

An Empirical Study of the Effectiveness of Quizlet-based IELTS Reading Vocabulary Acquisition

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Abstract

With the development of Internet technology, mobile Apps are widely used in foreign language teaching. Taking Quizlet as the mobile teaching platform and combining with the teaching characteristics of IELTS reading course, this paper conducted an empirical study on sophomores of School of International Studies in Wenzhou Business College to explore the effect of Quizlet on the acquisition of IELTS reading vocabulary. The study found that Quizlet-based mobile vocabulary teaching receives wide acceptance among students and has a positive effect on improving IELTS reading vocabulary learning, which provides a useful reference for IELTS reading teaching reform and innovation.

Keywords

Mobile learning; Quizlet; IELTS reading vocabulary.

1. Introduction

With the rapid development of mobile technology, mobile-assisted language learning (MALL) has become a new way of language teaching. The generation born in the 00s, which makes up the majority of current Chinese college students, is commonly considered as “digital natives” because they have grown up with the Internet, mobiles and social media since they were children [1]. Their way of thinking is deeply influenced by technological development. Meanwhile, they have strong sense of engagement and a strong focus on experience while obtaining knowledge. These characteristics highlight the increasing self-consciousness of contemporary college students. The application of mobile technology in language teaching can break the limitation of traditional learning mode on space and time and thus meet the personalized needs of today’s college students, and make the learning process more independent and flexible. Mobile learning applications (App) have been widely used in foreign language teaching in recent years [2]. This research uses Quizlet as the mobile learning platform and incorporates this mobile App into IELTS reading course for 41 sophomores in the School of International Studies. The teaching experiment was carried out for three weeks to test the effectiveness of Quizlet on weekly IELTS vocabulary test scores. The study aims to help learners to improve vocabulary learning efficiency and promote the application of mobile technology in IELTS reading course.

2. Research on the Vocabulary Learning Apps in English Teaching

A large number of domestic studies have shown that mobile foreign language teaching based on smart phones can break the time and space constraints, strengthen Chinese students' interest and motivation in language learning, and thus improve the effect of vocabulary acquisition [3]. Yu Xiujun discussed the auxiliary role of “toWords” in English teaching [4]. Tan Yangyu explored English vocabulary teaching strategies by taking the App “BaiCiZhan” as an

example [5]. Wang Yulan studies the blended English teaching mode based on mobile Apps by incorporating English learning Apps such as English Liulishuo, Shanbay Word and China Daily covering all aspects of listening, speaking, reading and writing [6].

Through literature review, the author found that most researchers only discussed the impact of mobile Apps on English teaching at the theoretical level, and there are still few quantitative studies. Meanwhile, most vocabulary learning Apps have their own built-in lexicons which are prone to be inconsistent with English teachers' actual teaching content in class. This inconsistency is likely to cause disjunction between online and offline learning on students. The mobile App Quizlet discussed in this paper has the function of self-creation of thesaurus, which can realize the seamless linkage of in-class teaching content and mobile vocabulary learning after class. Finally, many researches on mobile vocabulary learning mainly study the effect on college English vocabulary acquisition. The IELTS test discussed in this study belongs to the international English language proficiency test. Most examinees take this test to reach the language threshold for further study abroad. Therefore, the vocabulary of IELTS reading test is highly academic. Currently, there are still few empirical studies on the effect of mobile Apps on IELTS reading vocabulary acquisition.

3. Vocabulary Teaching Based on Quizlet

Quizlet was founded in 2005 by Andrew Sutherland, an American high school student. After more than a decade of development, Quizlet is now a popular mobile App for vocabulary learning, with more than 50 million learners using the platform every month to meet their vocabulary learning needs [7]. Users can create study sets freely on the platform, which currently provides more than 350 million study sets for users to acquire words independently. In this study, the virtual classroom was set up on Quizlet first and the IELTS reading vocabulary study sets created by the teacher were uploaded on the platform before every lesson. Students who join the class can choose any learning mode for word practice on their mobile phones. The teacher can master students' learning progress of each study set through the data provided by the platform.

Quizlet supports text, pictures, sound, games and other media forms. It offers various vocabulary learning modes including flashcards, learn, write, spell, test and games (match and gravity). An example of study set is shown in Fig.1. Comparing to traditional ways of vocabulary learning such as memorizing vocabulary list on paper, learners have a higher degree of autonomy when choosing the learning module they prefer. During the class, teachers can utilize the Live function of Quizlet, which randomly generates interactive word games on mobile phones to strengthen memory. The App can record the study progress of each learner and create real-time leader boards to enhance learners' fun through competition in vocabulary learning.

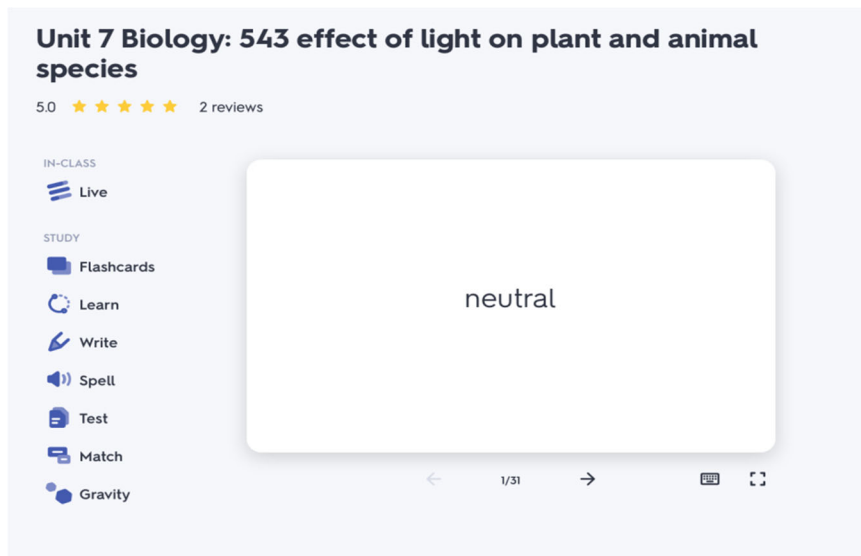


Figure 1. Vocabulary study set created on Quizlet

4. Research Design

4.1. Research Questions

This study used experimental method to discuss the effectiveness of Quizlet for IELTS reading vocabulary acquisition. The purpose of this study was to explore answers for the following research questions:

1. Is there significant difference in vocabulary test scores between the experimental group and the control group?
2. What is the preferred vocabulary learning module for experimental group?
3. Are students willing to use Quizlet as long-term vocabulary learning tool?

4.2. Experimental Subject

The experimental subjects included 41 second-year students from two classes in the international program of Wenzhou Business College. There were 25 students in the experimental group and 16 students in the control group. According to the results of mock IELTS reading test, these two classes were at similar language level with mean scores of 3.97 and 4.14 respectively, indicating that there was no significant difference in the vocabulary level among two groups of students.

4.3. Experimental Process

According to the requirement of course syllabus, the research selected 30 IELTS reading words from the passage the Effect of Light on Plant and Animal Species as the target words for the experiment. The experimental teaching lasted for three weeks, and students in both groups were tested in the third week. The vocabulary test consisted of 20 questions and was timed for 6 minutes. The test questions include multiple choice questions, true or false questions and matching questions, aiming to comprehensively examine whether students have mastered both Chinese definition and English synonyms of target words.

The vocabulary teaching based on Quizlet is illustrated in Fig.2. In terms of experimental group, the teacher uploaded Quizlet study set to the group before first week's offline class, and students previewed target words through Flashcards learning mode on their mobile phones. During class, the teacher used the Live function of Quizlet to help students consolidate new words. After class, the experimental group were asked to memorize all the target words by

finishing all the learning modules on Quizlet. Both the experimental group and the control group took the vocabulary test in the third week.

For the control group, the content and progress of vocabulary teaching were synchronized with that in the experimental group. The difference among these two groups was that during class, the control group didn't have access to Quizlet and they should independently consolidated the new words after class through word list on paper released by the teacher.

After the vocabulary test, the experimental group were asked to finish a questionnaire. The questionnaire consists of three parts: The first part is to collect students' personal information (class, age and years of English learning). Questions 4-6 of the second part will investigate students' vocabulary learning using Quizlet, including the learning duration and their preference for using the software. Questions 7-9 of the third part aim at understanding student acceptance and overall evaluation of Quizlet-based vocabulary learning. The questionnaire should be completed in less than 10 minutes.

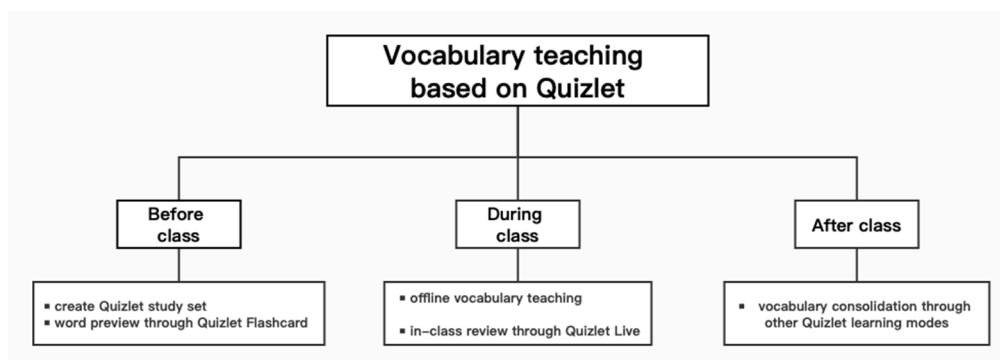


Figure 2. Vocabulary teaching based on Quizlet

5. Data Analysis

SPSS 28.0 was used for quantitative data analysis in this study. According to the three research questions, the following statistical methods need to be used: independent sample T-test to compare the performance of the experimental group and the control group in the vocabulary test; the descriptive data of each question in the questionnaire were collected, including frequency and average value.

6. Result and Discussions

6.1. Difference in Vocabulary Test Scores Between Two Groups

The statistical results of vocabulary test scores are shown in Table 1. Independent sample T test shows that the average score of vocabulary test in the experimental group is 81, while that in the control group is 64.94. The difference of vocabulary test scores between the experimental group and the control group was significant ($P < 0.001$), which means the score of the experimental group was significantly higher than the control group.

Table 1. Variance Analysis on Vocabulary Test Scores (M±SD)

	Experimental group (n=25)	Control group (n=16)	t	p
Test scores	81±14.93	64.94±7.9	3.95	<.001

This statistical result shows that the mobile App Quizlet has a very positive impact on IELTS vocabulary learning and can help learners improve vocabulary test scores. The new mobile

teaching mode has realized the expected outcome. Quizlet supports text, pictures, sound, games and other media forms, which can attract the contemporary college students known as "Internet natives". Compared with pure text memory, vocabulary learning combined with pictures, sounds, animations and other forms can enhance memory [8]. In addition, Quizlet provides a learning mode that provides real-time information on the progress, which is very helpful for learners to keep track of their learning. Compared with other vocabulary learning platforms, the biggest advantage of Quizlet is that teachers can create target vocabulary study set for students according to the teaching content, so as to match the vocabulary learning content inside and outside the classroom, and realize the integration of mobile learning and classroom teaching.

6.2. Students' Preference for Using Quizlet

According to the questionnaire, the three most popular learning modules for students on Quizlet are Flashcards, Learn and Match games as shown below in Figure 3. The Flashcards module on Quizlet visualizes each word with picture and pronunciation. 83.33% of the experimental group choose Flashcards as their favorite learning mode, which suggests that using pictures and sounds can effectively increase students learning efficiency. The percentages of Learn and Match are similar to each other, with 69.44% and 68.06% respectively. The Learn module on Quizlet can guide learners to memorize meanings of each word through repetition. The survey result indicates that most students find it useful to acquire new words through repetition. The Match module on Quizlet introduces competition into vocabulary learning. Student performance can be recorded on real-time ranking, which enhances learner motivation. It should be noted that the Spell and Write modules received the least attention from students. Therefore, teachers should encourage students to strengthen the learning of these two modules.

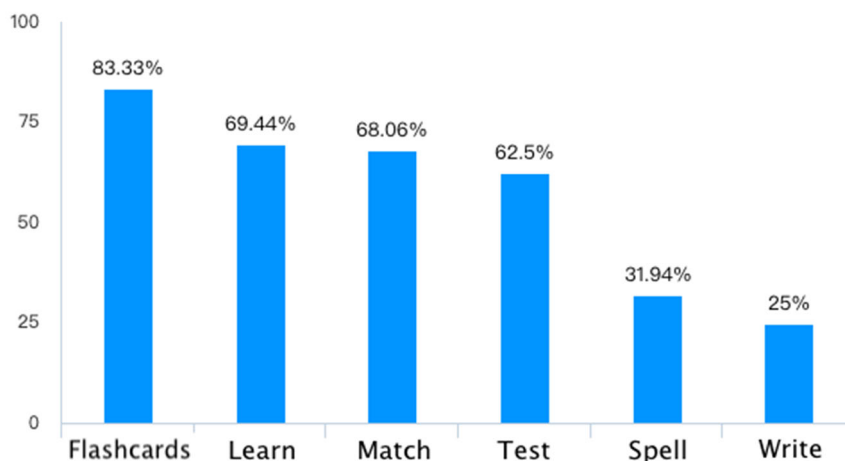


Figure 3. Survey result on preference for using Quizlet

Figure 4 illustrates students' acceptance of Quizlet. 97.22% of the experimental group choose to use Quizlet as long-term vocabulary learning tool whereas only a small proportion of students are not willing to use the App anymore. This result suggests that Quizlet generally receives wide acceptance among students and it is viable to introduce this learning tool to more students currently studying for IELTS.

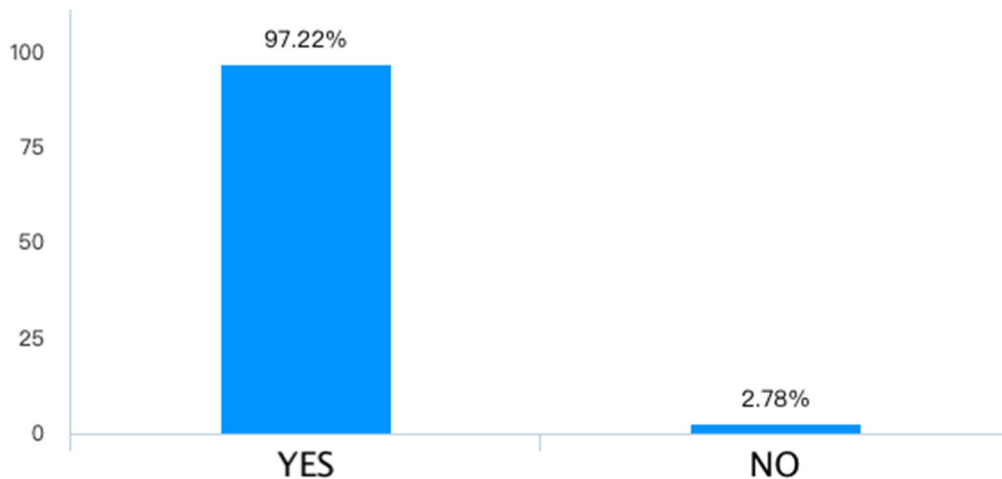


Figure 4. Survey result on acceptance of Quizlet

7. Conclusions

After conducting experiment and survey, the research comes to the following conclusions: there is significant difference in vocabulary test scores between the control group and the experimental group. The Quizlet-based vocabulary teaching can effectively improve IELTS vocabulary acquisition. Nearly all the students in the experimental group choose to use Quizlet in the long run. As for students' user experience towards Quizlet, Flashcards module is the favorite one followed by Learn and Match game, which implies that vocabulary teaching should incorporate image and pronunciation; appropriate repetition and competition can increase learners' motivation.

However, the study has its limitations: the three-week experimental period is relatively short and the sample size of 41 students is relatively small. Future studies can appropriately extend the experimental period to look into long-term effect of using Quizlet on vocabulary acquisition and expand the sample size to obtain more convincing conclusions. Overall, the Quizlet-based IELTS vocabulary teaching transcends the space and time limit of traditional teaching. A blend of online and offline teaching modes can significantly improve students' vocabulary test scores and make the learning process more self-motivated and enjoyable. This provides beneficial reference for IELTS teaching.

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