The Effects of Quizlet on International Information Technology University First-Year Students' Vocabulary Acquisition

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Abstract

In recent years, technology has become an integral part of education, offering new and innovative ways to teach and learn. One such tool that has gained popularity is Quizlet, an online educational platform that provides various methods for teaching and testing vocabulary. This study aims to determine the effectiveness of Quizlet in teaching vocabulary at International Information Technology University. A total of 60 students were randomly selected and divided into four groups: control groups, who were taught using traditional methods, and experimental groups, who were taught using Quizlet. The results showed that the experimental groups significantly outperformed the control groups in terms of vocabulary retention and recall. This suggests that Quizlet can be an effective tool for teaching vocabulary at International Information Technology University.

Keywords

Vocabulary, Quizlet, technology, education, teaching

1. Introduction

Vocabulary is a crucial component of language learning and plays a fundamental role in communication. The ability to use and understand a rich vocabulary is essential for success in many areas, including education and the workforce. With the increasing use of technology in education, online educational platforms have become a popular way for students to learn and improve their vocabulary. One such platform is Quizlet, a web-based application that provides interactive vocabulary instruction through games, flashcards, and quizzes [1].

Quizlet has been widely used in schools and universities around the world and has been praised for its effectiveness in teaching vocabulary. The platform has a user-friendly interface that makes it easy for students to create and use flashcards, take quizzes, and play games. Furthermore, Quizlet offers a wide variety of study modes that cater to different learning styles and make vocabulary instruction more engaging and enjoyable. With the convenience and flexibility of Quizlet, students can access it from any device with an internet connection, which allows them to study and review vocabulary at any time and in any place [1].

Despite its popularity, the effectiveness of Quizlet in teaching vocabulary has not been thoroughly researched. While there are a few studies that have explored the use of Quizlet in language learning, most of them focus on specific languages or aspects of the platform [2]. The purpose of this study is to examine the effectiveness of Quizlet in teaching vocabulary at International Information Technology University. The study will compare the vocabulary retention and recall of students who were taught using Quizlet to those who were taught using traditional methods, such as dictionary work and rote memorization [3].

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The significance of this study lies in its contribution to the field of vocabulary instruction. With the increasing use of technology in education, it is important to understand the potential benefits and limitations of online educational platforms, such as Quizlet, in teaching vocabulary. By exploring the effectiveness of Quizlet, this study aims to provide educators with valuable insights into the use of technology in vocabulary instruction and to suggest best practices for vocabulary teaching and learning.

Overall, Quizlet is a popular online educational platform that offers interactive vocabulary instruction through games, flashcards, and quizzes. Despite its popularity, the effectiveness of Quizlet in teaching vocabulary has not been thoroughly researched. The purpose of this study is to examine the effectiveness of Quizlet in teaching vocabulary at International Information Technology University and to provide educators with valuable insights into the use of technology in vocabulary instruction.

2. Hypothesis

The use of Quizlet in teaching vocabulary will result in significantly greater vocabulary retention and recall compared to traditional methods of vocabulary instruction.

The increasing use of technology in education has led to the development of a range of digital tools for vocabulary instruction [4]. One such tool is Quizlet, a web-based learning platform that provides interactive and engaging vocabulary activities [1]. Quizlet has been found to be an effective tool for teaching vocabulary in a number of studies [5].

The efficacy of Quizlet in teaching vocabulary can be attributed to its interactive and engaging activities, which allow students to actively engage with vocabulary words and receive immediate feedback [6]. Quizlet also allows students to track their progress and provides teachers with the ability to monitor students' vocabulary acquisition and retention [1]. These features make Quizlet an appealing tool for teaching vocabulary, as they have the potential to enhance students' motivation and engagement with vocabulary instruction [4].

However, the effectiveness of Quizlet in teaching vocabulary has yet to be systematically examined. This study aims to address this gap by comparing the vocabulary retention and recall of students who are taught vocabulary using Quizlet to those who are taught using traditional methods of vocabulary instruction. Based on the available evidence and the unique features of Quizlet, it is hypothesized that:

Students taught vocabulary using Quizlet will show significantly greater retention and recall of vocabulary words compared to students taught using traditional methods (e.g., textbook-based instruction, lecture-based instruction).

This hypothesis provides a clear and concise statement of the expected outcome of the study and serves as a guide for the design and analysis of the study. By testing this hypothesis, this study will contribute to our understanding of the effectiveness of Quizlet in teaching vocabulary and inform the development of vocabulary instruction practices at International Information Technology University.

3. Literature review

Vocabulary acquisition is a crucial aspect of language learning, as it allows students to understand and communicate effectively in a new language [7]. A wide range of methods and strategies have been used for teaching vocabulary, including textbook-based instruction, lecture-based instruction, and vocabulary games and activities [8]. However, with the increasing use of technology in education, digital tools and resources are being developed and used for vocabulary instruction [4]. One such tool is Quizlet, a web-based learning platform that provides interactive and engaging vocabulary activities [1].

Effectiveness of Quizlet in Teaching Vocabulary:

Quizlet has been found to be an effective tool for teaching vocabulary in a number of studies. Alharbi (2020) compared the vocabulary acquisition of Saudi Arabian EFL learners who used Quizlet to those who used traditional methods of vocabulary instruction. The results showed that students who used Quizlet had significantly greater vocabulary retention and recall compared to those who used traditional methods. This suggests that Quizlet can be an effective tool for teaching vocabulary in the EFL context [6].

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Limited Research on Quizlet and Vocabulary Instruction:

Despite the growing use of Quizlet in education and the evidence for its effectiveness in teaching vocabulary, there is a limited amount of research on this topic. Most of the available studies have been conducted in limited contexts, such as in specific countries or with specific student populations (e.g., EFL learners, and university students). Furthermore, few studies have compared the effectiveness of Quizlet to traditional methods of vocabulary instruction, and there is a need for more research in this area.

4. Methodology

The present study was a quasi-experimental design that used a pre-test and post-test control group design [9]. The participants were 60 undergraduate students enrolled in the English for Information Technology course at International Information Technology University. The students were randomly assigned to either the experimental group or the control group. The experimental groups were taught using Quizlet and the control groups were taught using traditional methods, such as dictionary work and rote memorization [3].

Both groups received vocabulary instruction for 4 weeks, with three hours of vocabulary instruction per week. The vocabulary instruction was designed to be comparable in terms of content, duration, and frequency for both groups. The experimental groups received their instruction through Quizlet, which was accessible on any device with an internet connection. The control groups received their instruction through traditional methods, such as dictionary work and rote memorization, in the classroom setting.

To assess the effectiveness of Quizlet in teaching vocabulary, a pre-test and post-test were administered to all groups. The pre-test was administered before the vocabulary instruction, and the post-test was administered after the 4 weeks of instruction. The pre-test and post-test consisted of multiple-choice and open-ended questions that assessed the students' vocabulary retention and recall of the target words [7]. The questions were designed to test the students' ability to recognize the meaning, pronunciation, and spelling of the target words.

In short, this study used a quasi-experimental design that compared the vocabulary retention and recall of students who were taught using Quizlet to those who were taught using traditional methods. The results of the study will contribute to our understanding of the use of technology in vocabulary instruction and will provide valuable insights into the potential benefits and limitations of Quizlet in teaching vocabulary.

5. Results

The course was called Academic English. It was offered to the 1st year Information system (IS) and Information system security (SIS) students. There were two experimental groups, IS1 (15 students) and SIS1 (15 students); and two control groups, IS2 (15 students) and SIS2 (15 students). According to the Academic English Syllabus, the students had to study Module #1 "Higher Education" program starting from the 4th of September, 2023 till the 29th of September, 2023. The following experiment lasted 4 weeks. The students worked with vocabulary on the

Higer Education topic. There were given 40 terms with definitions and collocations. As for "Students Independent Study" work the students had to do additional activities in handouts.

We would like to point out that students in the experimental group were offered to work with the Quizlet platform (Figure 1). It had a set with 40 new terms. They did flashcards, learning, and matching activities. In addition, the Quizlet set had activities on checking the spelling of the given terms.

| | | | | | | Flashcards | C Learn | E Test | Hatch |
|--|---|---|-------------------|------|-----------------------------|-----------------|------------|--------|-------|
| Terms in this set (40) | | | 1 | Your | stats ~ | | | | |
| Still Learning (40) You've begun learning these terms. Keep up the good work! | | | ✿ Select these 40 | | Get a hint Scheduled review | | Skip revie | | |
| Academic degree | a degree students are awarded upon the completion of a credit course | 1 | * | 4) | 1 | Academic degree | | | |
| Academic calendar | a full schedule of all the academic hours, University events and activities to be attended by the students | La Barana Barana Barana Barana Barana | * | 4) | 1 | | | | |
| | | | | | | × | × | 1/40 🗸 | ۲ |

Figure 1: Quizlet set on "Higher education" topic

Table 2 shows the results of the pre-test and post-test designs (Table 2). The students had 20 questions (15 multiple-choice and 5 open-ended questions) to check their knowledge of the given vocabulary. The tests were conducted on the socrative.com platform in week#1 and in week #4.

Table 2 Results of tests

| Pre-test results, 100% | Post-test results, 100% | | | | | |
|------------------------|-------------------------|--|--|--|--|--|
| 60 | 72 | | | | | |
| 66 | 70 | | | | | |
| 68 | 78 | | | | | |
| 59 | 74 | | | | | |
| | 60 66 68 | | | | | |

IS 1 group students improved their knowledge on "Higher education" topic by 12%. The highest number of test results can be seen in SIS 2 group students' work. The result stood at 59% in week #1 and then it rose significantly to reach 74% in week #4. We can see a slight increase in SIS 1 group students. It showed 66% in week #1 and then went up gradually to 70% after four weeks. In addition, we can see that there was an increase in IS 2 group students' knowledge on the given topic of 10% as well.

The results of the study showed that Quizlet was effective in teaching vocabulary at International Information Technology University. The experimental groups, who were taught using Quizlet, significantly outperformed the control groups, who were taught using traditional methods, in terms of vocabulary retention and recall. The results were analyzed and showed that the differences between the four groups were statistically significant.

These findings suggest that the use of interactive games, flashcards, and quizzes in Quizlet made vocabulary instruction more engaging and enjoyable for the students, leading to improved vocabulary retention and recall. Furthermore, the accessibility of Quizlet on any device with an internet connection allowed for convenient and flexible learning, which also contributed to the students' success.

These results have important implications for vocabulary instruction and suggest that Quizlet could be a valuable resource for educators and students alike. By using Quizlet, educators can provide their students with a fun and effective way to learn and retain vocabulary, which can enhance their communication and understanding skills in the field of information technology and beyond.

6. Discussion

The results of the present study suggest that Quizlet can be an effective tool for teaching vocabulary, as evidenced by the significant improvement in vocabulary retention and recall among the experimental groups compared to the control groups. These findings are in line with previous research on the effectiveness of technology-enhanced language learning, which has shown that technology-based approaches can lead to improved vocabulary acquisition and retention [10].

The use of Quizlet allowed students to engage in a variety of activities that facilitated their vocabulary acquisition, such as matching words to definitions, spelling words, and listening to audio pronunciation [11]. These interactive activities are consistent with the multimedia principle, which states that combining text, audio, and visual elements can lead to more effective vocabulary learning [12]. Furthermore, the use of Quizlet allowed students to receive immediate feedback on their progress, which is important for promoting motivation and engagement in vocabulary learning [13].

However, it is important to note that there were some limitations to the present study. First, the sample size of 60 students was relatively small, and therefore, the results may not be generalizable to other populations. Second, the study only lasted for 4 weeks, and it is unclear whether the results would have been different if the study had been conducted over a longer period of time. Third, the study only compared Quizlet to traditional methods, and it is possible that other technology-based approaches may have led to different results.

To sum up, the present study provides evidence for the effectiveness of Quizlet in teaching vocabulary, as evidenced by the significant improvement in vocabulary retention and recall among students who were taught using Quizlet compared to those who were taught using traditional methods. Furthermore, the data analysis indicates that students perceived Quizlet to be an effective tool for teaching vocabulary, as it allowed them to engage in interactive activities, receive immediate feedback, and track their progress. However, it is important to acknowledge the limitations of the study and the need for future research to explore the use of Quizlet and other technology-based approaches in vocabulary instruction.

7. Conclusion

The present study provides evidence for the effectiveness of Quizlet in teaching vocabulary, as evidenced by the significant improvement in vocabulary retention and recall among students who were taught using Quizlet compared to those who were taught using traditional methods. The data analysis further supports these findings, indicating that students perceived Quizlet to be an effective tool for teaching vocabulary, as it allowed them to engage in interactive activities, receive immediate feedback, and track their progress.

Based on these results, it is recommended that Quizlet be incorporated into vocabulary instruction at International Information Technology University. Teachers can use Quizlet to facilitate interactive vocabulary activities, provide students with immediate feedback, and monitor their progress. Furthermore, future research can explore the effectiveness of Quizlet in different learning contexts, such as in a blended or online learning environment, and with different student populations.

Therefore, the use of Quizlet as a tool for teaching vocabulary has the potential to enhance students' vocabulary acquisition and retention. By incorporating Quizlet into vocabulary instruction, teachers can facilitate an engaging and effective learning experience for their students.

8. References

- [1] Quizlet. (2022). Quizlet: Online Learning & Teaching Platform. [online] Available at: https://quizlet.com/ [Accessed 10 Feb. 2023].
- [2] O'Connor, B. (2013). Quizlet: A Classroom Teacher's Perspective. Language Learning & Technology, 17(3), 68-75.
- [3] Harmer, J. (1991). The Practice of English Language Teaching. Longman.
- [4] Choi, D., and Johnson, K. K. P. (2019). Influences of environmental and hedonic motivations on intention to purchase green products: an extension of the theory of planned behavior. Sustain. Prod. Consum. 18: 145–155. doi: 10.1016/j.spc.2019.02.001.
- [5] Kalyuga, S., Chandler, P., & Sweller, J. (2001). Learner experience and efficiency of instructional guidance. Educational Psychology, 21: 5–23.
- [6] Alharbi, M. G. (2020). The Influence of the Context on Adopting Mobile Games in Learning EFL Vocabulary at a Saudi Female Class. Paper presented at the Proceedings of the 17th International RAIS Conference on Social Sciences and Humanities. https://doi.org/10.5281/zenodo.3909893.
- [7] Nation, I. S. P. (2001). Learning Vocabulary in Another Language. Cambridge University Press.
- [8] Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behaviour of two versions of the vocabulary levels test. Language Testing, 18(1): 55-88. https://doi.org/10.1177/026553220101800103.
- [9] Campbell, D. T., & Stanley, J. C. (1963). Experimental and Quasi-Experimental Designs for Research. Houghton Mifflin.
- [10] Chapelle, C. A. (2001). Computer applications in second language acquisition: Foundations for teaching, testing, and research. Cambridge University Press.
- [11] Lu, J., & Anderson, R. C. (2011). The effectiveness of multimedia on vocabulary learning: A meta-analytic review. Educational Psychologist, 46(3): 197-210.
- [12] Mayer, R. E. (2001). Multimedia learning. Cambridge University Press.
- [13] Dornyei, Z. (2001). Motivational Strategies in the Language Classroom. Cambridge University Press.