

Mobile-Assisted Language Learning: Using Smartphone Apps to Study Academic Vocabulary

Gilbert DIZON

Introduction

Smartphone penetration has grown exponentially over the past few years. As of April 2015, nearly two-thirds of Americans owned a smartphone, up 8% from a year earlier (Smith, McGeeny, Duggan, Raine, & Ketter, 2015). Ownership is highest amongst young people, with 85% of those between the ages of 18-29 stating they had a smartphone. This trend is also mirrored in Japan, with 79% of those under 25 stating they currently use a smartphone (Consumer Barometer, 2015). The high rate of smartphone ownership among young people affords teachers an opportunity to incorporate these devices into the classroom in order to enhance foreign language learning. Accordingly, this paper will detail the benefits of using smartphones to learn vocabulary as well as discuss preliminary results from a study involving mobile devices to study English.

Mobile Language Learning (MALL)

As Jee (2011) notes, MALL “affords second or foreign language learners and teachers ever greater opportunity to practice the target language anywhere and anytime” (p. 162). This is the greatest advantage of MALL over other e-learning or computer-assisted language learning (CALL) activities. While traditional CALL activities are typically confined to the classroom, school, or home, students can complete MALL tasks regardless of time or place. This gives learners more opportunities for language development, a key factor considering the hectic schedule of many university students.

In a study involving 80 Iranian university students, Azabdaftari and Mozaheb (2012) found that mobile language learning could enhance L2 English vocabulary development. The students were divided into two equal groups of 40: an experimental group which studied vocabulary through mobile devices and a control group which used traditional flashcards. According to the results of their study, the experimental group performed much better on a 20-item vocabulary test with

a mean score of 65 compared to 45 for the control group.

In an additional study investigating MALL, Lu (2008) found that short message service (SMS) via mobile phones helped EFL learners increase their knowledge of target vocabulary. A total of 30 high school students in Taiwan participated in the study. The students were given pre- and post-tests to measure the impact that SMS and the paper treatment had on the students' scores. Lu (2008) found that those who studied via SMS had larger gains compared to those who studied using traditional paper materials.

Not only can MALL can have an impact on students' L2 vocabulary acquisition, but students also have positive perceptions of its use. Azabdaftari and Mozaheb's (2012) determined several themes concerning MALL after interviewing 10 of the participants in their study. Firstly, the students stated that they liked the fact that they could study vocabulary anytime and anywhere. As stated earlier, this is MALL's greatest advantage over other traditional learning activities. Another benefit stated by the participants was that it was entertaining. Some students may view vocabulary learning via paper flashcards as tedious. On the other hand, MALL activities are more engaging, allowing learners to interact with each other with their smartphones or tablets. Similarly, the participants in Lee's (2008) study also had positive attitudes towards MALL. Five distinct advantages were determined based on the students' comments during open-ended interviews: 1) ubiquity, 2) fun, 3) effective time management, 4) manageable amount of content, and 5) helpful for study.

Preliminary Results

During the first semester of the 2015 academic year, the researcher performed a small-scale study involving computerized and mobile flashcards to enhance academic vocabulary. Nine second- and third- year students participated in the study. The learners had an intermediate level of L2 English proficiency based on their TOEIC scores. The group met three times a week with the researcher over the course of the 15-week semester.

After the first week of the semester, the learners were given the Vocabulary Levels Test (VLT) at the academic vocabulary level to assess their knowledge of academic vocabulary. Originally made by Laufer and Nation (1999), the newest version of the VLT was created by Schmitt, Schmitt, and Clapham (2001) and

has been proven to have a high level of validity, with both versions of the test producing similar results. With exception of the tenth and final week of the study in which 30 words were covered, students were introduced to 60 words a week from the 570-word AWL or Academic Word List (Coxhead, 1998). The AWL contains 10% of the words found in academic textbooks, thus making it an essential vocabulary list to study for learners who are interested in studying abroad and/or taking the TOEFL exam.

Quizlet was chosen as the designated program for this study. The primary reason for this was because students could download the application for free from their mobile devices. At the start of each class, students were given 10 minutes to study the new words via the *Quizlet* website or the *Quizlet* mobile application which is available on both the Apple iOS and Google Android mobile platforms. Each digital flashcard contained the vocabulary item, its definition in English, as well as a Japanese translation. Pronunciation of the terms was also available to the students through the app. Figure 1 below shows a screenshot from the *Quizlet* app.



Figure 1. *Quizlet* mobile application

Out of the nine students who participated in the study, eight of them were able to make gains on their VLT scores. Table 1 shows the results from the tests. The mean score on the 30-item test increased from 20.33 to 23.56 with an average gain of 3.23. These findings demonstrate that computerized or mobile flashcards can help develop academic vocabulary in the L2.

Table 1

VLT Results

	Pre-test	Post-test	Gain
Mean	20.33	23.56	3.23
SD	5.55	5.34	3.67

A survey was also administered to find out the learners' attitudes towards the activity as well as their study habits outside of class. Six out of the nine participants stated they preferred using *Quizlet* via smartphone to using a computer (Figure 2). This finding reflects the shift towards mobile devices such as smartphones and tablets (Walters, 2012). Also notable, a majority of the students (n=7) spent a considerable amount of time outside of class to study the vocabulary (Figure 3). This is significant as it shows that the learners were making a conscious effort to take advantage of the additional opportunities to study the L2.

Did you prefer studying English vocabulary with Quizlet via computer or smartphone?

Answered: 9 Skipped: 0

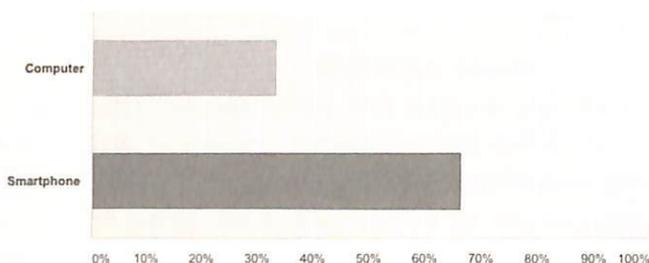


Figure 2. *Quizlet* study preferences

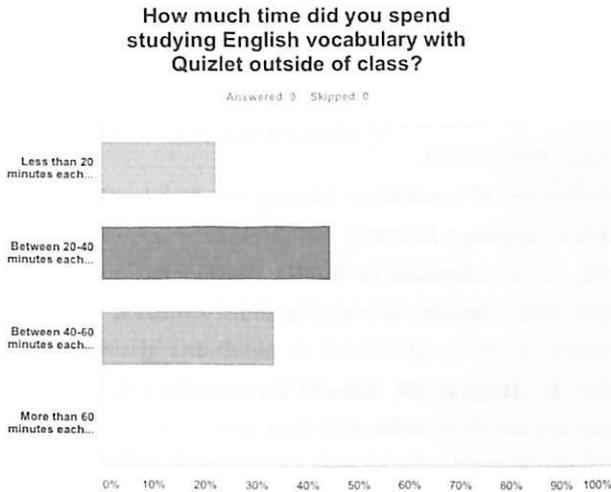


Figure 3. Amount of time studied outside of class

Conclusion

Studying L2 vocabulary via MALL offers many unique advantages over traditional methods. They allow students to study vocabulary anytime and anywhere, extending learning outside of the classroom. Even when compared to computerized flashcards, students seem to prefer studying in a mobile environment. Moreover, students would rather study L2 vocabulary via MALL over traditional activities such as flashcards or reading materials because it is more interesting and engaging. Given this, teachers should actively look for ways to leverage students' mobile devices to enhance language learning.

References

- Azabdaftari, B., & Mozaheb, M. A. (2012). Comparing vocabulary learning of EFL learners by using two different strategies: mobile learning vs. flashcards. *The EUROCALL Review*, 20(2), 47-59.
- Consumer Barometer. (2015). Consumer Barometer - Insights. Retrieved August 26, 2015 from <https://www.consumerbarometer.com/en/insights/?countryCode=JP>
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213-

- Jee, M. J. (2011). Web 2.0 technology meets mobile assisted language learning. *The IALLT Journal*, 41(1), 161-175.
- Laufer, B., & Nation, P. A. A vocabulary-size test of controlled productive ability. *Language Testing*, 16(1), 33-51.
- Lu, M. (2008). Effectiveness of vocabulary learning via mobile phone. *Journal of Computer Assisted Language Learning*, 24, 515-525.
- Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behavior of two new versions of the Vocabulary Levels Test. *Language Testing*, 18, 55-88.
- Smith, A., McGeeney, K., Duggan, M., Raincic, L., & Keeter, S. (2015, April 1). *U.S. Smartphone use in 2015*. Retrieved from http://www.pewinternet.org/files/2015/03/PI_Smartphones_0401151.pdf
- Walters, T. (2012). *Understanding the "mobile shift": Obsession with the mobile channel obscures the shift to ubiquitous computing*. Digital Clarity Group. Retrieved from <http://digitalclaritygroup.com/wordpress/wp-content/uploads/2012/12/DCG-Insight-Understanding-the-Mobile-Shift-Nov-2012.pdf>

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