

Suggesting Kahoot to improve the English proficiency test with students in business management and accounting IV-A-7 at Centro Regional Universitario de Veraguas, 2023

Sugerencia de Kahoot para mejorar la prueba de competencia en inglés con estudiantes de administración empresarial y contabilidad IV-A-7 en el Centro Regional Universitario de Veraguas, 2023

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ABSTRACT

A study was conducted with the purpose of demonstrating whether to suggest the use of Kahoot! as an online tool to improve the performance of the Business Management and Accounting students, IV-A-7 at Centro Regional Universitario de Veraguas, 2023, in the English proficiency test. The sample for this research where 15 students. The independent variable is the online tool Kahoot! The study aims to determine whether the tool helps seniors in the Business Administration and Accounting program to improve their performance in the English proficiency exam. The dependent variable is “the performance in the English proficiency exam. The researchers will give a pre-test to the students in the first session, which aims to determine the students’ prior knowledge. Thus, the pre-test will consist of thirty questions related to the material of study contained in preparation for the proficiency exam. After completing the intervention, the researchers will give a post-test to the students. This test will be like the pre-test. The post-test results will provide important information concerning the students’ understanding of all the topics that appeared in the pre-test. In addition, we use an interview based on a question where the students answer the reasons why they consider themselves to have failed the English proficiency test. The majority of those polled who had previously taken the test disagreed, stating that they were ignorant of the English language’s grammatical structures, which they needed to learn in order to respond correctly. Every student went into the test with a distinct set of expectations, thinking that it would be simple to pass and get their degree fast, but they all came up short of what they had anticipated. The students’ responses led us to the conclusion that it was necessary to incorporate a technological tool for educational purposes that would help them improve their level of English and as a final 51 result, Kahoot was chosen because it has the characteristics for the development of this type of test.

KEYWORDS: Educational technology, academic performance, higher education, student assessment, second language learning.



RESUMEN

Se realizó un estudio para determinar si se puede recomendar el uso de Kahoot como herramienta en línea para mejorar el desempeño de los estudiantes de Administración de Empresas y Contabilidad, IV-A-7, del Centro Regional Universitario de Veraguas, 2023, en el examen de inglés. La muestra de esta investigación fue de 15 estudiantes. La variable independiente es la herramienta en línea Kahoot. El estudio busca determinar si la herramienta ayuda a los estudiantes de último año de Administración de Empresas y Contabilidad a mejorar su desempeño en el examen de inglés. La variable dependiente es el rendimiento en el examen de inglés. Los investigadores realizarán una prueba previa a los estudiantes en la primera sesión para determinar sus conocimientos previos. Esta prueba constará de treinta preguntas relacionadas con el material de estudio de preparación para el examen de inglés. Tras completar la intervención, los investigadores realizarán una prueba posterior. Esta prueba será similar a la prueba previa. Los resultados de la prueba posterior proporcionarán información importante sobre la comprensión de los estudiantes de todos los temas tratados en la prueba previa. Además, se utilizó una entrevista basada en una pregunta donde los estudiantes respondieron las razones por las que consideran que han reprobado el examen de inglés. La mayoría de los encuestados que ya habían realizado el examen afirmaron desconocer las estructuras gramaticales del inglés, las cuales necesitaban aprender para responder correctamente. Cada estudiante se presentó al examen con expectativas distintas, pensando que sería fácil aprobar y obtener su título rápidamente, pero ninguno cumplió con las expectativas. Las respuestas de los estudiantes llevaron a la conclusión de que era necesario incorporar una herramienta tecnológica con fines educativos que les ayudara a mejorar su nivel de inglés y como resultado final se eligió Kahoot por tener las características para el desarrollo de este tipo de pruebas.

PALABRAS CLAVES: Tecnología educativa, rendimiento académico, enseñanza superior, evaluación del estudiante, aprendizaje de una segunda lengua.

INTRODUCTION

In recent decades, the role of the English language as a global means of communication has increased considerably. English has become the dominant language in international business, science, technology, and higher education. As a result, many universities around the world require students to demonstrate a minimum level of English proficiency before completing their undergraduate studies. These requirements aim to ensure that graduates possess the necessary linguistic skills to participate effectively in global academic and professional environments. However, despite the importance of English proficiency, many university students experience significant difficulties in achieving the required level of competence, particularly when English is studied as a foreign language. In many higher education institutions, standardized English proficiency tests are used to evaluate students' linguistic competence. These tests commonly assess the four main language skills: reading, writing, listening, and speaking. According to Wang (2021), language proficiency tests serve multiple purposes in educational systems, including evaluating students' knowledge, guiding instructional practices, and identifying strengths and weaknesses in language learning. Furthermore, proficiency tests provide diagnostic information that can help both students and teachers improve learning outcomes. Nevertheless, students who do not specialize in English often face considerable challenges when preparing for such assessments. Research conducted in different countries has shown that insufficient preparation, lack of motivation, and limited exposure to the English language are common factors contributing to low performance in proficiency tests. Telfer and Stewart-McKoy (2015), for example, reported that poor performance in English language examinations has been a persistent problem at various educational levels in Jamaica. Similarly, Ozowuba (2018) highlighted the importance of English proficiency for academic success in multilingual contexts such as Nigeria, where English functions as a lingua franca that facilitates communication among speakers of different native languages. These findings suggest that improving English language instruction is a critical challenge for many educational systems.

In recent years, technological innovations have transformed teaching and learning practices in higher education. Digital technologies have created new opportunities for interactive and student-centered learning environments. One of the most relevant trends in educational innovation is the use of gamification strategies. Gamification refers to the incorporation of game elements such as competition, scoring systems, rewards, and interactive challenges into educational contexts in order to increase student motivation and engagement (Deterding et al., 2011). By integrating elements commonly associated with games, educators aim to create learning experiences that are more engaging and stimulating for students. Among the technological tools used in gamified learning environments, Kahoot! has gained considerable popularity in educational contexts worldwide. Kahoot! is a web-based learning platform that allows teachers to create interactive quizzes, surveys, and discussions that students can answer in real time using mobile devices or computers. The platform incorporates elements of competition, instant feedback, and visual engagement, which can make the learning process more dynamic and enjoyable for students. Because of these features, Kahoot! has been widely adopted in classrooms at different educational levels, including primary education, secondary education, and higher education.

Several studies have explored the educational impact of Kahoot! and similar game-based learning tools. Research conducted by Licorish et al. (2018) found that Kahoot! significantly increases students' participation and interaction during classroom activities. Their study demonstrated that students were more engaged in lectures and discussions when interactive quizzes were incorporated into the learning process. In addition, students reported that the competitive and playful nature of the platform made the learning experience more enjoyable and stimulating. Similarly, a comprehensive literature review conducted by Wang and Tahir (2020) analyzed multiple empirical studies examining the use of Kahoot! in educational settings. The authors concluded that the platform generally produces positive outcomes in terms of student motivation, engagement, and academic performance. Their findings suggest that game-based response systems can serve as effective formative assessment tools that provide immediate feedback and encourage active participation during lessons. Interactive response systems used during classroom instruction can significantly increase student participation and promote deeper cognitive engagement with course content (Caldwell, 2007). The effectiveness of Kahoot! has also been examined in the context of language learning. Zarzycka-Piskorz (2016) found that the use of digital games in grammar instruction can increase student motivation and improve learning outcomes in foreign language classes. In particular, the author observed that students were more willing to participate in grammar exercises when these activities were presented in a game-based format. Likewise, Martín-Sómer, Moreira, and Casado (2021) reported that the use of Kahoot! helped maintain student motivation during online classes, especially during the COVID-19 pandemic, when many educational institutions transitioned to remote learning environments.

Despite the growing body of research supporting the educational benefits of gamification tools, many university programs still rely primarily on traditional teaching methods when preparing students for standardized English proficiency examinations. In some cases, students attend lectures or complete written exercises without opportunities for interactive practice or immediate feedback. As a result, students may struggle to develop the grammatical knowledge and language skills necessary to successfully pass proficiency tests. At the Centro Regional Universitario de Veraguas of the Universidad de Panamá, students from various academic programs are required to pass an English proficiency test in order to complete their undergraduate degree. However, many students encounter difficulties when attempting to pass this examination, often requiring multiple attempts before achieving the required score. This situation suggests that additional pedagogical strategies may be necessary to improve students' preparation and support their learning process. Given the potential benefits of gamification and digital learning tools, the integration of platforms such as Kahoot! could represent an innovative approach to improving

students' performance in English proficiency tests. By incorporating interactive quizzes and immediate feedback into the learning process, students may be able to reinforce their grammatical knowledge, identify areas of difficulty, and develop greater confidence when taking language assessments. Active learning strategies have been widely recognized as effective approaches to increase student engagement and improve learning outcomes in higher education environments (Prince, 2004).

Therefore, the purpose of this study is to examine whether the use of Kahoot! as an online educational tool can improve the performance of students in the English proficiency test at the Centro Regional Universitario de Veraguas. Specifically, the study seeks to determine whether the implementation of a gamified learning strategy can contribute to better understanding of grammatical structures and increased success rates in the proficiency examination. Through the analysis of pre-test and post-test results, this research aims to provide empirical evidence regarding the effectiveness of Kahoot! as a pedagogical resource for supporting English language learning in higher education contexts.

MATERIALS AND METHODS

The design for this study will be quantitative pre-experimental action research based on an intervention. It has a pretest and posttest that will be applied to students in the Business Administration program at Centro Regional Universitario de Veraguas. The sample for this research is 15 students of the Business Management and Accounting program, group IV-A-7, at Centro Regional Universitario de Veraguas, afternoon shift. For this research, the independent variable was the online tool Kahoot! The study aims to determine whether the tool helps seniors in the Business Administration and Accounting program to improve their performance in the English proficiency exam at the Centro Regional Universitario de Veraguas in 2023. The dependent variable was the performance in the English proficiency exam of the students. It was applied a pre-test to the students in the first session to determine the students' prior knowledge. The pre-test will consist of thirty questions related to the material of study contained in preparation for the proficiency exam. A post-test was administered after the intervention. This test was similar to the pre-test. The post-test results provided important information concerning the students' understanding of all the topics that appeared in the pre-test. In addition, we use an interview based on a question where the students answer the reasons why they consider themselves to have failed the English proficiency test.

QUESTIONS O PRE AND POST TEST

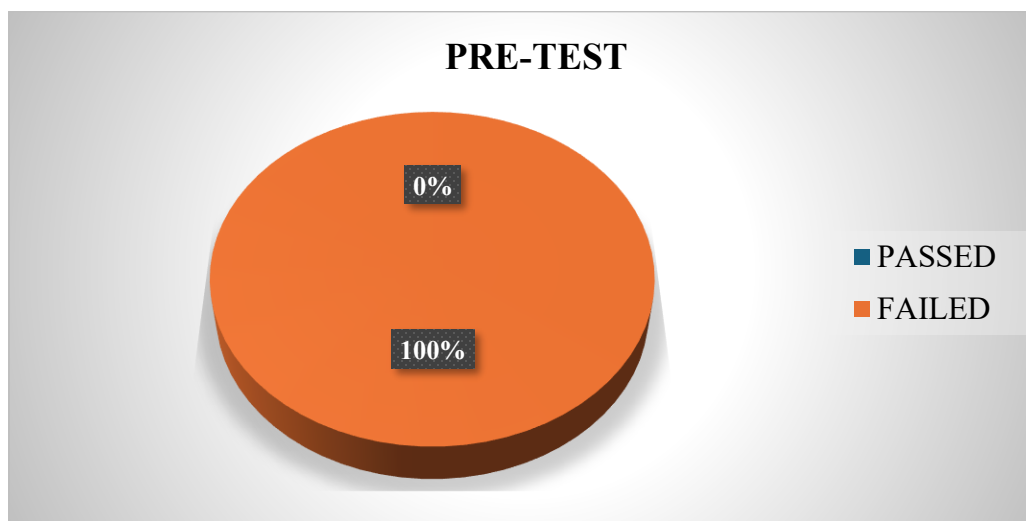
1. When we use the I, you, we and they pronoun we need to add -s to the verb.
2. For verbs that end in a consonant + Y, we remove the Y and add -ES.
3. For verbs that end in a vowel + Y, we just add -S.
4. To make a negative sentence in present tense in English we normally use Didn't.
5. For verbs that end in a consonant + Y, we remove the Y and add -IES.
6. We use Do when the subject is I, you, we or they to make questions.
7. When the subject is he, she or it, we add DO to make questions.
8. We normally add -ED to the end of the most verbs to make the past tense.
9. If a word ends in an E we just add the -ED to the end.
9. If the word ends in a consonant + vowel + consonant, we double the final consonant and add D.
10. If a two-syllable verb ends in a Consonant + Vowel + Consonant, we DO NOT double the final consonant when the stress is on the FIRST syllable.
11. We double the final consonant when the word ends in W, X or Y or when the final syllable is not stressed.
12. We use did to make a question in the past tense.

13. Both do and do in present tense questions become didn't in past tense questions.
14. Irregular verbs are ONLY irregular in affirmative/positive sentences.
15. The past tense of EAT is ATE.
16. USE 1 "going to" to Express a Voluntary Action OR request.
17. We use "Will" to Express a "Promise", offer or threat:
18. We used to be going to talk about something in the future that will be a result of something in the present.
19. We use "Will" or "Be Going to" to Express a Prediction.
20. A pronoun is the name of a person, place, thing or idea. In simple terms, we can refer to a noun as a naming word.
21. Pronouns are used to replace nouns. We do this to avoid repetition, but also to indicate things like possession.
22. An adverb is a word that expresses an action, feeling or state of being.
23. An adjective is a word used to modify or describe a noun or pronoun.
24. Prepositions are used to indicate relationships between nouns, phrases or pronouns to other words in a sentence.
25. We use comparative adjectives to compare two adjectives.
26. "There is" and "there are" are demonstrative pronouns.
27. Prepositions tell us where objects are in relation to other objects.
28. Indefinite quantities: a lot of, some, any, many, much.
29. The forms of "verb be" in present tense are: am / is / are.
30. The forms of "verb be" in past tense are: was and were.

RESULTS

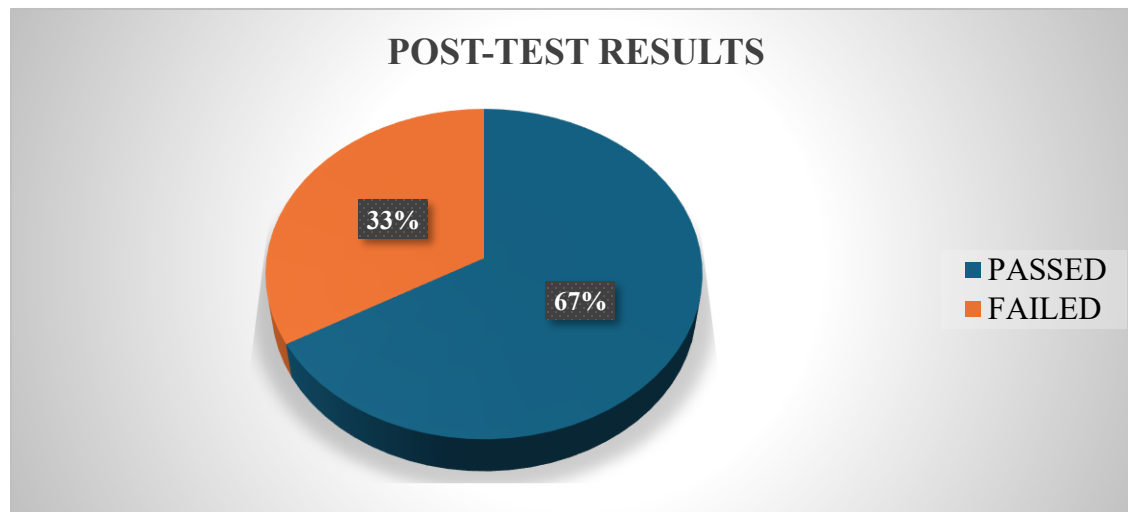
Figure 1

General results of the pre-test



Nota. The results of the pre-test showed that 100% of the sample failed the pre-test. Students did not show knowledge about the topics presented in the pre-test (Fig.1).

Figure 2
General results of the post-test



Nota. According to the results, 67% approved the post-test and 33 % failed it. Thus, most of the participants were able to understand what the test was about (Fig. 2).

Figure 3
Pre-test and post-test grading

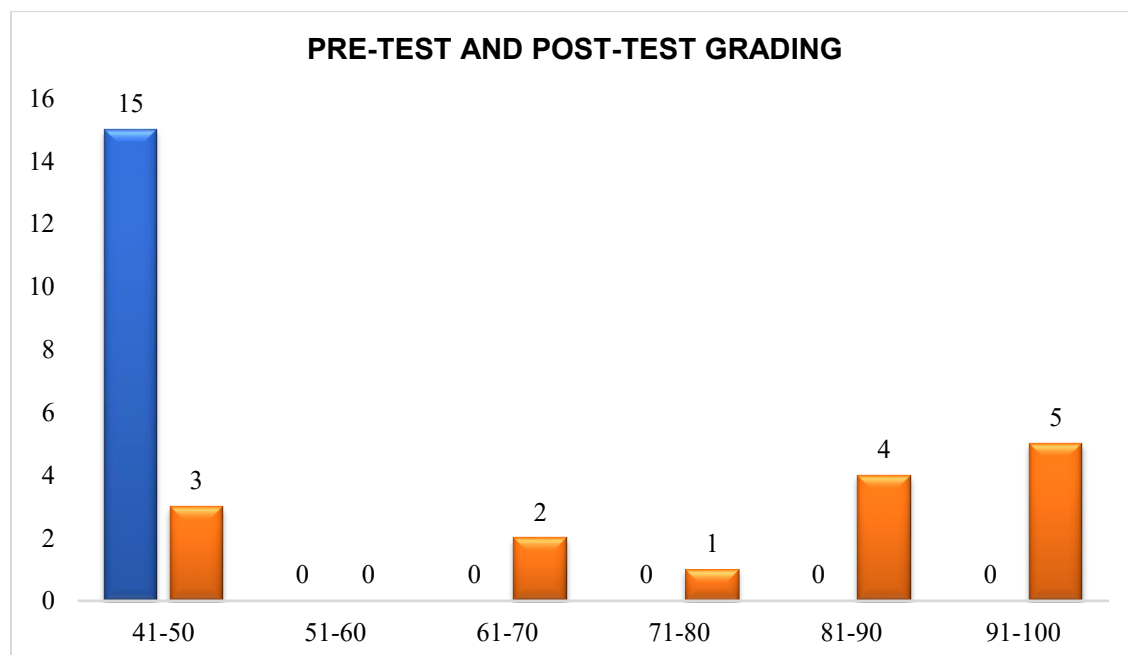


Figure 3 shows the relationship between the number of students who took the pre-test and the number of them who passed the post-test, along with the scores they obtained. It can be observed that 100% of the students who failed the pre-test got under 71% of the grade. However,

they improved their grades in the post-test. In the post-test, 13.33% of the students got from 61 to 70 representing 2 students, 6.67% got from 71 to 80 representing only 1 student, 26.67% got from 81 to 90 representing 4 students, and 33.3% got from 91 to 100 in the post-test that represent 5 students. Finally, 20% got under 71% representing 3 students.

DISCUSSION

The purpose of this study was to examine whether the implementation of Kahoot! as an online learning tool could improve students' performance in the English proficiency test at the Centro Regional Universitario de Veraguas. The findings of this research indicate that the incorporation of Kahoot! as a pedagogical strategy had a positive impact on students' learning outcomes. The comparison between the pre-test and post-test results demonstrates a clear improvement in students' performance after the intervention. While all participants failed the pre-test, the majority were able to pass the post-test after participating in the learning activities supported by Kahoot! These results suggest that the use of interactive digital tools can contribute significantly to improving students' understanding of grammatical structures and other linguistic components evaluated in English proficiency examinations. One possible explanation for this improvement is the motivational effect produced by gamified learning environments. Gamification introduces elements such as competition, instant feedback, and visual engagement that can increase students' interest and participation during learning activities. As a result, students may become more actively involved in the learning process, which can lead to better comprehension and retention of the instructional content.

The findings of this study are consistent with previous research on the educational impact of Kahoot! and similar gamified learning platforms. Licorish et al. (2018) reported that the use of Kahoot! in classroom settings enhances student engagement and promotes interaction between students and instructors. According to their findings, the competitive nature of the platform encourages students to participate more actively in learning activities, while the immediate feedback provided by the system allows students to identify and correct their mistakes during the learning process. These characteristics may contribute to a more dynamic and participatory learning environment. Similarly, the literature review conducted by Wang and Tahir (2020) analyzed multiple studies examining the use of Kahoot! as a learning tool and concluded that game-based response systems generally have a positive impact on students' academic performance, motivation, and classroom engagement. Their research suggests that the interactive and playful nature of Kahoot! can transform traditional lecture-based instruction into a more engaging learning experience that promotes active participation and collaborative learning.

Another factor that may explain the improvement observed in this study is the role of formative assessment in the learning process. Kahoot! allows instructors to evaluate students' understanding of specific topics in real time, which provides immediate feedback both to the teacher and to the students. This feedback enables instructors to identify areas where students experience difficulties and adjust their teaching strategies accordingly. At the same time, students can recognize their own learning gaps and focus their efforts on improving specific aspects of their language knowledge.

Previous research has highlighted the importance of formative assessment in promoting effective learning outcomes. According to Wang (2021), assessment tools not only measure students' knowledge but also play a crucial role in guiding instructional practices and supporting the development of learning strategies. When assessments are used as learning tools rather than merely as evaluation instruments, they can contribute to improving students' academic performance and fostering greater autonomy in the learning process.

The results obtained in this study also align with research conducted in the context of language learning. Zarzycka-Piskorz (2016) found that game-based activities can increase students' motivation and participation in grammar instruction. In her study, students demonstrated

greater enthusiasm and willingness to engage in grammar exercises when these activities were presented through digital games. This increased motivation can facilitate the learning of complex grammatical structures and improve students' confidence in using the language. Furthermore, the findings of Martín-Sómer et al. (2021) indicate that the use of Kahoot! can help maintain students' motivation even in challenging learning environments, such as online or remote classes. Their research conducted during the COVID-19 pandemic demonstrated that the incorporation of interactive learning tools helped sustain students' attention and engagement despite the limitations associated with virtual instruction. This suggests that digital learning platforms can play an important role in maintaining student participation in various educational contexts.

Another relevant aspect of this study is the identification of the difficulties students face when preparing for English proficiency tests. The interviews conducted with participants revealed that many students lacked sufficient knowledge of English grammatical structures, which prevented them from answering the questions correctly in previous attempts at the proficiency exam. These findings highlight the importance of reinforcing grammar instruction and providing students with opportunities to practice language structures in interactive learning environments. In this sense, the integration of Kahoot! into the preparation process for English proficiency tests may serve as an effective pedagogical strategy. By presenting grammatical exercises in a game-based format, students can practice key language structures in a more engaging and less stressful environment. Additionally, the competitive and collaborative elements of the platform may encourage students to participate more actively and develop a more positive attitude toward learning English.

Despite the positive results observed in this study, some limitations should be considered when interpreting the findings. One of the main limitations is the relatively small sample size, which consisted of only fifteen students. Although the results suggest that Kahoot! may be an effective tool for improving students' performance in English proficiency tests, further research involving larger samples would be necessary to confirm these findings and generalize the results to broader populations. Another limitation relates to the research design, which was pre-experimental and did not include a control group. Future studies could employ quasi-experimental or experimental designs in order to compare the effectiveness of gamified learning tools with traditional instructional methods. Such research could provide stronger evidence regarding the impact of digital gamification tools on language learning outcomes.

Nevertheless, the results of this study provide valuable insights into the potential benefits of integrating digital gamification tools into language learning programs. The improvement observed in students' post-test performance suggests that Kahoot! can be used as a complementary instructional strategy to reinforce grammatical knowledge and enhance students' preparation for English proficiency examinations.

CONCLUSIONS

This study analyzed the effectiveness of Kahoot! as a gamified learning tool to improve students' performance in the English proficiency test at the Centro Regional Universitario de Veraguas of the Universidad de Panamá. The results indicate that the incorporation of interactive digital tools can positively influence students' understanding of grammatical structures and their preparation for standardized language assessments. The comparison between the pre-test and post-test results shows a clear improvement after the intervention. Initially, 100% of the students failed the pre-test, demonstrating limited prior knowledge of the grammatical topics evaluated. However, after the instructional activities supported by Kahoot!, 67% of the participants successfully passed the post-test. These findings suggest that gamified learning environments can enhance students' engagement and motivation, which in turn facilitates better comprehension and retention of language content. One important factor contributing to this improvement is the interactive and competitive nature of Kahoot!, which encourages active participation during learning activities. The platform provides immediate feedback, allowing students to recognize their mistakes and correct them in real time. This formative assessment process helps reinforce grammatical knowledge and supports a more dynamic learning experience compared to traditional instructional methods. Additionally, the interviews conducted with students revealed that many of them had previously failed the English proficiency test due to insufficient knowledge of grammatical structures. This highlights the need for teaching strategies that promote continuous practice and reinforce essential language concepts. In this context, Kahoot! proved to be an effective pedagogical resource for supporting students' learning process.

Despite the positive results obtained, the study has some limitations, including the small sample size and the absence of a control group. Future research should involve larger populations and more rigorous experimental designs to confirm the effectiveness of gamified learning tools in language education. Overall, the findings suggest that integrating Kahoot! into English instruction may contribute to improving students' preparation and performance in proficiency examinations.

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