University Students' Perceptions on the Use of Quizlet in Learning Vocabulary

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Abstract—Computer-assisted language learning (CALL) and mobile-assisted language learning (MALL) approaches have had positive effects on language education. Quizlet is an emerging tool which has helped many language learners to achieve their learning goals. The study aims to explore students' perceptions on the use of Quizlet for their learning vocabulary. Both quantitative and qualitative approaches were employed to examine the frequency of use among students and their level of satisfaction toward Quizlet as well as its advantages and disadvantages it brought students. For data analysis, 148 students participated in the study through a questionnaire and a semi-structured interview. The results revealed that students *sometimes* used Quizlet for their learning vocabulary (M=3.073, SD=.6485) with the frequency of approximately 2 hours per week. In addition, students' level of satisfaction was rated quite positive (M=3.515, SD=.8289). In particular, the feature *Test* was most noticeable and satisfactory since it helped students review vocabulary effectively. Many students preferred Quizlet because of its convenience and effectiveness while others were dissatisfied with some features such as *Match* as well as some spelling and definition errors, and unnatural pronunciation. It is to suggest that students would prefer Quizlet as a helpful tool for their vocabulary mastery. Besides, Quizlet developers could upgrade its features to make it an outstanding aid for language learners.

Keywords—Quizlet, vocabulary, learning, perception, university student

1 Introduction

The advances in technology have brought learners beneficial values in all aspects, especially for language learners. Thanks to technological tools and applications, learners have approached new learning styles and strategies which assist them to acquire foreign languages easier. Many learners still find vocabulary difficult to learn since it is primary to all language learners at the beginning. A number of ways to learn vocabulary have been applied in order to memorize as many words as possible. The use of visual aids as pictures, films, posters or media has become well-known in many language classrooms with teachers' knowledge of language teaching [1-6]. The problem is that learners feel unmotivated or uninterested in learning new vocabulary when they

cannot find effective solutions for this problem [7]. Therefore, integrating technology in learning languages is a must since it is beneficial to all language learners [8-9]. Moreover, the role of ICT in teaching and learning vocabulary has been increasing via computers and mobile phones [10-11]. As a result, learners can learn vocabulary through a tool based on computer-assisted language learning (CALL), which is considered as a helpful aid for second language acquisition [12-14]. Therefore, CALL materials made it easier for learners to interact and use languages [15]. In addition, mobile-assisted language learning (MALL) approach is preferable in the fourth industrial revolution. In other words, MALL is a method of linguistic learning that uses moveable mobile devices such as smartphones, tablets, and smartphone applications as learning and instructional tools for learners over the Internet [16-19]. Many research results showed that MALL has a positive effect on helping learners to improve English vocabulary [20-23]. Applied from CALL and MALL approaches, a variety of applications were born to support language learners from every single aspect. Among different applications and tools for vocabulary learning, Quizlet is emerged as a remarkable one. Quizlet was developed by Andrew Sutherland in 2005, which is now available in many different languages as English, Chinese, Russian, French, Vietnamese and so on, and used in over 130 countries, figuring at approximately 60 million monthly users, 500 million study sets [24]. Therefore, many instructors and teachers have used Quizlet as a gamified learning vocabulary activity which enhances students' outcomes [25-27]. Also, as examined by a number of researchers and educators, the results showed that one of the most cutting-edge tools for language learners is Quizlet, which is an effective online-based learning application [28-34]. It is no doubt that the use of Quizlet for learning vocabulary is efficient.

To specify the features of Quizlet, it consists of *Flashcards, Learn, Write, Spell, Match, Test* and *Gravity*. The feature *Flashcards* provides users with definitions of a term, in which the definitions can be displayed in different language options. Users can flip each card with a click and pronunciations are also included if the users click the sound button. The second feature is *Learn* in which users can study vocabulary with multiple questions, flashcards or written questions, and they can choose if they want to answer in English or in their first language. The third feature is *Write*, which asks the users to write their answers with definitions given in English or in their mother tongue. *Spell* is the next feature which allows users to type their answers from what they hear. The next feature is to ask users to match the terms with their definitions, called *Match*, in which the timer is used to see how fast the users finish it. In addition, *Test* feature is for users to consolidate all the terms with multiple, true or false, written questions and matching. The last feature is *Gravity*, in which users have to write their answers for the questions labelled in asteroids.
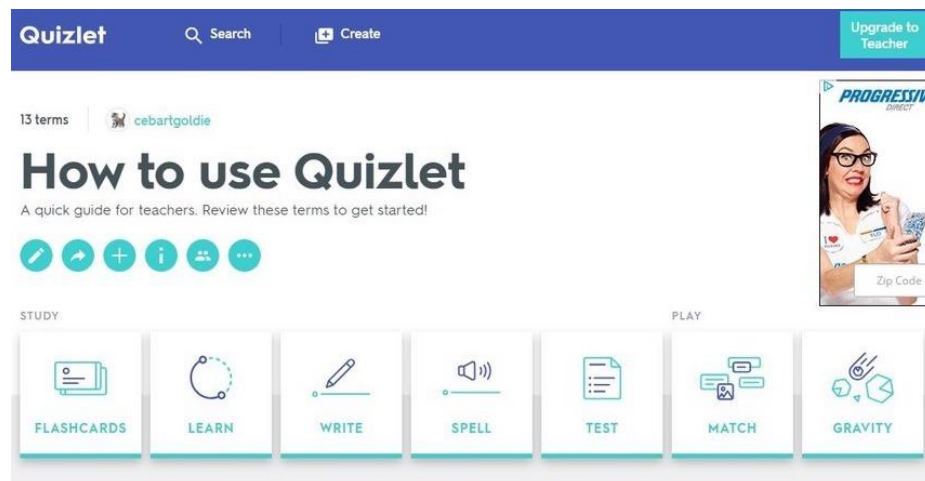
Fig. 1. The features of Quizlet

Since the outstanding features of Quizlet for students to use as a tool to learn vocabulary, instructors and students have used it very frequently in their language learning. Specifically, the use of Quizlet for learning vocabulary was examined to see the frequency and satisfaction of Quizlet in their language learning process as specified in vocabulary improvement. Moreover, some benefits and drawbacks would be analyzed for better use. The study is to seek the answers for the below-mentioned questions:

1. What is the frequency of Quizlet use for vocabulary learning among university students?
2. How are university students satisfied with the use of Quizlet for their learning vocabulary?
3. What are the advantages and disadvantages when university students use Quizlet for their learning vocabulary?

2 Methodology

2.1 Participants

The total number of participants was 148 (41.2% males and 58.8% females) at a private university in Vietnam. Their age was ranged from 18-24 and all of them were experienced in using Quizlet for their learning vocabulary. Out of 148 participants, 20 students were randomly invited for a semi-structured interview.

2.2 Research instruments

The study was design to get feedback from students about the use of Quizlet for their English vocabulary learning, so a 21-item questionnaire was utilized, in which 14 items

were based on 5-point Likert scale for a quantitative method and 7 items were used to check participants' frequency on the use of Quizlet as a qualitative method. Besides, open-ended questions were also employed to gain insight into their views on the benefits and drawbacks when the participants used Quizlet.

2.3 Data collection and analysis

Before collecting data for analysis, the questions were supervised and revised by several colleagues for accuracy. The questionnaire was sent to 200 students at a private university via Google Forms. Eventually, the number of returned responses was 148, accounting for 74% of the initial population. To ensure the reliability of the questionnaire, the Statistical Package for the Social Sciences (IBM SPSS) Statistics version 25 was used for analysis. The result showed that the Cronbach's Alpha value of quantitative items was 0.899, which indicated that the questionnaire was reliable and good for research.

3 Results

3.1 Results from the questionnaires

The results of data analysis for the frequency of Quizlet use for learning vocabulary among students were displayed in each feature as *Flashcards, Learn, Write, Spell, Test, Match* and *Gravity* and as a whole. The frequency was ranked as 1 for *never*, 2 for *seldom*, 3 for *sometimes*, 4 for *often* and 5 for *always*.

Table 1 reveals that students used Quizlet at an average level (M=3.073; SD=.6485) to study English vocabulary. In particular, students *sometimes* spent their time learning English vocabulary by the features of *Flashcards, Learn, Test* and *Match* while the other features were recorded as a rare level.

Table 1. Mean score of frequency on Quizlet features

Features	N	Mean	SD
Flashcards	148	3.507	.8921
Learn	148	3.439	.86682
Write	148	2.541	1.0194
Spell	148	2.608	1.1043
Test	148	3.608	.9231
Match	148	3.797	.7993
Gravity	148	2.014	.9618
Quizlet	148	3.073	.6485

As can be seen from Table 2, a majority of students found Quizlet a familiar tool for learning vocabulary. The percentage of students *sometimes* using Quizlet features for this purpose was recorded the highest, figuring at 38.03%. Besides, approximately a

third of students used these features on their frequent basis. Whereas, a small number of students never or always applied this application for their learning vocabulary, at 13.23% and 8.0% respectively). Among Quizlet features, *Flashcards, Learn*, and *Match* were most noticeable since students sometimes used them while students paid most attention to the feature of *Test*, with 39.9% students considered it on their often use. Interestingly, the feature *Gravity* was not preferable as a third of the students never or seldom used it to study vocabulary, accounting for 35.8% and 35.1% respectively.

Table 2. Frequency of students' use of Quizlet features

Frequency	Never	Seldom	Sometimes	Often	Always
Flashcards	2.7%	6.1%	41.9%	36.5%	12.8%
Learn	2.1%	7.4%	46.6%	32.4%	11.5%
Write	18.9%	26.4%	38.5%	14.2%	2%
Spell	18.9%	26.4%	34.5%	15.5%	4.7%
Test	2.7%	6.1%	35.1%	39.9%	16.2%
Match	11.5%	15.5%	47.3%	18.3%	7.4%
Gravity	35.8%	35.1%	22.3%	5.4%	1.4%
Average	13.23%	17.57%	38.03%	23.17%	8.0%

The results from Table 3 indicated that the participants spent approximately 2 hours per week on Quizlet features on average. Interestingly, within 2 hours weekly, students focused much on using *Test* feature. In addition, a majority of students (42.47%) consumed less than 1 hour weekly while a small percentage of students (14.42) spent more than 3 hours weekly to learn vocabulary by themselves on Quizlet. In particular, most participants (76.4%) did not prefer *Gravity* feature, so they spend the least time on it.

Table 3. Percentage of hours students spent on Quizlet features per week

Features	Less than 1 hour	1-2 hours	2-3 hours	3-4 hours	More than 4 hours
Flashcards	20.3%	37.8%	20.3%	14.9%	6.8%
Learn	26.4%	30.4%	23.6%	13.5%	6.1%
Write	57.4%	24.3%	12.2%	4.7%	1.4%
Spell	54.7%	21.6%	12.8%	6.8%	4.1%
Test	18.2%	30.4%	29.1%	14.9%	7.4%
Match	43.9%	26.4%	15.5%	8.8%	5.4%
Gravity	76.4%	10.1%	7.4%	5.4%	0.7%
Average	42.47%	25.86%	17.27%	9.86%	4.56%

Data collected were analyzed with a 5-point Likert scale which displayed 1 as *very dissatisfied*, 2 as *dissatisfied*, 3 as *normal*, 4 as *satisfied*, and 5 as *very satisfied*. The results from Table 4 proved that students considered Quizlet quite positive for their learning vocabulary (M=3.515, SD=.8289). To be specific, students preferred *Flashcards, Learn* and *Test* features most as their satisfaction for these features was recorded

high (M=4.041, SD=.7548; M=4.020, SD=.7511; and M=4.176, SD=.7351 respectively). In contrast, students did not show their appreciation much for the feature *Match* (M=2.054, SD=1.200) since they were dissatisfied with it.

Table 4. Students' satisfaction on the use of Quizlet and its features

Features	N	Mean	SD
Flashcards	148	4.041	.7548
Learn	148	4.020	.7511
Write	148	3.500	.7423
Spell	148	3.541	.7770
Test	148	4.176	.7351
Match	148	2.054	1.200
Gravity	148	3.278	.6682
Quizlet	148	3.515	.8289

3.2 Results from the interviews

Advantages of using Quizlet for learning vocabulary. From the analysis of the interviews, 95% of the participants supported that Quizlet was a good tool for learning vocabulary since it was free and convenient. Students preferred an application or tool which could give them an easy access to its features without any cost.

"I usually use Quizlet to review my vocabulary. You know I have to learn many words in a lesson, so if I don't remember them I can't understand a reading text, for example. I can learn and check if I remember vocabulary whenever and wherever I want because Quizlet is always available on my phone or laptop. One thing I like most about it is as you know I'm a student, so I don't want to pay for an app, and choose the basic mode because it's totally free." (Participant F)

In addition, 15 out of 20 students agreed that Quizlet helped them remember vocabulary longer since they were categorized and various in different themes or students could definitely add any words they wanted to learn as well as check if I remembered them.

"My previous way to learn vocabulary is to write down a word many times until I remember it, but I forgot it short afterwards. Since I use Quizlet, I think I can remember many words for a long time. It also provides many topics I want to learn. Sometimes, I can add some words or edit some study sets as I wish. I often use the feature Test to review my learned vocabulary. It's also my favorite feature." (Participant C)

Half of the participants recognized that Quizlet notified and reminded users of the study sets they were in progress. They appreciated this feature since the users could keep their right tracks to achieve the best results for vocabulary improvement.

"Sometimes I'm lazy to study vocabulary, but Quizlet send me notifications to remind me to go back to it for my review. It's really helpful for a lazy student like me. Thanks to it, I've become its loyal friend." (Participant H)

Interestingly, 65% of the participants described that Quizlet also helped users to check the pronunciation of a new word or phrase. Therefore, students could find it easy to learn to write and hear its sounds at the same time.

"I still prefer Quizlet because I can check how a word is pronounced just by a click on a sound button. I don't have to use a dictionary for pronunciation check. I like to hear and write what it says with the feature Spell." (Participant N)

Disadvantages of using Quizlet for learning vocabulary. The results revealed that all participants could recognized some mistakes or errors on Quizlet. Their reason was that it was free and people could create and share any study sets on their own without censorship and evaluation.

"I see many mistakes about spelling, word use and wrong definitions. When you pick up on set to study, it might be created by someone who is a student like you, then they share it with many people, so it's not error-free. Also, no one checks its accuracy for you although Quizlet sometimes suggests for correction." (Participant B)

As shared by 90% of the participants, Quizlet worked with Internet access. Therefore, it only worked well for whose phones were always connected to the Internet.

"When my connection is poor or I want to learn it outside without the Internet, it's impossible. It only works if I pay money to upgrade it to Quizlet Plus, but you know, I'm a student, so I accept this inconvenience." (Participant E)

A drawback spotted by 15 students (75%) was that Quizlet did not show its flexibility in marking users' answers. Therefore, the interviewers were not satisfied with the features that asked them to write something as a term or its definition since it only marked correct if the users wrote or typed it accurately.

"I feel annoyed when it asks me to type the same as its answer, but you know a term may have similar definitions. Especially, I type my correct Vietnamese, but it marks me wrong. When I check it again, I see the answers with a mistake in Vietnamese tones. I'm right, so I think Quizlet should develop this feature and upgrade it to fix that error." (Participant K)

In addition to providing pronunciation for every term, 65% students complained that the sounds were not naturally pronounced due to the effect of artificial or robotic sounds.

"I feel the sounds are not very natural. I guess developers use robot voice sounds, so I don't really like it. I still prefer the pronunciation from my favorite dictionary." (Participant P)

4 Discussion

The results from the findings supported that Quizlet was considered helpful and commonly-used among students to improve their vocabulary mastery. This finding was in line with Baptist [25] and Christanti [26] since students preferred Quizlet as a tool for its convenience and effectiveness.

First of all, the use of Quizlet for learning vocabulary was at a normal frequency. The participants spent more time on the features *Learn*, *Test* and *Match* than the other ones since they saw these features helped them learn faster as well as review their range

of vocabulary for long-term memorization. Especially, *Test* was the most remarkable based on students' perceptions toward the use of Quizlet.

Moreover, the average time spent on Quizlet features was recorded approximately 2 hours per week, in which students also used most of their time for *Flashcards, Learn* and *Test*.

The results from the analysis, students felt quite satisfied with Quizlet features, which was in line with Prayogi and Wulandari [33]. Especially, they also proved that *Flashcards, Learn* and *Test* features were more preferable while *Match* dissatisfied them because it took them much time on this feature, which was not consistent with the results from Sangtupim and Mongkolhutthi [34]. In addition, students also complained that many errors were found in spelling and definitions since users could create by themselves and share without evaluation and censorship. Also, the included pronunciation on Quizlet was not rated high because of speakers' unnatural sounds.

5   Conclusion

In addition to the contribution of technological applications and programs to language learning, Quizlet was emerged as an outstanding tool for vocabulary mastery. Students' perceptions on the use of Quizlet in learning vocabulary were significant to identify an aid for language learners to improve their vocabulary. Since students felt quite satisfied with Quizlet, it has become a preferable choice in their learning process as they spent certain time using its features frequently. The findings of this study suggested the implication of Quizlet for vocabulary mastery. Moreover, teachers could apply Quizlet as a supporting tool for teaching vocabulary, and students would take advantage of Quizlet to enrich their vocabulary. Also, Quizlet developers could find some ways to upgrade its features for more attractive and accurate use.

6   Acknowledgement

7   References

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