

# Quizlet's Usefulness for Vocabulary Learning: Perceptions of High-Level and Low-Level Chinese College EFL Learners

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**Abstract:-** This study investigates the perceived usefulness of Quizlet for vocabulary learning among Chinese college EFL learners and examines differences in perceptions between high-level and low-level learners based on their post-test scores. A descriptive research design was employed, utilizing a web-based survey to gather quantitative data from 95 students in Shandong province, China, after an 8-week intervention using Quizlet. The survey was based on the Technology Acceptance Model (TAM) and focused on perceived usefulness. The findings reveal that overall, students hold a positive attitude towards Quizlet, with an overall mean score of 3.81 ( $SD = 0.64$ ), indicating its perceived utility in enhancing vocabulary acquisition. Specifically, Quizlet was found to be particularly beneficial for improving both receptive ( $M=4.18$ ,  $SD=0.70$ ) and productive ( $M=4.17$ ,  $SD=0.68$ ) vocabulary knowledge. However, its perceived usefulness in improving broader language skills such as reading, writing, speaking, and listening was comparatively lower. An independent samples t-test indicated no significant difference in the overall perceived usefulness between high-level and low-level learners, though high-level learners perceived greater benefits in learning speed and productive vocabulary knowledge. These insights suggest that while Quizlet is a valuable tool for vocabulary learning, its integration should be complemented with other methods to address comprehensive language development. The study's implications highlight the need for tailored instructional strategies to optimize digital tools like Quizlet across different proficiency levels in EFL contexts.

**Keywords:-** Quizlet; Vocabulary Learning; EFL Learners, Chinese Higher Education, Digital Tools.

## I. INTRODUCTION

English language education in China holds immense significance, mandated from early primary school through higher education, serving over 400 million learners [1][2]. Despite this widespread exposure, many Chinese college students grapple with mastering English vocabulary, which is pivotal for developing proficiency across all language skills [3][4].

The evolution of digital technologies, such as the Internet and smartphones, has transformed educational practices by introducing innovative approaches like digital game-based learning for vocabulary acquisition [5]. These advancements have given rise to platforms like Quizlet, a web-based tool enabling users to create, share, and study digital flashcards across various subjects, including language education.

This study aims to investigate Chinese college EFL learners' perceptions of Quizlet's usefulness for vocabulary learning and to explore differences in these perceptions between high-level and low-level learners based on their post-test scores. While digital technologies have demonstrated potential to enhance motivation and engagement in language learning contexts [6][7], there remains a gap in understanding how Chinese college students specifically perceive Quizlet's usefulness for vocabulary acquisition. Effective integration of digital tools in education hinges on learners' perceptions and preferences [8][9]. Furthermore, [10] underscored the necessity for inclusive research across varied educational levels to fully comprehend Quizlet's efficacy. Therefore, this study aims to fill this gap by exploring Chinese college EFL learners' perspectives on Quizlet, aiming to provide crucial insights for enhancing language teaching strategies within Chinese higher education.

## II. LITERATURE REVIEW

Vocabulary acquisition plays a pivotal role in language proficiency across diverse educational contexts. In China, despite early exposure to English education starting from primary school, many students struggle with expanding their vocabulary, which significantly impacts overall language competence [11]. This underscores the necessity for effective vocabulary learning strategies tailored to support learners in overcoming these challenges.

Digital game-based learning has garnered attention for its potential to transform traditional memorization into engaging and interactive experiences [5]. [6] investigated the impact of digital game-based vocabulary learning among Korean middle school students, noting positive attitudes despite statistically insignificant differences in vocabulary scores compared to traditional methods. Similarly, studies by [7] and [12] highlighted the effectiveness of digital

games in enhancing vocabulary retention and student engagement among primary school students in Malaysia.

Quizlet, designed as a digital flashcard application, has been extensively researched for its perceived utility in vocabulary acquisition. [13] explored tertiary-level EFL learners' perceptions of Quizlet within the Technology Acceptance Model (TAM), revealing favorable attitudes, particularly among lower-level students. [14] emphasized Quizlet's effectiveness in enhancing technical vocabulary mastery and creating a conducive learning environment, thereby boosting students' confidence in English language acquisition. [15] conducted a qualitative study among vocational students, identifying motivational benefits and enhanced vocabulary acquisition through Quizlet.

In contrast, Ho and Kawaguchi [16] found that participants preferred Quizlet over physical flashcards for learning vocabulary, citing reasons such as ease of use, interest, and perceived improvement in vocabulary learning speed. Although some participants felt physical flashcards aided in vocabulary retention, Quizlet was generally preferred due to its convenience and usability.

Despite these insights, empirical research specific to Chinese college students' perceptions of Quizlet remains limited, necessitating localized investigations to inform effective pedagogical practices. This study addresses this gap by examining Chinese college EFL learners' perceptions of Quizlet's usefulness for vocabulary learning, aiming to provide nuanced insights into technology-integrated language education.

### III. METHODS

#### A. Research Design

This study employs a descriptive research design to gather quantitative data on participants' perceptions of Quizlet as a tool for vocabulary learning. A web-based survey method was selected for data collection due to its advantages, including reduced costs, increased efficiency, and real-time data processing capabilities [17]. This approach aligns with the goals of descriptive research, which seeks to systematically and accurately describe and interpret the characteristics of a specific phenomenon.

#### B. Participants

The participants of the study were 95 students from Shandong province, northern China, who were enrolled in college English courses and used Quizlet for vocabulary learning in two intact classes. The survey aimed to investigate their perceptions following an 8-week Quizlet intervention in the classroom. According to Cohen et al. [17], a sample size of at least 30 participants is recommended for robust statistical analyses. Participants were classified into two groups based on their average post-test scores: those scoring above 27 points were categorized as high-level learners ( $n = 47$ ), while those scoring 27 points or below were categorized as low-level learners ( $n = 48$ ).

#### C. Instruments

The questionnaire consisted of two parts. The first part included demographic questions to collect participant background information. The second part contained seven items designed based on [18] Technology Acceptance Model, focusing on perceived usefulness. All items were close-ended questions rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) and were administered in Chinese to ensure comprehension, given the participants' low English proficiency [19]. Cronbach's alpha coefficient was calculated to assess the internal consistency reliability of the questionnaire scales, with a value of .901 indicating excellent reliability [17].

#### D. Data Collection

A web-based survey was employed to gather quantitative data on participants' perceptions of Quizlet as a tool for vocabulary learning. Web-based surveys offer advantages over traditional paper-based methods, including reduced costs, increased efficiency, and real-time data processing capabilities [17]. The survey was administered using the online platform 'Wen Juan Xing'. Participants were assured of the voluntary nature of their participation, emphasizing that their involvement was unrelated to their academic grades. The questionnaires were distributed to participants in their classroom after the Quizlet intervention. The researcher explained key terms (e.g., receptive vocabulary knowledge, productive vocabulary knowledge) and clarified any points of confusion to ensure accurate completion of the questionnaires. All participants completed the survey after 8 weeks of using Quizlet as a vocabulary learning tool.

#### E. Data Analysis

To address the first objective of the study, descriptive statistical analyses were conducted to provide an overview of students' perceptions of Quizlet's usefulness. Measures such as means, and standard deviations were used to summarize the data. For the second objective, an independent samples t-test was conducted to compare the perceived usefulness of Quizlet between high-level and low-level learners. This test was chosen to determine if there were significant differences in perceptions between the two groups based on their post-test scores. This approach ensures a comprehensive examination of the data, providing insights into both the general perceptions of Quizlet and the differential impacts based on learners' proficiency levels.

### IV. FINDINGS

This section addresses the findings for the two research objectives: the overall perceptions of all college EFL learners on the perceived usefulness of Quizlet for vocabulary learning and the comparison of these perceptions between high-level and low-level learners.

**A. Overall Perceptions of All College EFL Learners**

The mean scores for the perceived usefulness of Quizlet among all college EFL learners are summarized in Table 1. The overall mean score was 3.81 (*SD* = 0.64),

which is above the midpoint, indicating a generally positive attitude toward the usefulness of Quizlet for vocabulary learning.

Table 1: Mean Scores of Perceived Usefulness of Quizlet for All Students

SR No.	Item	Mean	SD
1.	Quizlet helped me learn English vocabulary more quickly.	4.18	0.71
2.	My receptive vocabulary knowledge was improved by using Quizlet.	4.18	0.70
3.	My productive vocabulary knowledge was improved by using Quizlet.	4.17	0.68
4.	The use of Quizlet helped me to improve my reading skills.	3.62	0.85
5.	The use of Quizlet helped me to improve my writing skills.	3.38	0.95
6.	The use of Quizlet helped me to improve my speaking skills.	3.55	0.90
7.	The use of Quizlet helped me to improve my listening skills.	3.60	0.86
<b>Overall Perceived Usefulness</b>		<b>3.81</b>	<b>0.64</b>

The results indicate that learners found Quizlet particularly useful for improving both receptive (*M* = 4.18, *SD* = 0.70) and productive vocabulary knowledge (*M* = 4.17, *SD* = 0.68). However, the perceived usefulness of Quizlet for enhancing other language skills, such as reading (*M* = 3.62, *SD* = 0.85), writing (*M* = 3.38, *SD* = 0.95), speaking (*M* = 3.55, *SD* = 0.90), and listening (*M* = 3.60, *SD* = 0.86), was lower.

**B. Comparison between High-Level and Low-Level Learners**

An independent sample *t*-test was conducted to compare the perceptions of high-level and low-level college EFL learners regarding the usefulness of Quizlet. The results are presented in Table 2.

Table 2: Comparison of Perceived Usefulness of Quizlet Between High-Level and Low-Level Learners

Items	Group	Mean	SD	<i>t</i>	<i>p</i>
1. Quizlet helped me learn English vocabulary more quickly.	High	4.36	0.64	2.538	.013*
	Low	4.00	0.74		
2. My Receptive vocabulary knowledge was improved by using Quizlet.	High	4.28	0.74	1.353	.179
	Low	4.08	0.65		
3. My Productive vocabulary knowledge was improved by using Quizlet.	High	4.32	0.63	2.184	.031*
	Low	4.02	0.70		
4. The use of Quizlet helped me to improve my reading skills.	High	3.66	0.92	.434	.665
	Low	3.58	0.79		
5. The use of Quizlet helped me to improve my writing skills.	High	3.47	0.97	.907	.367
	Low	3.29	0.92		
6. The use of Quizlet helped me to improve my speaking skills.	High	3.60	0.88	.518	.605
	Low	3.50	0.92		
7. The use of Quizlet helped me to improve my listening skills.	High	3.66	0.84	.670	.505
	Low	3.54	0.87		
Perceive usefulness	High	3.91	0.63	1.436	.154
	Low	3.72	0.65		

Notes: Mean range from 1 to 5, and the midpoint is 3.

SD = Standard deviation, 95% Confidence Interval of the Difference

The *t*-test revealed no significant difference in the overall perceived usefulness of Quizlet between high-level and low-level groups (*t* = 1.436, *p* = .154). However, high-level learners had a slightly more positive perception (*M* = 3.91, *SD* = 0.63) compared to low-level learners (*M* = 3.72, *SD* = 0.65). Significant differences were identified in two specific items. High-level learners believed more strongly that Quizlet helped them learn vocabulary more quickly

(Item 1, *t* = 2.538, *p* = .013). They also perceived a greater improvement in their productive vocabulary knowledge (Item 3, *t* = 2.184, *p* = .031). These findings suggest that while both high-level and low-level learners find Quizlet useful, high-level learners perceive greater benefits in terms of vocabulary learning efficiency and enhancement of productive vocabulary knowledge.

## V. DISCUSSION

This study examined the perceptions of college EFL learners in Shandong province, northern China, regarding Quizlet as a vocabulary learning tool. The findings indicated a generally positive attitude towards Quizlet's usefulness, with an overall mean score of 3.81 ( $SD = 0.64$ ). Both high-level and low-level learners acknowledged Quizlet's effectiveness in enhancing their vocabulary knowledge. Notably, high-level learners perceived greater benefits in terms of learning speed and productive vocabulary knowledge compared to their low-level counterparts. However, Quizlet's impact on improving broader language skills such as reading, writing, speaking, and listening was less significant.

### A. General Perceptions

The overall mean score of 3.81 ( $SD = 0.64$ ) indicates that college EFL learners generally perceive Quizlet as a valuable tool for vocabulary learning. This finding aligns with previous research suggesting that digital flashcards and gamified learning platforms effectively support vocabulary acquisition [20][21]. Participants specifically noted that Quizlet helped them learn English vocabulary more quickly ( $M = 4.18$ ,  $SD = 0.71$ ) and improved both their receptive ( $M = 4.18$ ,  $SD = 0.70$ ) and productive vocabulary knowledge ( $M = 4.17$ ,  $SD = 0.68$ ). These results underscore Quizlet's potential to enhance vocabulary learning efficiency and effectiveness, echoing the positive outcomes reported by [22]. Both high-level and low-level learners had positive attitudes towards the usefulness of Quizlet in their vocabulary learning, consistent with [23], who found that learners held positive attitudes towards using Quizlet for English vocabulary learning, particularly noting its usefulness.

While learners acknowledged Quizlet's usefulness for vocabulary learning, they were less enthusiastic about its ability to improve other language skills. The mean scores for reading ( $M = 3.62$ ,  $SD = 0.85$ ), writing ( $M = 3.38$ ,  $SD = 0.95$ ), speaking ( $M = 3.55$ ,  $SD = 0.90$ ), and listening ( $M = 3.60$ ,  $SD = 0.86$ ) were notably lower. This suggests that while Quizlet is highly regarded for vocabulary practice, its impact on broader language proficiency may be limited. This finding is consistent with previous studies indicating that specialized tools like Quizlet are most effective when targeting specific linguistic competencies [8].

### B. Comparison Between High-Level and Low-Level Learners

The comparison between high-level and low-level learners revealed significant differences in their perceptions of Quizlet's usefulness. Although the overall perceived usefulness did not differ significantly ( $t = 1.436$ ,  $p = .154$ ), high-level learners rated the tool more positively ( $M = 3.91$ ,  $SD = 0.63$ ) compared to low-level learners ( $M = 3.72$ ,  $SD = 0.65$ ).

This suggests that learners with higher proficiency levels may derive more benefit from Quizlet, potentially due to their greater ability to leverage the tool's features effectively. High-level proficiency college EFL learners perceived greater usefulness of Quizlet for learning vocabulary quickly and improving productive vocabulary knowledge. [13] found similar results in Turkey, where high-level proficiency students had more positive opinions about Quizlet than low-level proficiency students. [13] argued that high-level students' greater vocabulary knowledge and lexical capacity enabled them to leverage Quizlet's features more effectively. These differences underscore the varying benefits of Quizlet based on learners' proficiency levels and highlight the importance of tailoring vocabulary learning tools to meet the specific needs of different learner groups.

## VI. CONCLUSION

In summary, this study demonstrates that Quizlet is perceived as a useful tool for vocabulary learning among college EFL learners, with high-level learners perceiving greater benefits. While Quizlet effectively supports vocabulary acquisition, its impact on other language skills appears limited. These findings suggest that while Quizlet can be a valuable addition to vocabulary learning strategies, it should be complemented with other tools and methods to address comprehensive language development.

Several limitations should be considered when interpreting the findings of this study. Firstly, the sample size was relatively small and limited to one region in China, which may affect the generalizability of the results. Secondly, the study relied on self-reported data, which can be subject to biases such as social desirability and recall bias. Additionally, the study focused solely on quantitative data, which may not capture the full depth of learners' experiences and perceptions.

The findings of this study have practical implications for educators and language instructors. Given the positive perceptions of Quizlet for vocabulary learning, it can be integrated into language curricula to enhance vocabulary acquisition. However, since the tool showed limited effectiveness in improving broader language skills, it should be supplemented with other instructional methods that target comprehensive language development. Educators should also consider the varying needs of high-level and low-level learners to optimize the use of digital tools like Quizlet.

Future research should address the limitations of this study by expanding the sample size and including participants from diverse regions to improve generalizability. Additionally, qualitative methods such as interviews and focus groups could provide deeper insights into learners' experiences with Quizlet. Furthermore, exploring the integration of Quizlet with other language learning activities could enhance its effectiveness across different language skills.

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