



INTEGRATING GAMIFIED APPS TO IMPROVE VOCABULARY RETENTION IN ESL CLASSROOMS

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ABSTRACT: *This article investigates the impact of gamified mobile applications on vocabulary acquisition and retention among 5th–6th grade ESL learners. The research findings presented in the article indicate that gamified tools enhance learners' motivation, engagement, and cognitive processing, leading to improved long-term vocabulary retention. The study emphasizes that integrating gamification into ESL classrooms can effectively support vocabulary learning and foster active participation*

KEYWORDS: *Gamification; Vocabulary retention; ESL learners; Gamified apps; Motivation in language learning; Digital tools in education.*

INTRODUCTION

The biggest obstacle to the development of English as a Second Language (ESL) proficiency is vocabulary acquisition, which is also the main predictor of reading comprehension and general academic achievement. However, the conventional techniques of rote memorization and decontextualized word lists frequently fail to produce the repeated, meaningful exposure needed to transfer new vocabulary from short-term to long-term memory for young students in the fifth and sixth grades (ages 10–12). This failure often leads to quick forgetfulness and a basic mismatch between the students' digital-native lifestyles and the learning environment.

The use of gamification in digital tools has increased dramatically in response to the demand for more interesting and successful teaching methods. The use of game-design features (like points, badges, leaderboards, and instant feedback) in non-gaming

contexts, particularly education, is known as gamification. These components directly address the psychological needs of autonomy, competence, and relatedness for the intermediate elementary/middle school student, turning the frequently anxiety-inducing process of vocabulary testing into a highly motivating activity. The impact of digital gamification on long-term vocabulary retention among the crucial transitional age group of fifth and sixth-grade ESL learners must be specifically examined, even though empirical research consistently demonstrates that it increases motivation and engagement across a range of age groups. This group needs a combination of structured reinforcement to get them ready for the growing academic demands of middle school and playful instruction to keep their interest.

LITERATURE REVIEW

Vocabulary is widely regarded as the foundation of communication in a second language. As Wilkins (1972) notes that,



“Without grammar very little can be conveyed; without vocabulary nothing can be conveyed.” Despite this importance, vocabulary teaching in many classrooms still relies heavily on rote learning, translation, and copying words from textbooks - methods that often fail to enhance memory and encourage deeper processing (Nation, 2013; Schmitt, 2000). Furthermore, the use of traditional methods during lesson directly affects to motivation of students during the lesson as a result they do not focus the lesson properly.

In contrast, gamification - the integration of game elements such as points, levels, badges, and rewards into educational contexts - has been found to significantly improve motivation and learning outcomes (Deterding et al., 2011). Gamified learning environments create active participation, increase repetition, and reduce anxiety, all of which are crucial for vocabulary retention (Gee, 2007; Sailer et al., 2017). More specifically, gamification helps teachers to create competitive environment in turn high attendance of students during lesson.

Research in educational psychology also highlights that learners retain information better when they are intrinsically motivated (Deci & Ryan, 2000) and when learning involves deeper cognitive processing (Craik & Lockhart, 1972). Therefore, gamified apps, which combine motivation and repeated exposure, hold strong potential for vocabulary development.

The article focuses on how gamified apps helps to improve vocabulary retention among students by presenting results of experiment taken places in students of fifth and sixth grade. It argues that integration of gamified apps can be effective in the process of vocabulary teacher rather than relying on traditional methods.

Research Questions

1. Does the integration of gamified apps improve vocabulary acquisition among ESL learners?
2. Do gamified applications enhance long-term vocabulary retention more effectively than traditional instruction?
3. How do young learners perceive the use of gamified apps?

METHODS

A quasi-experimental pre-test–post-test design was employed, consistent with methods used in vocabulary acquisition research (Webb, 2008). A total of 60 ESL learners from 5th and 6th grades participated. They were randomly divided into: Experimental group (n = 30) – taught using the Quizlet gamified app, Control group (n = 30) – taught using traditional vocabulary instruction

All students had similar proficiency levels and learning backgrounds. Pre-test / Post-test: 25 target words taken from the school curriculum. Retention test: administered two weeks later.

Observation checklist was based on Oxford’s (1990) engagement indicators.

Learner feedback questionnaire: adapted from Zimmerman (2009) on vocabulary attitudes.

The study lasted four weeks namely during first week both groups took pre-test in order to check their current knowledge which considered to be an important process in every experiment. Next in the period of 1–4-week, experimental group lessons conducted using gamified apps in order to improve vocabulary retention such as they used gamified apps like Quizlet, Kahoot and Worldwall. While control group used traditional methods in the process of Vocabulary learning like copying, drilling and translation. (Nation, 2013) After that on



the week 4, both groups took post-test, finally on the week of 6, they were examined through retention test. The same vocabulary items were taught in both groups to maintain consistency.

Descriptive statistics and comparative analysis were used to interpret data. Qualitative data from observations and surveys supported the quantitative results.

RESULTS

Pre-test outcomes showed that at the beginning, both experimental and control group students showed nearly similar results accounting 44% for experimental group, while 46% control group. This aligns with Schmitt's (2000) claim that learners with similar exposure show similar lexical baselines. After 4-week instruction, these groups showed different results, experimental group increased to 83 % and control group showed 65%. The improvement aligns with findings by Reinders (2012), who observed similar gains with digital gamified activities.

As of retention test results 2 weeks later, experimental group retained 79 %, while control group showed 58%. These results support the spacing effect explained by memory research (Craik & Lockhart, 1972; Webb, 2008).

Based on Oxford's (1990) strategy-use framework, students in the experimental group actively interacted with vocabulary, repeated tasks voluntarily, demonstrated high motivation as well as showed strong competitive engagement.

When it comes to learners' perception, 92% of students reported that Quizlet was "fun," "easy," and "helpful for remembering words," consistent with motivation theories (Deci & Ryan, 2000).

DISCUSSION

The findings clearly shows that the integration of gamified apps significantly

improves vocabulary retention in young learners. The experimental group's performance aligns with research on gamification, which suggests that game elements increase engagement and learning outcomes (Deterding et al., 2011; Sailer et al., 2017). Gamified mechanisms such as immediate feedback, repeating tasks, and rewards stimulate deeper cognitive processing, supporting Craik and Lockhart's (1972) depth-of-processing model. Quizlet's interactive modes also facilitate spaced repetition, reinforcing Nation's (2013) claim that repeated exposure is crucial for vocabulary mastery.

Traditional methods, although useful, lack the motivational drive and interactive features provided by gamified tools (Schmitt, 2000). Learners' positive attitudes confirm the motivational theories by Deci and Ryan (2000), indicating that intrinsic motivation directly improves learning.

CONCLUSION

This study provides strong evidence that gamified vocabulary learning enhances both acquisition and retention among 5th–6th grade ESL learners. Using traditional methods during classes especially in vocabulary acquisition cannot be effective as the students demonstrate a strong preference for innovative and gamified instructional approaches in the lesson. The integration of gamified significantly increased learner motivation, engagement, and memory retention. Students who learned with the help of Gamified apps memorized words for long period which aids them to have better results in language learning process. The study recommends that ESL teachers incorporate gamified tools to create more interactive and effective vocabulary learning environmen

ts. Futhermore integration of gamified apps improves students' digital literacy



which is highly important skill in their future education as well as profession.

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