



The Effect of Kahoot! -Based Instruction on Vocabulary Acquisition and Morphological Awareness among EFL Second-Year College Students

Aisha Ashour Ekhmaira^{1*}, Fatima Meftah Aldofani²

^{1,2}English language department Faculty of Education Elmergib University Al-Khoms Libya

أثر استخدام منصة كاهوت على اكتساب المفردات والوعي الصرفي لدى طلاب السنة الثانية الجامعي (تخصص لغة إنجليزية كلغة أجنبية)

عائشة عاشور اخميرة^{1*}، فاطمة مفتاح الدوفاني²
^{1,2}قسم اللغة الإنجليزية، كلية التربية، جامعة المرقب، الخمس، ليبيا

*Corresponding author: Akhmira2019@gmail.com

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Abstract:

This study investigated the effect of Kahoot! - based instruction on vocabulary acquisition and morphological awareness among EFL second-year-college students. Vocabulary knowledge and morphological awareness are essential components of language proficiency, contributing to reading comprehension, writing accuracy and effective communication. A quasi-experimental design was employed, involving an experimental group and a control group (N = 16). Data were collected through pre- and post-tests designed to measure vocabulary knowledge and morphological awareness. The findings revealed statistically significant differences in favor of the experimental group ($p < .05$), with a large effect size. The results also indicated increased student engagement and motivation. The study concludes that Kahoot! is an effective instructional tool for enhancing vocabulary learning and morphological awareness in EFL contexts.

Key words: Kahoot, vocabulary acquisition, morphological awareness, EFL, gamification.

المخلص:

في اكتساب المفردات وتنمية الوعي الصرفي لدى طلاب السنة الثانية الجامعية في تخصص اللغة الإنجليزية كلغة أجنبية. تُعد المعرفة بالمفردات والوعي الصرفي من المكونات الأساسية للكفاءة اللغوية، لما لهما من دور في دعم الفهم القرائي، ودقة الكتابة، والتواصل الفعّال. اعتمدت الدراسة على تصميم شبه تجريبي، شمل مجموعة تجريبية وأخرى ضابطة (N = 16). وتم جمع البيانات باستخدام اختبارات قبلية وبعديّة لقياس مستوى اكتساب المفردات والوعي الصرفي. أظهرت النتائج وجود فروق ذات دلالة إحصائية لصالح المجموعة التجريبية ($p < .05$)، مع حجم أثر كبير. كما أشارت النتائج إلى زيادة في دافعية الطلاب ومشاركتهم. وتخلص الدراسة إلى أن منصة كاهوت تُعد أداة تعليمية فعّالة في تعزيز تعلم المفردات وتنمية الوعي الصرفي في سياقات تعلم اللغة الإنجليزية كلغة أجنبية.

الكلمات المفتاحية: كاهوت، اكتساب المفردات، الوعي الصرفي، اللغة الإنجليزية كلغة أجنبية، التعلم القائم على الألعاب.

Introduction:

Vocabulary acquisition is widely recognized as a fundamental component of language learning. Without sufficient vocabulary knowledge, learners face difficulties in understanding texts, expressing ideas, and participating in communication. In addition, morphological awareness, the ability to recognize and manipulate word structures such as prefixes, suffixes, and roots, plays a crucial role in expanding vocabulary and improving language proficiency.

In many EFL classrooms, traditional teaching methods are still dominant. These methods often rely on memorization and teacher-centered instruction, which may limit student engagement and reduce long-term retention. As a result, learners struggle to retain vocabulary and apply morphological knowledge effectively.

With the rapid development of educational technology, gamified learning tools have emerged as innovative alternatives. Kahoot! a game-based learning platform, allows teachers to create interactive quizzes that promote competition, engagement, and immediate feedback.

This study aims to investigate the effectiveness of Kahoot!-based instruction in improving vocabulary acquisition and morphological awareness among second-year EFL college students.

Literature Review:**Vocabulary Acquisition:**

Vocabulary acquisition is essential for language development. According to Nation (2001), vocabulary knowledge is one of the strongest predictors of language proficiency. Learners need repeated exposure and meaningful use of words to achieve long-term retention.

Morphological Awareness:

Morphological awareness refers to the understanding of word formation processes. Carlisle (2004) emphasized that learners who understand morphological structures can infer meanings of unfamiliar words more effectively.

Gamification in Education:

Gamification involves the use of game elements in educational contexts. It has been shown to increase motivation, engagement, and participation.

Kahoot in EFL Learning:

Wang and Tahir (2020) found that Kahoot significantly enhances classroom interaction and student motivation. Similarly, Plump and LaRosa (2017) reported improved vocabulary retention among students using Kahoot.

Recent studies have further confirmed the effectiveness of gamified learning tools in EFL contexts. Rojabi et al. (2022) found that Kahoot significantly improves students' vocabulary achievement, engagement, and motivation in classroom settings.

Similarly, Cancino and Viguera (2024) reported that gamification enhances vocabulary learning and learners' self-efficacy, particularly in EFL environments.

In addition, recent research indicates that gamified platforms such as Kahoot, Quizizz, and Quizlet positively influence learners' performance, motivation, and classroom interaction (Rofiah & Waluyo, 2024). Moreover, a recent literature review (Suryanti et al., 2024) concluded that Kahoot significantly improves vocabulary retention and student engagement through interactive and competitive learning environments.

Research Gap:

Although previous studies have explored vocabulary learning using Kahoot, few studies have examined its combined effect on vocabulary acquisition and morphological awareness, especially in Arab EFL contexts.

Research Problem:

Many second-year EFL students demonstrate limited vocabulary range and weak morphological awareness. Traditional teaching methods often fail to provide sufficient interaction and practice. Therefore, there is a need to explore innovative instructional tools that enhance learning outcomes.

Purpose of the Study:

The purpose of this study is to examine whether using Kahoot significantly improves vocabulary acquisition and morphological awareness among EFL second-year college students compared to traditional instruction.

Research Questions:

1. Does the use of Kahoot significantly improve vocabulary acquisition among EFL second-year college students?
2. Does the use of Kahoot enhance morphological awareness?
3. Are there statistically significant differences between experimental and control groups?

Methodology:

Research Design:

This study adopted a quasi-experimental design involving two intact groups: an experimental group and a control group. The experimental group received instruction using Kahoot quizzes, while the control group was taught using traditional instructional methods.

Participants:

The participants in this study consisted of 16 second-year EFL students enrolled at the Faculty of Education, Al-Mergib University in Al-Khums. The participants divided into two groups into two groups (8 experimental, 8 control).

Experimental Group (Group A): received Kahoot-based instruction. Control Group (Group B): received traditional instruction. Both groups were similar in academic level and course content.

Instruments:

A vocabulary and morphology achievement test was designed by the researcher. The test included:

- Multiple-choice vocabulary questions.
- Word-formation tasks.
- Affix identification exercises.
- Root analysis items.
- The total score was calculated out of 50 marks.

Validity and Reliability:

The test was reviewed by experts to ensure content validity. Reliability was estimated using Cronbach's Alpha, which yielded a coefficient of 0.82, indicating a high level of internal consistency.

Procedures:

Both groups studied the same vocabulary and morphology units. The experimental group used Kahoot quizzes during instruction. The control group received traditional explanation and exercises. After the treatment period, both groups completed a post-test.

Data were analyzed using SPSS.

Data Analysis and Results:

Pre-test Comparison:

To examine between whether there were any initial differences between the experimental and control groups, a Mann-Whitney U test was conducted.

Table (1): Mann–Whitney U Test for Differences Between Experimental and Control Groups (Post Measurements)

	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	Asymp. Sig. (2-tailed)	Exact Sig. [2*(1-tailed Sig.)]
Exp	8	7.25	58.00	22.000	-1.10	0.268	.328 ^b
Con	8	9.75	78.00				

The results revealed no statistically significant differences between the experimental and control groups in the pre-test ($Z = -1.10$, $p = .268$). This indicates that both groups were equivalent prior to the intervention.

The effect size was small ($r = 0.28$), further confirming group homogeneity.



Decision: H1 is accepted

Post-test Comparison:

A Mann–Whitney U test was conducted to compare the post-test scores of the experimental and control groups.

Table (2): Mann–Whitney U Test for Differences Between Experimental and Control Groups (Pre-Measurements)

	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	Asymp. Sig. (2-tailed)	Exact Sig. [2*(1-tailed Sig.)]
Exp	8	11.13	89.00	11.000	-2.31	0.020	.028 ^b
Con	8	5.88	47.00				

The results showed statistically significant differences between the two groups ($Z = -2.31$, $p = .020$), in favor of the experimental group.

The effect size was large ($r = 0.58$), indicating a strong impact of Kahoot-based instruction on students' performance.



Decision: H2 is accepted.

Experimental Group (Pre vs Post):

A Wilcoxon Signed-Rank Test was conducted to examine differences between pre-test and post-test scores for the experimental group.

Table 3 Wilcoxon Test for Pre-Post Differences (Experimental Group).

Table (3): Wilcoxon Signed-Rank Test for Pre-Post Differences in the Experimental Group

	N	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
Negative Ranks	0 ^b	0.00	0.00	-2.565 ^c	0.010
Positive Ranks	8 ^c	4.50	36.00		
Ties	0 ^d				

The results indicated a statistically significant improvement ($Z = -2.565$, $p = .010$), with all scores improving in the post-test.

The effect size was very large ($r = 0.91$), indicating a strong effect of the intervention.

✓ Decision: H3 is accepted.

Control Group (Pre vs Post):

A Wilcoxon Signed-Rank Test was conducted for the control group.

Table 4 Wilcoxon Test for Pre-Post Differences (Control Group)

Table (4): Wilcoxon Signed-Rank Test for Pre-Post Differences in the Control Group

	N	Mean Rank	Sum of Ranks	Z	Asymp. Sig. (2-tailed)
Negative Ranks	2 ^b	3.50	7.00	-.816 ^c	0.414
Positive Ranks	4 ^c	3.50	14.00		
Ties	2 ^d				

The results showed no statistically significant differences ($Z = -0.816$, $p = .414$). The effect size was small ($r = 0.29$), indicating no meaningful improvement.

✓ Decision: H4 is accepted.

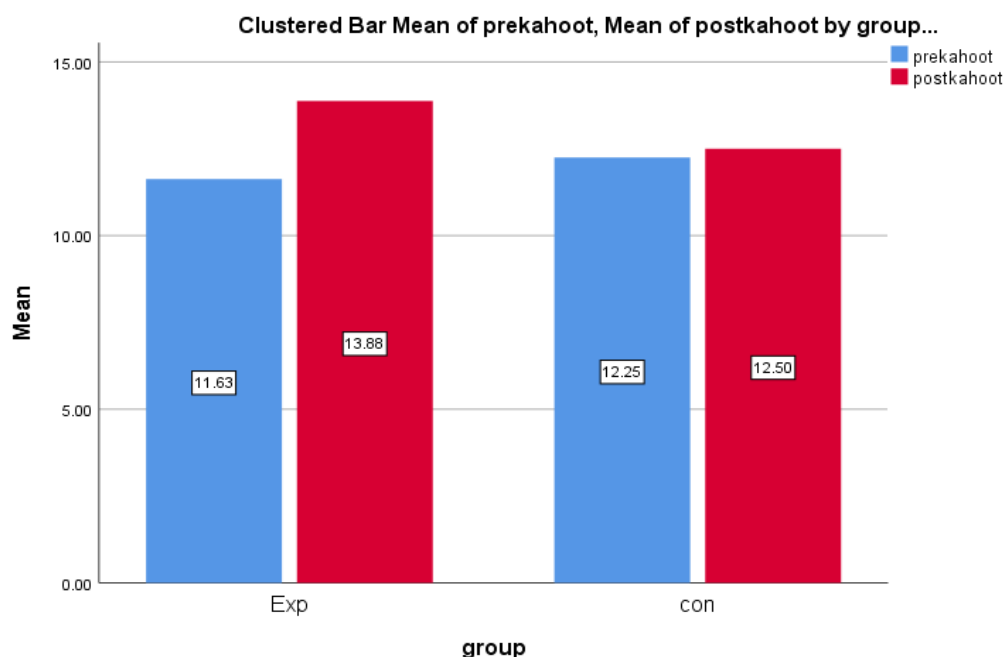


Figure 1: Comparison of Pre-test and Post-test Mean Scores for the Experimental and Control Groups in Vocabulary Acquisition and Morphological Awareness.

Overall Interpretation:

The findings indicate that Kahoot-based instruction had a statistically significant positive effect on students' vocabulary acquisition and morphological awareness.

While the control group showed no improvement, the experimental group demonstrated significant gains, confirming the effectiveness of the intervention.

The absence of differences in the pre-test and the presence of significant differences in the post-test support the validity of the experimental design.

Discussion:

The results confirm that Kahoot significantly improve vocabulary acquisition and morphological awareness. These findings align with previous studies (plump & LaRosa, 2017; Wang & Tahir, 2020).

The effectiveness of Kahoot can be attributed to: Immediate feedback, increased motivation, active participation. The study also extends previous research by addressing morphological awareness, which has received limited attention.

The findings of the present study are also supported by recent empirical research. For instance, Rojabi et al. (2022) demonstrated that gamified learning environments using Kahoot significantly increase student motivation and academic achievement.

Furthermore, recent meta-analytical research highlights that Kahoot has become one of the most effective tools for enhancing EFL instruction between 2020 and 2024 (Hadi et al., 2024).

These results suggest that the positive impact observed in this study is consistent with current global trends in gamified language learning.

The limitations of the study:

This study is limited to examine the use of Kahoot in teaching vocabulary acquisition and morphological awareness among second-year EFL college students. It is conducted within a specific educational setting and over short period of time (half academic year 2026).

The researchers focused only on selected learning outcomes and uses particular tool (tests), without addressing other language skills or long-term effects.

Conclusion:

This study examined the effectiveness of using Kahoot! in improving vocabulary acquisition and morphological awareness among EFL second-year college students.

The findings suggest that integrating game-based learning tools enhances motivation, engagement, and academic performance.

The study recommends incorporating digital interactive tools in EFL classrooms to support vocabulary development and word-formation skills.

Recommendations:

- EFL instructors should integrate interactive platforms into vocabulary instruction.
- Curriculum designers should encourage technology-supported learning.
- Future research should examine long-term retention effects.

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