

MALL and Vocabulary Learning in Elementary Students

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Abstract. Mobile learning is undergoing rapid evolution. Since learning English is very popular in non-English speaking countries, developing modern assisted-learning tools that support effective English learning is a critical issue in the English-language education field. Learning English involves memorization and practice of a large number of words and numerous grammatical structures. Vocabulary learning is a principal issue for English learning because vocabulary comprises the basic building blocks of English sentences. Therefore, many studies have attempted to improve the efficiency and performance when learning English vocabulary. With the accelerated growth in wireless and mobile technologies, mobile learning using mobile devices such as PDAs, tablet PCs, and cell phones has gradually become considered effective because it inherits all the advantages of e-learning and overcomes limitations of learning time and space that limit web-based learning systems. In this study 55 elementary EFL were selected among a group of learners who were equipped with mobile. They were divided into two groups. For the first group, there was a program of vocabulary learning through realia. The second group received the vocabularies and their meanings in English and Persian three times a day each time three words via SMS (Short message service). The data were analyzed by descriptive statistics. The result proves the effectiveness of MALL over using realia: students receiving SMSs learned more ($P < 0.05$). Finally a survey was done on the motivation of the students. The result shows that the subjects attended the MALL program became highly-motivated to follow the program.

Keywords: MALL, vocabulary learning, PDA, mobile technology

1. Introduction

In 1980s Twarog and Pereszlenyi Pinter used telephones to provide distant language learners with feedback and assistance. In 1990s Instructors at Brigham Young University-Hawaii taught a distance-learning English course from Hawaii to Tonga via telephone and computer (Green, Collier, & Evans, 2001). And from that time on every day a new aspect of MALL shows itself.

2. Review of literature

MALL has been highly concerned with the use of the mobile technologies, such as mobile phones, MP3/MP4 players, PDAs and palmtops computers, to support students' language learning. With MALL students would be able to access language learning materials, and to communicate with their teachers and peers, at anytime, anywhere.

Today, due to the growth of wireless and emerging technologies, MALL is available through numerous devices including mobile phones, iPods, tablet PCs, hand-held computers, PDAs, MP3 players and more. MALL designers have begun to move away from merely copying the traditions of standard non-mobile language learning and are implementing techniques that maximize the benefits of these new devices. The increasing number of possible delivery tools has spawned a wide-range of mobile language learning programs, from very-short tutorials to full courses. The number of people capable of producing MALL

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content is also on the rise, due largely to a combination of increased popularity, demand and the advent of content generation tools that simplify the programming process through the use of templates and macros.

MALL currently serves not only as a primary source of language education for students but also supports the retention and utilization of newly-acquired language skills. Through mobile participation in short exercises and tasks, learners are able to keep their linguistic talents sharp while reducing the risk of degradation of valuable knowledge, skills and abilities.

According to Nah, et. al. (2008), among the most noted affordances for MALL is ubiquitous access to learning anytime at any place that the user has reception. Compared to classroom or e-learning, the user does not need to be sitting in a classroom or at a computer to access learning materials. This enables users to brush up on language skills just before or just after a conversation in the language they are learning. Handheld delivery also affords new dynamics for collaborative learning as users can share the language learning process in small synchronous groups.

Learning English vocabulary and improving students' performance have been dealt with throughout the history of language teaching (West, 1953; Garins, 1986; Carter, 1987; Nation, 1990,...). It seems that the expansion of MALL can be very helpful in the learning of the vocabularies.

Thornton and Houser (2002; 2003; 2005) developed several innovative projects using mobile phones to teach English at a Japanese university. One focused on providing vocabulary instruction by SMS. Three times a day, they emailed short mini-lessons to students, sent in discrete chunks so as to be easily readable on the tiny screens. Lessons defined five words per week, recycled previous vocabulary, and used the words in various contexts, including episodic stories. Students were tested biweekly and compared to groups that received identical lessons via the Web and on paper. The authors then explored usability and learning issues. The results indicated that the SMS students learned over twice the number of vocabulary words as the Web students, and that SMS students improved their scores by nearly twice as much as students who had received their lessons on paper. Students' attitudes were also measured. The vast majority preferred the SMS instruction, wished to continue such lessons, and believed it to be a valuable teaching method. The authors theorized that their lessons had been effective due to their having been delivered as push media, which promote frequent rehearsal and spaced study, and utilized recycled vocabulary.

Levy and Kennedy (2005) created a similar program for Italian learners in Australia, sending vocabulary words and idioms, definitions, and example sentences via SMS in a spaced and scheduled pattern of delivery, and requesting feedback in the form of quizzes and follow up questions.

This study is to deal with the effectiveness of MALL in teaching vocabularies; it compares vocabulary learning in realia and MALL.

3. Methodology

3.1. Subjects

In the present study 55 elementary EFL students from both sexes were selected among a group of learners who are equipped with mobile. They have enrolled for elementary courses in Jahad-Daneshgahi institute in Yazd. They have already passed the pre-elementary levels. The book which is being taught there is "Interchange". They were divided into two groups: mobile learning (28), realia learning (27).

3.2. Procedure

For the latter group, there was a program of vocabulary learning through realia. This group attended a 20-session term. On six first sessions (each week two sessions), 30 words were being taught, each session 5 words. These words were selected from their elementary book. The second group received the vocabularies and their meanings in English and Persian three times a day each time three same words via SMS in ten days. A 20-item test was devised for eliciting the subjects' knowledge of vocabulary. This test was administered as a pre-test and post-tests both. To avoid the effects of test-wiseness, an interval of one month was accepted.

4. Results and Discussion

By administering the pretests and posttests and gathering the data, to find out whether there was any significant difference between pretest and posttests, paired-samples t-test was run. The results of these analyses are presented in the following tables.

As it is observed, the findings of this study suggest that MALL learning is more efficient in developing the knowledge of vocabulary in learners than realia. The MALL group also showed its interest orally to pursue the plan; even they were interested to do it collaboratively.

Since the words in this study were all from verb class, it is necessary to do more research on the other parts of speech. Although the number of sessions in which the realia group attended was different from the MALL group, it seems that it cannot be an important variable to distort the results because in either case the MALL group performed better.

Table 1: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	MALL PRETEST	12.1786	28	1.82683	.34524
	MALL POSTTEST	17.3571	28	2.92137	.55209
Pair 2	REALIA PRETEST	12.3704	27	2.40429	.46271
	REALIA POSTTEST	12.5926	27	2.32477	.44740

Table 2: Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	MALL PRETEST & MALL POSTTEST	28	.383	.044
Pair 2	REALIA PRETEST & REALIA POSTTEST	27	.985	.000

Table 3: Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	MALL PRETEST - MALL POSTTEST	-5.17857	2.78958	.52718	-6.26026	-4.09689	-9.823	27	.000
Pair 2	REALIA PRETEST - REALIA POSTTEST	-.22222	.42366	.08153	-.38982	-.05463	-2.726	26	.011

There was a significant difference in the scores for MALL

(M.pre=12.1786, M.post=17.3571; Sd.pre=1.82683, Sd.post=2.92137), $t(27)=-9.823$, $p=.000$ and Realia (M.pre=12.3704, M.post=12.5926; Sd.pre=2.40429, Sd.post=2.32477), $t(26)=-2.726$, $p=.011$.

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