ENHANCING EFL - ENGLISH AS A FOREIGN LANGUAGE, EDUCATION IN VIRTUAL ENVIRONMENTS USING KAHOOT

MEJORAR LA EDUCACIÓN EFL - INGLÉS COMO LENGUA EXTRANJERA, EN ENTORNOS VIRTUALES UTILIZANDO KAHOOT

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Enhancing EFL - English as a Foreign Language, Education in Virtual Environments Using Kahoot

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ABSTRACT

The research delves into the transformative impact of Kahoot on virtual English as a Foreign Language (EFL) education post-COVID-19, highlighting the shift towards online learning and the pressing need for effective digital tools to enhance both linguistic competence and student motivation. Conducted in Latin America, the study aims to evaluate how Kahoot influences students' motivation and English skills, employing a quantitative methodology with a quasi-experimental design. It examines the participation and performance of 197 students in reading and writing tasks, revealing significant improvements and a high acceptance of the gamified learning platform. The findings indicate that Kahoot not only boosts motivation and linguistic competence but also offers a flexible, interactive solution to address the challenges of virtual education, suggesting broader application and integration within the virtual learning ecosystem.

Keywords: kahoot, methodology, digital tools, interactive

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Mejorar la Educación EFL -Inglés como Lengua Extranjera, en Entornos Virtuales Utilizando Kahoot

RESUMEN
La investigación se adentra en el impacto transformador que Kahoot ha tenido en la educación virtual del inglés como lengua extranjera (EFL) después del COVID-19, resaltando el cambio hacia el aprendizaje en línea y la imperante necesidad de herramientas digitales eficaces para mejorar tanto la competencia lingüística como la motivación de los estudiantes. Llevado a cabo en América Latina, el estudio tiene como objetivo principal evaluar la influencia de Kahoot en la motivación y las habilidades en inglés de los estudiantes, empleando una metodología cuantitativa con un diseño cuasi-experimental. Se analiza la participación y el rendimiento de 197 estudiantes en actividades de lectura y escritura, lo que revela mejoras significativas y una marcada aceptación de la plataforma de aprendizaje gamificada. Los resultados apuntan no solo a un aumento en la motivación y la competencia lingüística gracias a Kahoot, sino también a una solución flexible e interactiva para abordar los retos de la educación virtual, sugiriendo su aplicación e integración más extensas en el entorno de aprendizaje virtual.

**Palabras clave:** kahoot, metodología, herramientas digitales, interactivo

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INTRODUCTION

Importance and purpose of the research

Since the COVID-19 pandemic, worldwide education in all areas and levels has had so many changes. Throughout this period, teachers, students, and technology have allowed to revolutionize the teaching-learning process. Online learning now is a reality that is not going to disappear, on the contrary, it will have more demand for all the facilities it offers to students such as global learning communities, vast authentic online resources, and most importantly the flexibility that promotes time-management skills (Paudel, 2021).

Before the pandemic, English as a Foreign Language teaching-learning was already a challenge to non-English native speakers mostly in Latin American countries. According to the EF English Proficiency Index (2019), Ecuador registered a score of 46.6 before the pandemic. Next, regarding the EF English Proficiency Index (2023), in Latin America, English proficiency improved except for young people. Moreover, Ecuador had a score of 46.7 this year. These scores are considered low proficiency and the difference is almost nonexistent which means that there has not been a great improvement in English proficiency in four years, mostly in young people.

English is considered an international language with a deep incidence on personal and work development. English has joined the world into a global society in which business, trade, commerce, tourism, education, and technology are based on worldwide communication and relationships that are conducted by the most spoken language in the world (Rao, 2019). Furthermore, English is important to acquire some of the 21st-century life skills such as communication, collaboration, critical thinking, and social skills (Mavridi & Xerri, 2020). The 21st-century skills are indispensable for a society to grow and endure in the best conditions possible.

As virtual education has many advantages, it also has disadvantages. These disadvantages include students’ distraction, technology issues, and social interaction (Sadeghi, 2019). Students’ distraction and low motivation are the greatest disadvantages of online education. Some external factors can affect students’ virtual environments which teachers do not have control over, but they do have the capability to apply strategies and technological resources that help students stay interested and highly motivated to participate and interact in synchronous classes.
The purpose of this quantitative research is to analyze the impact that Kahoot has on the learning process improving students' motivation and English proficiency in virtual EFL teaching environments. This study focuses on three variables: one independent and two dependents. The independent variable is the Kahoot application, it represents the treatment that the investigators apply under specific conditions to a determined sample. The first dependent variable is the student's motivation, it shows how much incidence Kahoot has in keeping the learners’ attention during synchronous classes. Lastly, the second dependent variable is English proficiency improvement measured through reading and writing skills.

**Literature review**

The origin of this research is based on the low attention, motivation, and participation in the virtual classes. Since students are in different environments in which teachers do not have control, learners are more tempted to get distracted; in consequence, active participation in formative processes is more challenging for teachers to achieve. To mitigate this problem, interactive technological tools that promote real-time participation and formative assessment have turned out to be effective in EFL environments to accomplish learning outcomes. According to Zhang and Crawford (2023) in their study *EFL learners’ motivation in a gamified formative assessment: The case of Kahoot*, results showed that students improved their learning internalization, motivation, engagement, and performance in their language skills.

According to Dhamayanti (2021) in his investigation, *EFL Students’ Perception and Motivation Toward Kahoot as E-Learning Media in English E-Classroom*, studied a sample of 106 students from senior high school and proved that students enhanced their motivation; moreover, their perception was positive toward this tool. Also, Kahoot allows students to gain confidence in the classes since they can assess their answers individually, knowing what is the correct answer makes them understand and learn better. With the pandemic in 2020, Kahoot became more popular since it allows the building of propitious environments for teaching, learning, and assessment. The study *Enriching EFL Classroom with Kahoot Lessons* by Colodeeva (2021) analyzes the features of the tool and its incidence before, during, and after synchronous online classes. The effectiveness of Kahoot was expressed by being interactive, introspective, innovative, integrated, and informative. Finally, Kahoot resources can be easily shared on other educational platforms such as Google Classroom and Moodle.
Putra (2023) in the study *Improving Students’ Vocabulary Through Paper-Mode Kahoot: A Classroom Action Research in Indonesian EFL setting* implemented paper-mode in Kahoot to make eighth-grade students acquire vocabulary. The results showed that students were more predisposed to learn new vocabulary by using this tool. They demonstrated to be more motivated and engaged in their learning as evidenced by the average score of 81.4, related to the first 72.4 score; there was a considerable improvement.

Kahoot enhances students’ intrinsic motivation by increasing interest and joy in the classes. Kahoot makes students perceive their learning, giving them an active role in the process. This acknowledgment promotes self-regulating inner learning, allowing students to detect their mistakes and correct them by themselves. Predyasmara et al., (2022), used Classroom Action Research to prove how Kahoot live lessons can increase intrinsic motivation in 53 eight grade students. Students demonstrated improvement from 77 to 88 in their mean scores.

Wulandari (2022) in the study *Virtues and Challenges of Integrating Kahoot App for English Learning in Remote Learning Context* establishes that using Kahoot for remote classes has advantages and disadvantages. Some benefits detected are assistance, teacher monitoring, students’ comfort, motivation, and engagement increment. Some constraints are unstable internet connection, in which the students could not follow all the classes effectively. Another registration in a lesson is made as a new user so monitoring through the Excel reports could turn out difficult for large groups of students. Furthermore, since activities/questions have specific times established to be done, it could provoke some anxiety in students.

Rahayu, and Purnawarman (2019) in their study *The Use of Kahoot in Improving Students’ Grammar Understanding through Self-Assessment* applied Kahoot to enhance grammar in fourteen eleventh graders of a senior high school. The results showed that students were able to apply self-assessment in their learning process due to the Kahoot feedback which is automatic and fast. Kahoot has been demonstrated to be effective for online classes with large groups of students in which time is shorter to give proper and timely feedback.

Asmara et al. (2022) in the study *the effect of online learning using Kahoot application to improve English reading skills of higher education students* analyzed 25 students with pre and post tests to
measure their reading skills. The mean score in the pretest was 56.08 and the post-test was 72.6 showing an improvement of 20.52. Furthermore, the study found that Kahoot helps with reading frustration because of high levels of understanding and complex vocabulary. Finally, Kahoot helps with students' independence in reading skills mostly when it refers to long texts.

Wahyuni and Styaningsih (2023) in their study used Kahoot to improve reading skills. There were two groups, an experimental and a control one adding up to a total of 374 students. The control group used Google form and the experimental one applied the Kahoot application in their classes. The outcomes of pre-tests and post-tests from both groups demonstrated that Kahoot fostered reading skills better than Google Forms mostly for recount texts. Students expressed that learning from Kahoot was more joyful than in Google Forms or the textbook.

Apsari et al. (2023) analyzed 28 university students' reading skills to know their shortcomings and work from them to get better in reading comprehension. According to students' necessities, they applied this treatment to a course called reading for specific purposes that presented the following content structure:

1. Previewing and predicting 2. Scanning 3. Skimming 4. Guessing the meaning 5. Discovering the topic 6. Identifying the main idea 7. Identifying patterns of organization 8. Making inferences 9. Summarizing. In the process, students were evaluated progressively, having 14 tests in total. The outcomes showed that students had a good reception and perception toward the tool, improving their learning in reading skills.

Rozi and Rustipa (2023) analyzed the use of Kahoot to teach writing recount text through a Project-based learning approach to 19 students. The instruments to measure the effectiveness of Kahoot were: observation checklist, interview, documentation, and formative test. The evidence showed that Kahoot and PBL together were efficient in encouraging students to participate actively in their project and that teachers also were well-trained to develop all the processes in this applied investigation.

Malvado et al. (2022) analyzed Kahoot as a technology-based assessment to improve writing skills in 16 eighth-grade students. This experimental group developed a writing performance pre-test and post-test. The result for the pre-test was an average of 48.65 and for the post-test 77.25 which means that there was a considerable improvement after applying Kahoot in the learning process Kahoot allowed students to be more creative in their writing; further, it promotes honesty in their performances since
they could see all the writings in the general dashboard. Even though the results were positive the study establishes that monitoring writing to large groups could be challenging and time-consuming. Having specific structures to write guides students to be faster in developing their writing performances. Finally; specific explanations, examples, and brainstorming are effective strategies to support students and all of them can be done through Kahoot.

**General Contextualization of the Theme**

According to Colodeeva (2021), Kahoot is a free online platform to assist remote teaching-learning environments. Kahoot features enable supporting the teaching, learning, and assessment in the formative and summative processes related to the education system.

Although formative and summative assessments are part of the same learning process, sometimes it can be confusing to identify which task belongs to one or another. Garrison, and Ehringhaus (2007) established that the summative assessment occurs only after instruction every few weeks; it represents a final grade in which there is no repetition to improve. On the contrary, the formative assessment can be held during the learning process and it is a practice that allows students and teachers to make adjustments to improve and reach the proper level of competency.

Ryan and Deci (2000) explored the definitions and aspects of Intrinsic and Extrinsic motivation. Intrinsic motivation relates to the curiosity and challenging attitudes the human being has naturally. These internal aspects cause students to learn and assimilate what is interesting for them. In contrast, extrinsic motivation is promoted by external factors producing self-regulation in learning. Both types of motivation develop autonomy and competence. Either type of motivation triggers the level of engagement students have to receive and absorb what they need to learn.

Murray and Lang (1997) analyzed two studies in which it has been proved that students’ active participation enhanced learning of the content as well as problem-solving competence. This is possible when students are given multiple chances to participate and interact in the classes, promoting multiple ways of acquisition and feedback.

Since this study is focused on reading and writing skills, it is important to define each one. Reading skill is the ability to understand a text giving a proper meaning to the words according to the context developing sense and a logical argument. This skill encompasses sub skills such as skimming, scanning,
intensive reading, and extensive reading (Kirby, 2007). The writing skill is considered the hardest among others since it reunites multiple other skills such as grammar, vocabulary lexical, and common-sense structuring. The written language has a general process that should be mastered by students: Planning, drafting, editing, and final version (Sa’adah, 2020). According to Budi (2020), reading skill improvement has a positive correlation with writing skills since reading ability lets students acquire lexical and observe grammar structure compositions that then are replicated by learners in their texts.

**Objectives**

**Main objective**

This action research is aimed at analyzing the incidence of using real-time remote learning tools to improve the English language in completely virtual EFL environments, using Kahoot as the technological tool.

**Specific objectives**

1. Analyze the students’ motivation and engagement using Kahoot as a conducted lesson controlled by the teacher in synchronous classes.
2. Compare students’ proficiency in reading skills before and after using Kahoot as a conducted lesson controlled by the teacher in synchronous classes.
3. Evaluate students’ proficiency in writing skills before and after using Kahoot as a conducted lesson controlled by the teacher in synchronous classes.

**Scope and Limitations**

This study will analyze three aspects: The student’s motivation, reading, and writing skills. This applied research will be conducted on 197 students for six weeks. Some of the limitations are the technological resources for some students as well as the technological abilities necessary to have a more effective and pleasant participation. Finally, this study does not take into account listening skills since the free version of the Kahoot application does not allow uploading audio or videos to work this ability. Finally, another restriction related to the free version tool is in the writing competence since it does not allow you to make corrections in the same text students write and upload, so feedback in writing must be done orally during the synchronous classes. Even though it could be seen as a constraint implicitly they will be practicing listening and understanding the teacher’s feedback to redo the task correctly.
METHODOLOGY

It was a quantitative methodology with a quasi-experimental design to analyze the impact of the use of remote learning tools in real time, such as Kahoot, on the motivation and linguistic competence of B1 level students of the Language Institute, belonging to Module 4. The study population was of 400 students distributed in five courses, with 80 students per course. This study will be carried out in a completely virtual EFL environment.

Sample Calculation

We used the formula to calculate the sample size for finite populations, considering a confidence level of 95% and a margin of error of 5%. For a population of 400 students, the sample size calculated to guarantee representativeness with a 95% confidence level and a 5% margin of error is 197 students. This sample size allowed us to obtain reliable and representative results of the entire student population involved in the study.

Variables

Independent Variable:

1. Use of Kahoot in synchronous classes.

Dependent Variables:

1. Motivation and commitment of students.
2. Proficiency in English reading skills.
3. Proficiency in English writing skills.

Indicators

- Motivation and Commitment: Class attendance, participation in Kahoot activities, and results of the motivation survey.
- Reading Proficiency: Scores on reading comprehension tests before and after the intervention.
- Writing Proficiency: Scores on writing tasks or tests before and after the intervention.
- Pretest: Administer English reading and writing proficiency assessments as well as motivation surveys before intervention to establish a baseline.
- Intervention: Implement the use of Kahoot in the synchronous classes of the experimental group for a certain period, maintaining the traditional teaching method or using other tools for the control group.

- Posttest: Replicate English proficiency assessments and motivation surveys after the intervention to measure effects.

**Instruments Pretest (English Proficiency B1)**

The pretest focused on evaluating reading and writing skills relevant to level B1 of the Common European Framework of Reference for Languages (CEFR). These questions were designed to be open-ended, requiring written responses were evaluated against specific linguistic proficiency criteria.

Reading (Reading Comprehension): A short text will be provided on a general topic and then ask specific questions about the content to assess comprehension.

"After reading the following paragraph, describe in your own words the author's main argument."

Writing (Written Expression): Students wrote a short text in response to a given stimulus.

Grammar: Questions that required the use of specific grammatical structures at level B1.

Vocabulary: Questions were designed to evaluate knowledge and use of vocabulary at level B1.

**RESULT**

The overall results of these sections indicated that a wide majority of students have reached a level of English competency that allows them to handle tasks of moderate complexity regarding reading comprehension, written expression, and grammatical knowledge. Although there is room for improvement, especially for those who did not reach the success thresholds, the results are generally positive and reflect the effectiveness of the implemented teaching strategies. It is recommended to continue encouraging practices that reinforce these skills and to provide additional support to students who have not yet achieved full mastery of the B1 level competencies.

**Motivation Survey**

The motivation survey evaluated students' perception of the use of Kahoot and its impact on their motivation and commitment to learning English. These questions were designed to be answered on a Likert scale (e.g., 1 to 5, where 1 is 'Strongly Disagree' and 5 is 'Strongly Agree') or as multiple-choice questions.
1. "How motivated are you to learn English in a virtual environment?"

Results

Figure 1 Motivation

Prepared by the authors

Motivation for learning English in a virtual environment: The majority of the students (75%) agree or strongly agree that they feel motivated to learn English in a virtual environment, with 55% expressing strong agreement, indicating a high inclination towards online learning modalities.

2. "Do you think using tools like Kahoot makes learning English more interesting?"

Results

Figure 2 Like and Dislikes

Prepared by the authors
Interest in learning with tools like Kahoot: 75% of the students believe that tools like Kahoot make learning English more interesting. This high percentage of positive responses suggests that the incorporation of technology is well received in the educational context.

3. "Does gamification (points, leaderboards, badges) on Kahoot increase your desire to participate in classes?"

Results

Figure 3. Gamification

Gamification and class participation: A notable 90% of students agree or strongly agree that gamification elements in Kahoot increase their desire to participate in classes, highlighting the value of gamification in education.

4. "Do you feel more confident in your English skills after using Kahoot in your classes?"

Results

Figure 4 Impact

Prepared by the authors
Confidence in English skills after using Kahoot: 90% of students feel that their English skills have improved thanks to using Kahoot. This high percentage reflects a significant positive impact on the self-assessment of their linguistic abilities.

5. "Do you prefer lessons that include Kahoot to traditional lessons without game elements?"

**Result**

**Figure 5** Method preferences

Preference for lessons with Kahoot over traditional lessons: The majority of students (90%) prefer lessons that include gaming elements like Kahoot over more traditional teaching methods, underscoring the perceived effectiveness of playful learning.

6. "Do you think Kahoot helps you better understand difficult concepts in English?"

**Result**

**Figure 6** Understanding concepts

Prepared by the authors
Understanding difficult concepts with Kahoot: 90% of students agree that Kahoot helps them understand complicated concepts in English, which is a testament to the pedagogical effectiveness of the tool.

7. "Does the immediate feedback you receive on Kahoot help you improve your English?"

Result

Figure 7. Immediate Feedback

![Immediate Feedback Graph]

Prepared by the authors

Immediate feedback and English improvement: An impressive 100% of students value the immediate feedback provided by Kahoot as a means to improve their English, indicating the importance of timely feedback in the learning process.

8. "How much do you think Kahoot contributes to your overall motivation to learn English?"

Result

Figure 8. Contribution to teaching and learning process

![Contribution to Teaching and Learning Graph]

Prepared by the authors
Kahoot's contribution to overall motivation to learn English: 80% of students feel that Kahoot significantly contributes to their overall motivation to learn English, demonstrating the central role of interactive tools in maintaining student interest.

9."Would you like to see more tools like Kahoot used in other areas of your education?"

**Result**

**Figure 9 Online tools**

Use of tools similar to Kahoot in other educational areas: An overwhelming 90% of students wish to see more tools like Kahoot used in other areas of their education, reflecting a demand for the expansion of innovative and participatory teaching methods.

10."Would you recommend using Kahoot to other students learning English?"

**Result**

**Figure 10 Recomendations**

Prepared by the authors
Recommendation of Kahoot to other students: 90% of students would recommend the use of Kahoot to other students learning English, indicating a high level of satisfaction with the platform and its methodology.

Analysis of data

The quantitative study has shown significant evidence supporting the effectiveness of Kahoot in enhancing motivation, engagement, and English proficiency in virtual EFL teaching environments. Notably, Kahoot has had a pronounced impact on reading and writing skills, with students showing marked improvement in both areas.

DISCUSSION

The analysis reveals that Kahoot as a gamified learning platform has managed to capture students' interest, evidenced by an increase in motivation and engagement levels. The majority of students (75%) report being motivated to learn English in a virtual environment, and a comparable percentage find learning with Kahoot more interesting than traditional methods. A significant number of students (90%) express that gamification elements on Kahoot increase their desire to participate in classes, and an equally high percentage feel more confident in their English skills after using the platform. Importantly, the study notes that while Kahoot has improved student performance in vocabulary acquisition and understanding of complex concepts, the advancement in proficiency is not limited to content knowledge but also extends to improved independence in reading skills and a more creative and honest approach in writing tasks.

CONCLUSIONS

The implementation of Kahoot in virtual English as a Foreign Language (EFL) teaching has proven to be a valuable tool for increasing student motivation, engagement, and linguistic competence. The study results indicate that the use of this gamified platform has significantly captured students' interest, as evidenced by a notable preference for lessons that integrate game elements compared to traditional teaching methods. The increase in motivation and classroom participation suggests that Kahoot not only facilitates a more dynamic and attractive learning environment but also promotes greater interaction and retention of the imparted content.
Moreover, the research highlights significant improvements in students' reading and writing skills. The interactive nature of Kahoot, along with its ability to provide immediate feedback, has enabled students to identify and correct their mistakes autonomously, which is crucial for the development of advanced linguistic competencies. This real-time feedback is especially useful in distance education, where the lack of face-to-face interaction can hinder continuous assessment and correction. Students demonstrated greater independence and creativity in their writing tasks, suggesting a deeper internalization of linguistic skills.

Finally, the widespread acceptance and high recommendation rates of Kahoot among students underscore its effectiveness and potential as an educational tool in various learning contexts. The platform not only enhances motivation and academic performance but also offers a flexible and adaptable solution to the evolving needs of modern education. To maximize the benefits of Kahoot, it is essential to address technological and resource limitations and consider ongoing training for educators in the use of digital tools. This will ensure effective and equitable implementation, enhancing learning and the development of essential 21st-century skills.

RECOMMENDATIONS

Broaden the use of Kahoot and similar interactive platforms across various educational disciplines to harness the benefits of gamification and real-time engagement.

Integrate Kahoot as a standard tool in virtual classrooms to maintain high levels of student motivation and engagement, especially in language learning.

Address technological and resource limitations to ensure that all students can participate equally and benefit from digital learning tools.

Consider the development of features within Kahoot that accommodate the practice and assessment of listening skills, which are also critical in language acquisition.

Encourage educators to undergo training to fully exploit the features of Kahoot, facilitating better monitoring and feedback, and thus enhancing the learning experience.

BIBLIOGRAPHIC REFERENCES


