indicates the magnitude of the differences between two groups.

DISCUSSION AND RESULT

A quantitative analysis of the results in this research shows that mobile-based group outperformed significantly paper-based group. The result of this research is in line with Thornton and Houser (2005), Jalalifarahani &Ghovehnodoushan(2011) , and Başoğlu &Akdemir(2010), Cavus &Ibrahim(2009), Li(2009)and Song(2008) . These researchers found that cell phone can be valuable tool for supporting students learning. Mobile-based learning help to individualize the language learning experiences. According to Ketabi, Zarei and Khazaie (2011) mobile technologies provide the learners with the aids to connect their learning processes with real world experiments, developing new ways for converging what is learnt in the classroom and what should be learnt outside seems unavoidable. The students can learn after classroom, as Grace(1998) said because of the class time constraint, vocabulary reinforcement and study is frequently the responsibility of the student outside the classroom . Also they can learn on their own in anyway and anytime. Therefore we can conclude that SMS plays an important role in vocabulary and collocation words learning. We as a teacher should be aware of the benefits of technology, specially cell phone in the language learning.

REFERENCES

Başoğlu, E. B., & Akdemir, Ö. (2010). A comparison of undergraduate students' English vocabulary learning: using mobile phones and flash cards. The Turkish Online Journal of Educational Technology, 9(3), 1-7.

Cavus, N., Ibrahim, D. (2009). "M-Learning: An experiment in Using SMS to support learning new English language words", British Journal of Educational Technology 40 (1): 78-91.

Grace C. (1998) Retention of word meanings inferred from context and sentence-level translation: implications for the design of beginning-level CALL software. The Modern Language Journal 82, 533–544.

Hashemi, M. & Ghasemi, B. (2011). Using mobile phones in language learning/teaching. Science Direct (15), 2947-2951.

Jalalifarhani, M., &GHovehnodoushan, M.(2011). Mall and vocabulary learning in Elementary students. 2011 international conference on languages, literature and linguistics. IPEDR vol.20 IACSIT Press, Singapore.

Jarke, P., Keing, C., Lam, P., & McNaught, C. (2008). Using SMSs to engage students in language learning. In E. R.

Weipp & J. Luca (Eds.), ED-MEDIA 2008 (pp. 6132–6141). Proceedings of the 20th annual World Conference on Educational Multimedia, Hypermedia &Telecommunications, Vienna, Austria, 30 June–4 July. Chesapeake VA: Association for the Advancement of Computers in Education.

Ketabi, S. ,Zarei, GH. R.,& Khazaie, S.(2011). Mobile mediated versus traditional method of L2 vocabulary learning : A comparison between vocabulary learning with and without pictorial annotation. International conference on language , literature and linguistics. IPEDR(26). IACSIT Press, Singapore.

Li, C. (2009). SMS-based vocabulary learning for ESL students. Unpublished master thesis, Auckland University ofTechnology, New Zealand.Loucky.

McCarthy, M.(1990).Vocabulary. Oxford: Oxford University Press.

Maghsodi, M. (2010). Type of task and type of dictionary in incidental vocabulary acquisition. The Asian EFL Journal. 12(1), 8-29.

Mottallebzadeh, Kh. Beh-Afarin, R., & Daliry Rad, S. (2011). The Effect of Short Message Service on the Retention of Collocations among Iranian Lower Intermediate EFL Learners .Theory and practice in language studies, 1(11),1514-1520.

Ozgula, B. & Abdulkadir, C. (2012). Teaching vocabulary through collocations in EFL classes: The case of Turkey.1(1), 21-32.

Ozok, A. A.,& Wei, J. (2007). Short messaging service use among college students in USA and its potential as an educational tool: an exploratory study. International Journal of Mobile learning and organization, 1(4), 355-374.

Roksana, B. (2011). Prospect for Cell Phones as Instructional Tools in the EFL Classroom: A Case Study of Jahangirnagar University, Bangladesh. English Language Teaching (4)1, 105-115.

Skrzypek, A. (2009). Phonological short-term memory and L2 collocation development in adult learners. EUROSLA Yearbook, 9(1), 109-184. doi:10.1075/eurosla.9.09 skr.http:dx.doi.org/10.1075/eurosla.9.09 skr.

Song, Y. (2008). SMS enhanced vocabulary learning for mobile audiences. International Journal of Mobile Learningand Organisation, 2(1), 81-98.

Thornton, P. & Houser, C. (2005). Using Mobile Phones in English Education in Japan. Journal of Computer Assisted Learning, 21, 217-228.

Wanger, E. D. &Wilson, P. (2005). Disconnected. TtD, 59(12), 40-43.

Woolard, G. (2000). Collocation-encouraging learner independence. In Lewis, M. (Ed.) Teaching Collocation, 28-46. Croatia: Heinle.