MULTIMEDIA MESSAGING SERVICE (MMS) VS. SHORT MESSAGE SENDING (SMS) AND SECOND LANGUAGE LEARNERS' VOCABULARY

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Abstract

Our aim in this paper reviewed the current state of mobile learning to examine the extent to which mobile device can support English vocabulary learning. This paper studied the application of students' English vocabulary acquisition in multimedia environment. It involves the comparison the effect of MMS (multimedia messaging service) and SMS (short message sending) on vocabulary learning. 50 elementary level learners were randomly divided into two groups: Group 1: MMS group and group 2: SMS group. This study investigated the superiority of MMS in comparison with SMS . The results (pre and post tests) were analyzed using t-test. The statistical analysis of the results showed that presenting L2 vocabulary with MMS resulted in better learning.

Key Words: Mobile-learning, MMS(multimedia message service), SMS (short message sending)

INTRODUCTION

Mosavi and Nezarat (2012) said mobile learning is characterized by its potential for learning to be spontaneous, informal, personalized and ubiquitous. Such learning is reinforced when people encounter shortage of free time as the result of working longer hours. such an environment, busy people tend to use portable devices to learn new materials rather than taking time for traditional classroom-based courses. Also, they mentioned the rising speed of mobile technology is increasing and penetrating all aspects of the lives so that this technology plays a vital role in learning different dimensions of knowledge. Today, a clear shift from teacher-led learning to student-led learning that m-learning allowed causes the students feel using the technology more effective and interesting than before. In fact, we can provide a richer learning environment through mobile phones for our language learners.

It is claimed that , in Iran , mobile technology is a familiar part of the lives of most teachers and students. Yet it seems to be in its infancy and its using in learning and teaching has been more gradual, as educators have sought to understand how best to use this tool to support various kinds of learning. As learning with a mobile phone is fundamentally different from classroom learning , a new field of study has come in to shape , namely that of Mobile learning (Sharples, 2000). This study investigated how the use of multimedia messages (MMS) via mobile phone affects learners' English vocabulary acquisition.

Laufer (1997) said for students of English as a foreign language (EFL), 5000 base words are considered a minimal requirement for understanding non specialized English texts. Vocabulary knowledge is considered by both L1 and L2 researchers to be of great significance in the development of language competence (Nation, 2001; Laufer, 1998).

To reduce stress from encounters of unknown words and to enhance vocabulary learning , glosses or annotations on a text are designed. This design increases exposure of the target words and calls learners' attention to them and the information provided by the design helps learners avoid incorrect guesses and inferences in given context (Nation, 2001:175).

Kost , Foss, and Lenzini (1999) found that EFL learners performed better on both production and recognition vocabulary tests when they were allowed to use a combination of visual text and graphics.

In recent years , some interest has been expressed towards modality of input in language learning due to the increased use of multimedia materials. Multimedia, that is , a combination of print , audio and imagery, has been argued to enhance input by making it more comprehensible (Plass & Jones, 2005). Paivio's Dual-coding theory (1986) states that learning improves when the information is received through two channel (verbal and visual) to construct meaning.

Chen and Hsieh (2008) present a study using SMS and MMS messages for the study of English vocabulary. The results showed that the validity of both dual coding and cognitive load theories, that is , using more than one modality is more effective than the use of a single modality.

The aim of the study
The goal of this study is to find out whether learning vocabulary via MMS will result in better learning than learning vocabulary via SMS.

Research Question
What are the effects of MMS vs. SMS on vocabulary learning of second language learners?

Alternative Hypothesis
H1: There are significance differences between MMS and SMS in vocabulary learning of second language learners.

METHODOLOGY

Participants
Participants were selected   from 5 classes at the same level of language proficiency (elementary level) . The subjects were selected among the students who had MMS supported mobile phones. 50 elementary level English learners were randomly divided into two types of treatment. Half of these 50 students formed the group 1(MMS group) and the other half the group 2(SMS group).The multimedia messages in this study allowed students to see the definitions of words, example sentences and pictorial representations, while through SMS , just the word with Farsi meaning was sent. These students were selected regarding their use of mobile devices.

Procedure
Before performing the experiment , all participants perform a pre-test to assess their initial vocabulary abilities. In treatment sessions MMS group received English vocabulary with Farsi meaning as well as picture and an example related to vocabulary ,while SMS group received the same vocabulary only with farsi meaning . During these sessions , three times a day , at 9:00, 13:00, 18:00 hours, I sent three MMS to MMS group and three SMS to SMS group each day and students read my messages as they arrived. After four weeks of learning activities they performed a post test to assess their English vocabulary learning achievements . It was composed of 80 items with a full score of 20. Both the formats of the pre-test and post-test are all common .These tests were a list of English words and asked the participants to answer their meaning in Farsi. The testing time is 45 minutes for pre-test and post-test.

Data analysis
For data analysis, the difference score between MMS group and SMS group was the dependent variable whereas the treatment types (MMS,SMS) was the independent variable. All of the 50 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 MMS and SMS in order to determine each of their effects on vocabulary learning outcomes. A t-test was run to test the alternative hypothesis. Table (1) shows groups descriptive statistics ,from this we can see that $\bar{x}$ = 16.2 and SD= 2.47 (MMS group) and $\bar{x}$= 14.7 and SD= 2.32 (SMS group). Table 1: t-test result.

Table 1: Means and Standard deviation obtained in post-test

	N	Mean	Std. deviation
MMS	25	16.2	2.47
SMS	25	14.7	2.32

Also the result of t-test showed that $t(48)=0.031$, $p<0.05$, therefore MMS is significantly different from SMS ,and we can support the alternative hypothesis.
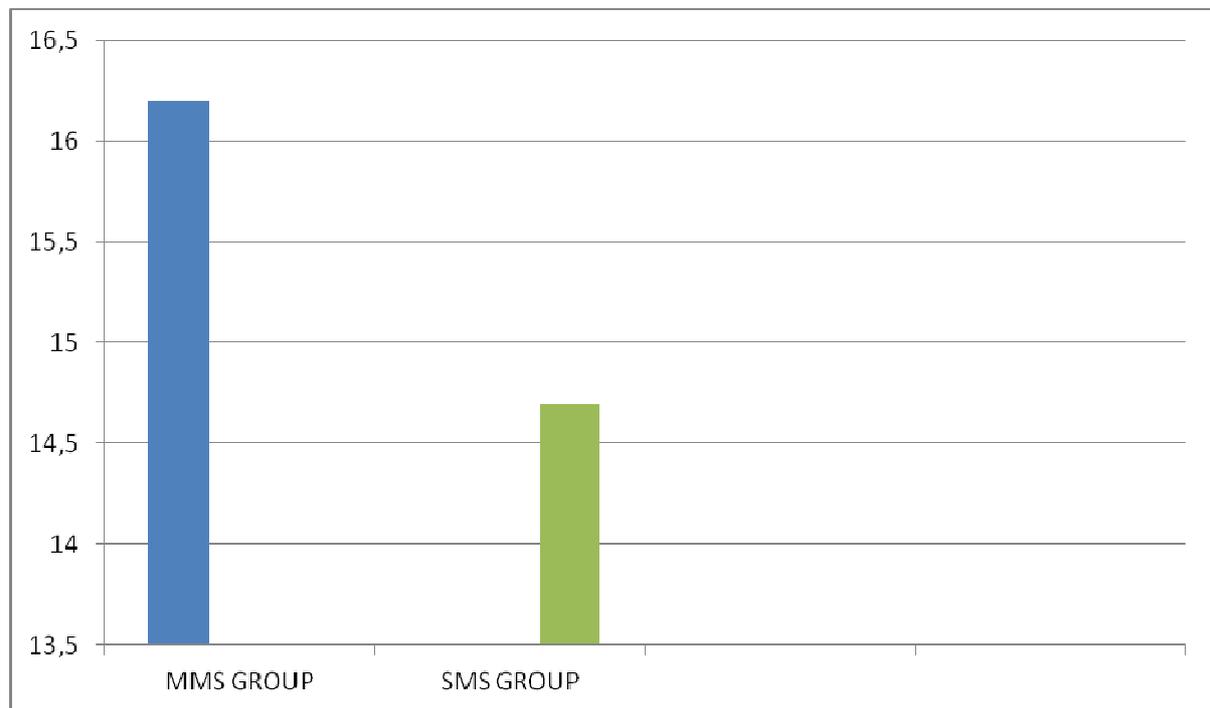

Figure 1: Comparison of means obtained in post-test by two groups

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

DISSCUSION AND CONCLUSION

The main purpose of this study was to explore the impact of multimedia messages vs. short message on vocabulary learning of EFL learners. In this regard a t-test was conducted to probe the alternative hypothesis in this study. The results revealed that there was a significant difference between the means of MMS group and SMS group . Therefore, it can be concluded that using MMS has a significant impact on vocabulary learning of Iranian EFL elementary level students and hypothesis of study stating that MMS group would outperform the SMS group is met. The result of this study is in line with dual-coding theory (DCT theory) as well as Lie, Moare, Craham,& Lee (2002). They said that designing pedagogically effective multimedia instruction in language learning has been an important issue. The findings of this study support the idea that the use of visual media supports vocabulary acquisition and helps increase achievement scores. We can say that sending and receiving MMS which has a substantially higher information-carrying capacity than SMS is more impactful.

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