

Impact of Interactive Platforms on First Graders' English Vocabulary Acquisition and Retention through communicative tasks.

Impacto de las plataformas interactivas en la adquisición y retención de vocabulario en inglés de estudiantes de primer grado a través de tareas comunicativas.

Sebastián Basto Borrero

Universidad Santiago de Cali

Cali, Colombia

<https://orcid.org/0009-0005-0649-0500>

[sebastian.basto00@usc.edu.co](mailto:sebastian.basto00@usc.edu.co)

Joann Sebastián Cataño Restrepo

Universidad Santiago de Cali

Cali, Colombia

<https://orcid.org/0009-0006-6404-483X>

[joann.catano00@usc.edu.co](mailto:joann.catano00@usc.edu.co)

Lourdes Montenegro Arrieta

Universidad Santiago de Cali

Cali, Colombia

<https://orcid.org/0009-0003-3141-4521>

[lourdes.montenegro00@usc.edu.co](mailto:lourdes.montenegro00@usc.edu.co)

## **Resumen**

El presente estudio se enfocó en analizar el impacto de plataformas interactivas (Wordwall, Bamboozle y Kahoot versión offline) como herramientas digitales para el enriquecimiento del vocabulario en estudiantes de primero de primaria de un colegio privado bilingüe en Santiago de Cali, poniendo especial énfasis en aquellos individuos con requerimientos específicos de apoyo educativo. A través de un diseño metodológico mixto, el análisis optó por un enfoque combinado a través de una investigación de estudio de caso que fusionó técnicas tanto cualitativas como cuantitativas. La recopilación de datos integró la observación directa, el registro de las actividades de comunicación y una encuesta aplicada a los estudiantes con el apoyo de los padres, posibilitando un análisis integral del fenómeno en estudio. Los hallazgos revelaron que estas herramientas tecnológicas no solo aumentaron la participación de los alumnos, sino que también propiciaron un aprendizaje más enriquecido y relevante, potenciando la motivación en el salón de clases. Sin embargo, la investigación también detectó barreras significativas, especialmente en lo que respecta a la conectividad y el dominio tecnológico, considerando estos desafíos, las plataformas demostraron ser herramientas efectivas para potenciar el vocabulario y fomentar la comunicación en inglés, particularmente en entornos educativos con limitación de recursos. La conclusión resalta la relevancia de una aplicación estratégica, enfatizando que cuando estas herramientas se ajustan de manera consciente a las necesidades particulares de los alumnos, pueden modificar significativamente la experiencia de aprendizaje del inglés en variados contextos educativos.

**Palabras clave:** Plataformas interactivas; tareas comunicativas; adquisición de vocabulario, retención de vocabulario.

## **Abstract**

The study focused on analyzing the impact of interactive platforms (Wordwall, Bamboozle, and Kahoot offline version) as digital tools for vocabulary enrichment in first grade students at a private bilingual school in Santiago de Cali. with special emphasis on individuals with specific educational support requirements. Through a mixed methodological design, the analysis adopted a combined approach via case study research that merged both qualitative and quantitative techniques. Data collection integrated direct observation, communication activity logging, and a survey applied to students with parental support, enabling a

comprehensive analysis of the studied phenomenon. The findings revealed that these technological tools not only increased student participation but also fostered a more enriched and relevant learning experience, enhancing classroom motivation. However, the research also identified significant barriers, particularly concerning connectivity and technological proficiency. Considering these challenges, the platforms demonstrated their effectiveness as tools for vocabulary enhancement and English communication, especially in educational environments with limited resources. The conclusion underscores the importance of strategic implementation, emphasizing that when these tools are consciously adapted to students' particular needs, they can significantly transform the English learning experience across diverse educational contexts.

**Keywords:** Interactive platforms; communicative tasks, vocabulary acquisition, vocabulary retention.

## **Introduction**

Advances in technology have significantly transformed the educational landscape by providing students with innovative tools that foster more engaging and productive interactions. García-García (2024) asserts that integrating digital platforms into English language instruction enhances learning outcomes by increasing student motivation and engagement. Similarly, Prieto-Andreu et al. (2020) emphasize the importance of gamification in education, highlighting how incorporating game-like elements into the learning process promotes active participation and facilitates communication, resulting in a dynamic educational environment.

Nowadays, students who are frequently referred to as "digital natives," exhibit ease and enthusiasm while utilizing technology and educational apps. This familiarity positions interactive platforms as effective tools for teaching vocabulary, facilitating communicative tasks that enhance the significance and interest of learning. These resources offer continuous practice in diverse contexts, which is crucial for reinforcing vocabulary retention. Moreover, the inclusion of gamification elements, such as leaderboards, interactive challenges, and scoring systems, has been shown to further enhance student motivation and engagement (Prieto-Andreu et al., 2020).

Given the variety of learning needs observed in the classroom, this research analyzes the impact of interactive platforms on first graders' English vocabulary acquisition and retention through communicative tasks. Therefore, the primary research question guiding this investigation is: **What is the impact of interactive platforms on first graders' English vocabulary acquisition and retention through communicative tasks?** This study was motivated by the need to address issues related to poor vocabulary retention and low engagement often associated with traditional teaching methods. It aims to demonstrate how interactive platforms can provide young learners with more meaningful, motivating, and effective learning opportunities.

### **Theoretical Framework**

Over the past decade, interactive platforms have become increasingly prevalent in foreign language education. In response, educational policies worldwide emphasize the integration of Information and Communication Technologies (ICT) to enhance skills such as communication, collaboration, and critical thinking. In Colombia, the Ministry of Education's Programa Nacional de Inglés (PNI) and the Decreto 1421 de 2017, which establishes the Plan Individual de Ajustes Razonables (PIAR), prioritize inclusive and equitable access to quality education through technology. These initiatives underscore the importance of using ICT tools to strengthen communicative skills and provide differentiated instruction, ensuring effective learning for all students, including those with difficulties.

Nevertheless, children's facility with technology does not automatically create academic benefits, especially regarding vocabulary development. According to Misirova (2022), technology-enhanced learning environments can improve vocabulary retention, their success largely depends on their integration within well-designed learning activities. For example, learners frequently turn to quick, easily available resources, potentially restricting their utilization of more profound, analytical learning techniques. This highlights the need for interactive platforms that not only support vocabulary acquisition but also promote critical thinking and reflective learning processes. According to Xin Li et al. (2021), technology integration supports vocabulary retention when implemented within structured, meaningful learning activities. Rofiah and Waluyo (2024) further highlight that interactive games and apps provide repeated, context-based exposure, which strengthens long-term vocabulary

retention, a key challenge in early language education. By focusing on how these platforms can enhance student learning through communicative tasks, this section presents key theoretical contributions and research findings on the relationship between technology and vocabulary development.

Previous studies highlight the importance of interactive platforms in promoting student engagement, which is essential for effective language learning (Albliadi & Khlood, 2019). This engagement fosters a dynamic environment where students can apply vocabulary in meaningful contexts, reinforcing retention and practical use. Similarly, Qaserras (2023) emphasizes that communicative platforms enable authentic language practice, bridging the gap between theoretical knowledge and real-world application. Vargas-Saritama and Espinoza Celi (2024) build on these ideas by demonstrating how gamified activities enhance vocabulary retention by making learning enjoyable and memorable. Collectively, these studies underscore how interactive platforms can effectively integrate engagement, authenticity, and motivation to facilitate deeper vocabulary acquisition.

In the context of language learning, Communicative Language Teaching (CLT) emerged as a response to traditional grammar-focused methods, prioritizing meaningful communication over rote memorization. Interactive platforms align seamlessly with CLT by creating engaging, context-rich environments where vocabulary is acquired through authentic, communicative tasks. Qaserras (2023) asserts that CLT motivates students to engage in practical assignments requiring authentic language use, supported by interactive platforms that offer dynamic, gamified situations for vocabulary learning through games, simulations, and collaborative exercises. Furthermore, Xin Li et al. (2021) propose that technology-enhanced communicative tasks engage students in problem-solving scenarios where language emerges naturally, fostering interaction, collaboration, and vocabulary retention.

To advance inclusive education, the Plan Individual de Ajustes Razonables (PIAR), established by Decreto 1421 de 2017 of the Ministerio de Educación Nacional de Colombia, ensures that students with disabilities receive reasonable adjustments to guarantee their full participation and learning (Ministerio de Educación Nacional, 2017). The decree emphasizes personalized learning plans and adapts educational methods, making the integration of interactive platforms tailored to diverse needs essential. By providing differentiated

instruction and individualized activities, these platforms align with the PIAR framework, enabling all students, including those with specific educational needs, to engage meaningfully in learning. Digital tools foster inclusivity by offering multisensory input, personalized learning paths, and continuous feedback—key elements for effective learning (Gómez & Molina, 2020; López-Rincón & Pérez-Salazar, 2021).

Learning a second language involves extensive cognitive processes that transcend well beyond simple memory because, to achieve true comprehension and long-term retention, students must carefully integrate new material with what they already know. Meaningful learning naturally arises when new knowledge meaningfully relates to preexisting cognitive structures, allowing for deeper comprehension and long-term retention, according to Ausubel's Theory of Meaningful Learning (2002, updated edition). This whole method is essential for successful language learning, especially as it actively supports students in fusing new words with what they already know and comprehend, resulting in a rich web of interrelated linguistic information. In this way, engaging environments like workshops and practical classes are essential for promoting meaningful learning. According to Andrews et al. (2023), these kinds of environments greatly improve student involvement by offering many chances for communication, practical application, and group problem-solving. This spontaneous connection between theoretical ideas and real-world application clearly demonstrates how communicative platforms facilitate language learning in a beneficial way, establishing a smooth link between abstract comprehension and practical application.

Vygotsky's work (as cited in Gómez-Giraldo, 2021) remains influential for demonstrating how children progress through the zone of proximal development (ZPD), mastering complex skills through mediation, with support from external tools and their social environment. Interactive platforms function as mediators, facilitating language acquisition through communication-based activities. Vygotsky (as cited in Gómez-Giraldo, 2021) emphasizes the importance of guided interaction and social context in children's cognitive development. Interactive platforms meet first-grade students' needs by promoting vocabulary acquisition through discovery and participation.

Research consistently demonstrates the effectiveness of interactive platforms in vocabulary acquisition. Misirova (2022), Xin Li et al. (2021), and Rofiah and Waluyo (2024) confirm

that digital tools provide repeated, context-based exposure, reinforcing long-term retention. These platforms motivate students and facilitate deeper learning by enabling active participation and self-directed exploration. Consequently, integrating interactive platforms into first-grade EFL classrooms addresses the limitations of traditional methods and fosters comprehensive language development.

This theoretical framework directly addresses the research question: What is the impact of interactive platforms on the acquisition and retention of English vocabulary through communicative tasks in young learners? By synthesizing CLT principles, sociocultural perspectives, meaningful learning, and inclusive education frameworks, this study demonstrates how interactive platforms enhance motivation, engagement, and long-term vocabulary retention, bridging global and national educational policies with classroom practice. This comprehensive conceptual framework ensures consistency between the problem statement and the research methods, providing a strong basis for analyzing how interactive platforms impact vocabulary acquisition and retention in first-grade classrooms.

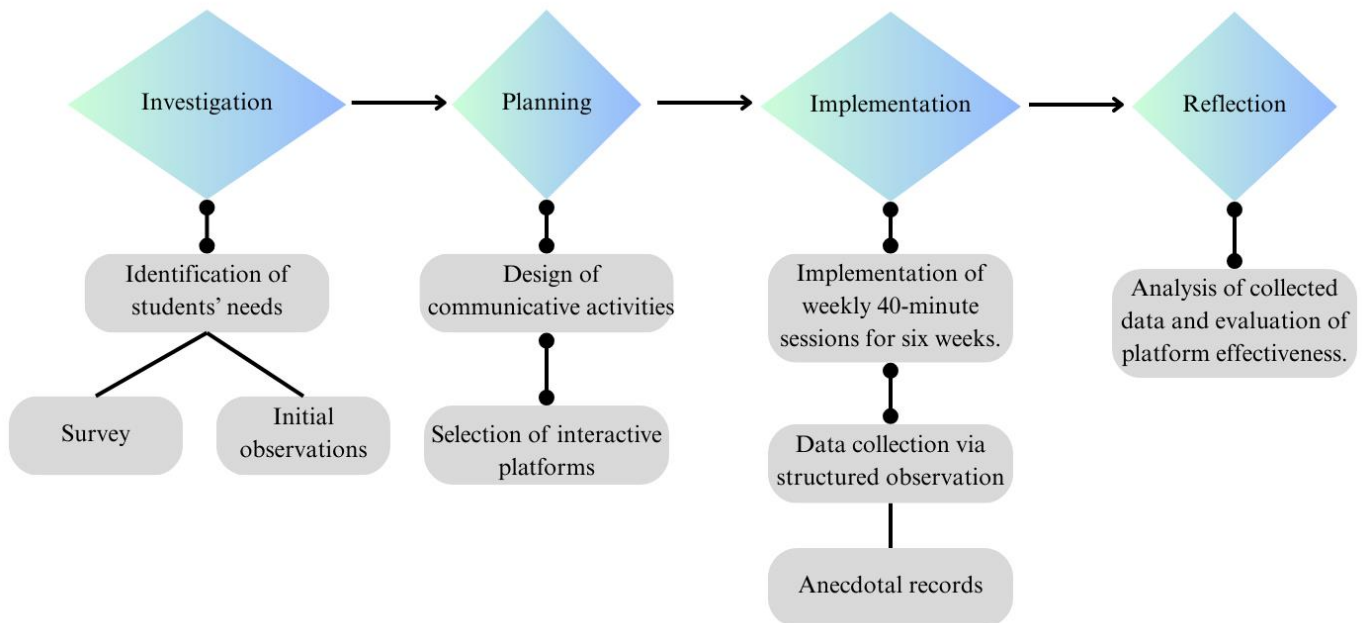
### **Methodology**

This study employed a mixed-methods approach, which combines qualitative and quantitative data to provide a comprehensive understanding of the research problem (Creswell & Plano Clark, 2018), within the framework of action research, which aims to generate improvements in educational practices through reflective and direct intervention (Kemmis et al., 2014), focusing on the impact of interactive platforms on the acquisition and retention of English vocabulary through communicative tasks. The study population consists of six- and seven-year-old first-grade children from a bilingual educational institution located in Santiago de Cali. The sample comprises 25 students who meet specific research-relevant criteria: they are EFL students with an A1 proficiency level according to the Common European Framework of Reference for Languages (CEFR).

The research design followed the four stages of the action research cycle: investigation, planning, implementation, and evaluation. These phases ensured a systematic approach to identify, address, and evaluate the challenges in vocabulary acquisition, combining quantitative and qualitative data to provide a comprehensive analysis.

Figure 1 below illustrates the linear sequence of the four phases of action research used in this study:

Figure 1. *Action- Research process*



Note. Own elaboration.

The graphic representation offers a concise and comprehensive overview of the study's development, showing how each stage is strategically built upon the one before it. A thorough grasp of how each phase contributes to the overall research process is made possible by this methodical approach, which guarantees a well-structured and methodical investigation of the research subject. A reflective methodology that enables thorough analysis and careful interpretation of the results is fostered by the study's structured flow, which emphasizes the logical connections between the phases.

The investigation phase aimed to understand the educational context, identify students' needs and establish a baseline for the study. Although a formal diagnostic was not conducted, initial observations provided valuable insights into students' prior knowledge, challenges, and engagement levels. These observations were recorded in detailed logs, focusing on student's behavior, participation and responses to vocabulary tasks. Additionally, a survey was conducted only once at the beginning of the study, consisting of closed-ended questions with

pictograms to facilitate comprehension and gather students' opinions on the usefulness and entertainment value of the platforms. The survey collected quantitative data on students' perceptions of vocabulary learning and technology use. The results were analyzed statistically to identify common patterns and challenges in vocabulary acquisition, allowing for an objective understanding of students' familiarity with the target vocabulary.

The next phase of this research is the planning phase, considering the results of the investigation phase, the research objectives were refined, and lesson plans were designed based on the Communicative Language Teaching (CLT) approach, emphasizing interactive, context-based tasks to facilitate meaningful language use. These lessons integrated interactive platforms such as Wordwall, Bamboozle, and Kahoot offline to create dynamic and engaging activities. These included role-plays, matching games, and collaborative exercises tailored to students' needs, focusing on vocabulary related to parts of the house, neighborhood vocabulary, animals, abilities and action verbs. Inclusive practices were prioritized following the PIAR framework ensuring accessibility and participation.

Throughout the six-week implementation phase, a few well-organized sessions were held. These lessons were created especially to involve students in communicative, vocabulary-rich activities that encouraged active language use. During this time, the emphasis was on giving students engaging educational experiences that incorporated interactive platforms and allowed them to acquire language in relevant and useful situations. To create a collaborative and engaging learning environment, the sessions included a range of activities that prompted students to engage with the language and their peers. The table below provides a detailed summary of the interactive platforms used during this phase, outlining their specific purpose and the tailored activities developed to support vocabulary learning. This overview highlights how each tool was strategically employed to achieve the study's objectives.

Table 1. *Interactive Platforms Used in the Implementation Phase*

<i><b>Interactive platform</b></i>	<i><b>Purpose</b></i>	<i><b>Activities</b></i>
<b>Wordwall</b>	Reinforce vocabulary through sorting, matching, and categorizing games.	Matching games, vocabulary classification, and fill-in-the-blank exercises.

<b>Bamboozle</b>	Foster peer interaction and collaborative learning.	Team-based games, vocabulary challenges, and competitive tasks.
<b>Kahoot offline</b>	Conduct formative assessments in an engaging manner.	Multiple-choice quizzes, true/false challenges, and vocabulary review games.

---

Note. Own elaboration.

These activities were designed to promote authentic communication, allowing students to use vocabulary in practical contexts. Scaffolding techniques, which involve providing temporary support to learners as they develop new skills and gradually reduce that support as competence increases (Reiser & Dempsey, 2018), were employed to support learners progressively, with immediate feedback and reinforcement to enhance retention.

The final phase assessed the impact of interactive platforms using both quantitative and qualitative data. Observations were completed after each session, documenting students' participation in communicative activities and their interactions with the platforms, focusing on the level of participation, perceived difficulty, and usage patterns. These observations provided qualitative data on how students interacted with the platforms and engaged in communicative tasks. Since the survey was only conducted at the beginning of the study, the reflection focused on qualitative data from the observation sheets, these sheets were coded to identify recurring themes related to motivation, communicative competence and inclusive practices.

Any identifiable information was kept private, and all participant data was anonymized. To preserve their anonymity, teachers and students were given pseudonyms in the final report. This research can be replicated in comparable contexts thanks to the proposed methodology, which provides a solid foundation for assessing the impact of interactive platforms on English vocabulary development. The triangulation of data ensures a comprehensive understanding of the vocabulary acquisition and retention process in young learners, guaranteeing the validity of the findings.

## Results

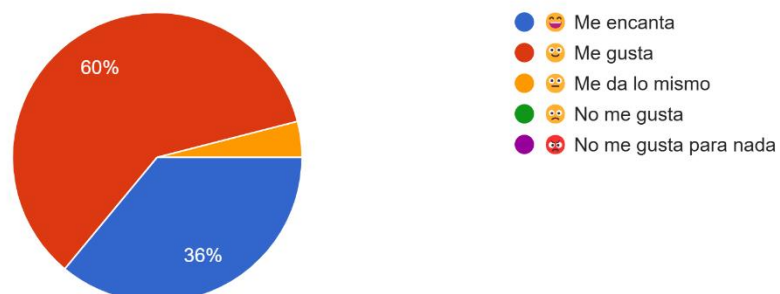
This section presents the findings from the four phases of the action research cycle, categorizing results according to their relevance to the research question. The initial survey, conducted at the beginning of the study, provided a baseline for understanding students' perceptions of vocabulary learning and technology use. To ensure accessibility for young learners, the survey was conducted in Spanish, with parental assistance provided when needed, the questions were designed using simple language and visual aids to facilitate comprehension, considering the children's age. This approach ensures that the responses accurately reflect the students' experiences with interactive platforms for vocabulary learning and aligns with best practices in early childhood research (Campos, 2018, Learning styles, 2023).

A significant number of students showed very positive feelings about using interactive platforms to learn English. A notable 96% of participants said they "love" or "like" using these digital tools in their classes, indicating a significant level of involvement and joy for technology. This high percentage highlights the impact of technology in promoting positive attitudes toward language acquisition and reflects students' positive perceptions of the learning process made possible by these platforms. The following graphic illustrates the percentage of student engagement, further confirming the significant impact that interactive platforms have on the students' motivation and their willingness to participate in language learning tasks. It highlights the extent to which digital tools have successfully captured the students' attention, contributing to their overall positive experience in the classroom.

Figure 2. *Students' engagement levels with interactive platforms.*

¿Te gusta usar las plataformas interactivas en clase para aprender inglés?

25 respuestas



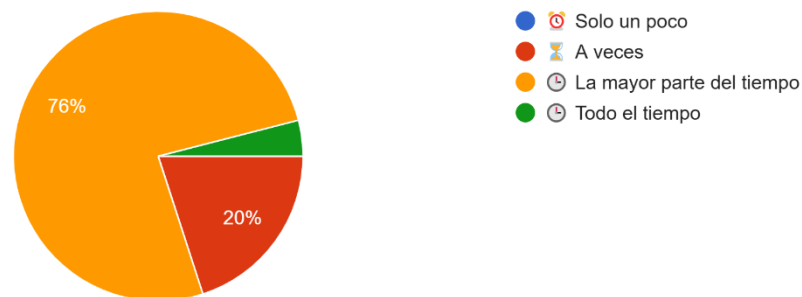
Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

According to the frequency of use, over 76% of students said they used interactive platforms "most of the time" in class, while 20% said they used them "sometimes." According to the findings, incorporating these digital tools into the classroom is a regular and frequent feature of the learning environment rather than a singular instance. The large proportion of students who regularly utilize these platforms suggest that they are not only aware of the resources but also recognize their importance in the everyday learning process, both of which are critical for long-term language acquisition. The following graphic provides a visual representation of the frequency with which students utilize the interactive platforms, further supporting the conclusion that these tools are integral to their language learning experiences. A significant percentage of students consistently engage with the platforms, highlighting the effectiveness of this method in the classroom.

Figure 3. *Time when students use interactive platforms.*

¿Cuánto tiempo usas las plataformas interactivas en clase para aprender nuevas palabras en inglés?

25 respuestas



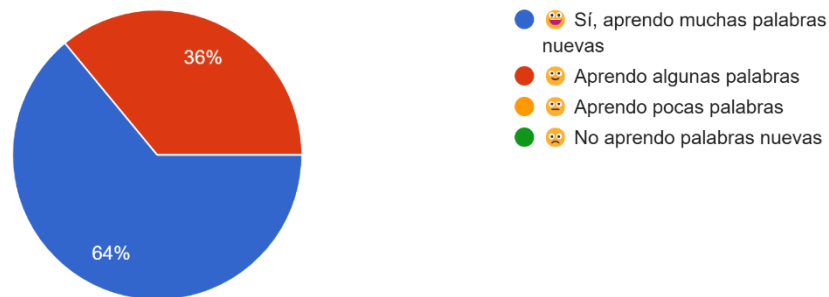
Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

Interactive platforms that combine text, music, and images encourage the development of several cognitive associations, which improve memory recall. These components complement one another by appealing to different senses, which makes learning more interesting and efficient. Students are better able to process and remember new vocabulary

when it is presented to them in the form of written words, sounds, and images. The graphic below presents a visual representation of the survey results, emphasizing students' perceptions of the use of these platforms. The data further underscores the positive impact these interactive tools have on vocabulary learning and retention.

Figure 4. *Perception of new vocabulary with interactive platforms.*

¿Las actividades en las plataformas interactivas te ayudan a aprender palabras nuevas en inglés?  
25 respuestas



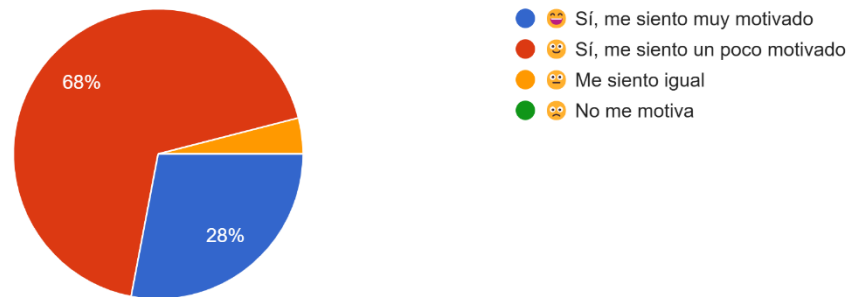
Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

High levels of motivation are necessary for learning a new language, and the survey's results clearly demonstrate the beneficial effects of interactive platforms in promoting this determination. Students who used these digital materials reported feeling "very motivated" or "somewhat motivated" in a remarkable 96% of cases. This large proportion implies that interactive platforms are important in boosting students' enthusiasm and motivation for language learning activities. The graphic below presents a visual representation of the students' motivation levels when using these interactive platforms, further illustrating the strong correlation between technology use and increased motivation in the language learning process.

Figure 5. *Students' motivation when using interactive platforms.*

¿Te sientes más motivado y feliz cuando usas las plataformas interactivas en clase?

25 respuestas



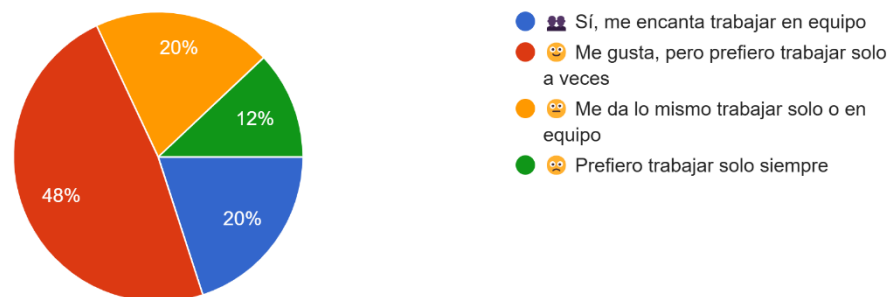
Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

Additionally, approximately 60% of students reported that they enjoy working in teams when using interactive platforms. This finding underscores the positive influence these tools have on fostering collaborative learning experiences. Students' enjoyment of teamwork highlights the potential of interactive platforms to not only enhance individual learning but also promote social interaction and cooperation among peers. The following graphic illustrates the impact of these interactive platforms on students' ability to work collaboratively during communicative tasks. It emphasizes how platforms such as Wordwall, Bamboozle, and Kahoot offline contribute to promoting teamwork, interaction, and mutual support.

Figure 6. *Collaborative work with interactive platforms.*

¿Te gusta trabajar en equipo con tus compañeros usando las plataformas interactivas?

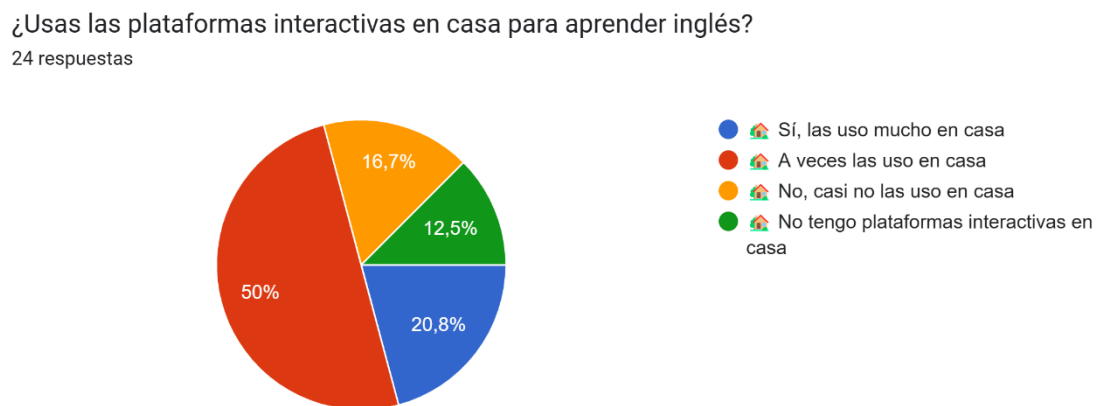
25 respuestas



Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

Although these interactive platforms are commonly utilized in classroom settings, they see less frequent use in home environments. Just 20.8% of students indicated they use them "a lot" beyond school hours, while 50% reported using them "sometimes", and the remaining 29.2% stated they rarely or never used these tools at home. These findings reveal a disconnect between learning practices at school and those continuing at home. The following graphic presents the frequency with which students engaged with interactive platforms outside the classroom environment. This data provides insights into students' motivation to continue learning beyond school hours and their familiarity with digital tools.

Figure 7. *Frequency of students using platforms at home.*



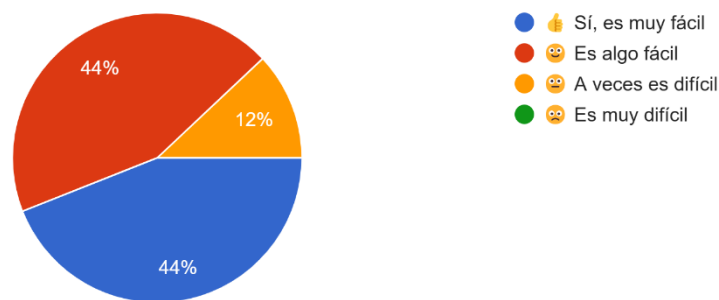
Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

According to Qasserras (2023), for technology-enhanced learning to reach its full potential, students need to interact with digital resources outside the classroom environment. However, restricted parental participation or limited device availability at home may obstruct this practice. According to participant replies, 44% of students said using interactive platforms at home with their parents was very easy, while another 44% thought it was easy. None of those who participated said it was tough, and only 12% said it was occasionally challenging. Considering these findings, most students feel confident using these resources at home, most likely because of parental supervision or encouragement. The fact that some still occasionally struggle, however, emphasizes how crucial it is to guarantee fair access and support at home to optimize the advantages of technology-enhanced learning. The following graphic

illustrates students' perceptions regarding the ease of using interactive platforms at home with the support of their parents. This data offers valuable insights into the level of accessibility and comfort students experience when engaging with digital learning tools outside the classroom setting.

Figure 8. *Students' Perceived Ease of Using Interactive Platforms at Home.*

¿Te parece fácil usar las plataformas interactivas en casa con la ayuda de tus papás?  
25 respuestas

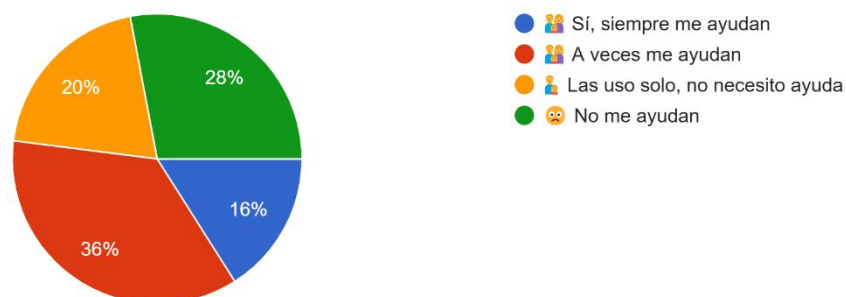


Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

Students were also asked if they received parental assistance when using these platforms to have a better understanding of this dynamic. In this instance, 36% indicated they occasionally received help, compared to just 16% who said they always received it. Furthermore, 28% said they received no assistance at all, and 20% said they used the platforms on their own. The following graphic illustrates the students' experiences with interactive platforms at home.

Figure 9. *Parental Support During the Use of Interactive Platforms at Home.*

¿Tus papás te ayudan cuando usas las plataformas interactivas en casa?  
25 respuestas



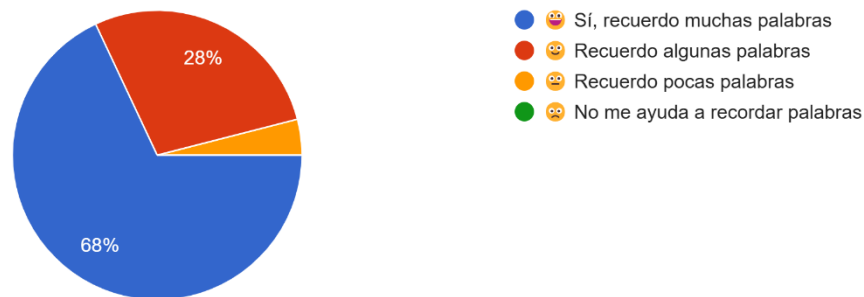
Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

These results indicate that upcoming interventions should concentrate on enhancing parental awareness and offering practical approaches to encourage the use of interactive learning tools in home settings.

Regarding vocabulary retention, 68% of students indicated that they were able to recall "many words" after using interactive platforms, while 28% reported remembering "some words." These findings highlight the positive effect that interactive tools have on vocabulary retention, suggesting that the use of these platforms plays a key role in helping students internalize new vocabulary over time. The graphic that follows provides an overview of how well these technologies helped the students' word recall after they engaged in platform-based activities. The findings demonstrate the important influence that regular language exposure and interesting activities have on long-term vocabulary learning.

Figure 10. *Students' vocabulary retention rates after platform-based activities.*

¿Crees que usar las plataformas interactivas en casa te ayuda a recordar mejor las palabras en inglés?  
25 respuestas



Note. Graph generated by Google Forms based on data from the survey conducted for this research article.

Lesson plans were designed with care to respond to the demands that were discovered throughout the study's investigation phase. The Communicative Language Teaching (CLT) strategy was used to develop communicative, interactive, and context-rich activities that promoted meaningful language use by integrating offline platforms like Wordwall,

Bamboozle, and Kahoot. These exercises were thoughtfully created to give students the chance to practice vocabulary in relevant and engaging situations, which is crucial for successful language acquisition.

The purpose of the six-week implementation phase was to include these interactive platforms in communication tasks in an efficient way. During this time, observations showed significant improvements in student enthusiasm, participation, and engagement. Students actively engaged in the assignments and regularly used the target vocabulary, demonstrating the high effectiveness of using these platforms to enhance vocabulary acquisition. Students were inspired to connect with the content and one another by the interactive nature of the platforms, which promoted deeper learning and improved word memory. The following table provides a concise summary of the main findings, highlighting the positive impact of interactive platforms on student participation and vocabulary development.

Table 2. *Interactive Platforms used in the Implementation Phase*

<b><i>Platform</i></b>	<b><i>Activity type</i></b>	<b><i>Objective</i></b>	<b><i>Results</i></b>
<b>Wordwall</b>	Matching and Categorizing Games	Vocabulary practice in context	Students improved recognition and categorization skills; 80% showed retention in subsequent lessons.
<b>Bamboozle</b>	Cooperative Activities	Interaction and Collaboration	Promoted teamwork; 75% of students used target vocabulary effectively.
<b>Kahoot Offline</b>	Formative Assessments	Fun and Competitive Practice	90% accuracy in identifying vocabulary; increased motivation observed.

Note. Own elaboration.

The coding process revealed three categories that emerged from the analysis of observations logs. The first category, “Engagement and motivation”, highlighted a high level of enthusiasm and active participation among students, especially during competitive and collaborative activities, this category was supported by evidence showing that 85% of

students consistently engaged in class activities, demonstrating a positive response to the use of interactive platforms. The second category, “Vocabulary Acquisition and Retention”, emphasized the improvement in students' vocabulary retention and practical application, approximately 75% of students were observed using target vocabulary consistently in communicative tasks, showcasing the effectiveness of platform-based activities in reinforcing vocabulary. Finally, the third category, “Challenges and Limitations”, identified certain obstacles encountered during the implementation phase. Limited device access affected 40% of the sessions, such as connectivity issues and platform navigation challenges. The table below summarizes the analysis of observation logs based on the coding process. Percentages were calculated using the frequency of observed behaviors relative to the total number of observed sessions.

Table 3. *Categorization of results.*

<i>Category</i>	<i>Code</i>	<i>Observation Evidence</i>	<i>Frequency</i>
<b>Engagement and Motivation</b>	Active Participation	High student engagement during competitive games and collaborative activities.	85%
	Motivation Increase	Noticeable enthusiasm and willingness to participate in tasks using platforms.	80%
<b>Vocabulary Acquisition and Retention</b>	Vocabulary Recall	Consistent use of target vocabulary in context after repeated exposure.	75%
	Practical Application	Successful application of vocabulary in communicative tasks.	70%
<b>Challenges and Limitations</b>	Technical Issues	Occasional connectivity issues and device limitations.	40%

Note. Own elaboration.

The percentages were calculated by dividing the frequency of observed behaviors by the total number of observed sessions and multiplying by 100. For example, the 85% in Active Participation represents the proportion of sessions where students consistently engaged in competitive and collaborative activities.

During the final phase, the focus was on assessing the impact of interactive platforms on vocabulary retention and communicative competence. Observation logs were systematically analyzed through the coding process to identify patterns and measure progress. The coding process revealed that students showed significant progress in vocabulary use. Initially, many students could only recognize isolated words; however, by the end of the implementation phase, 75% of students were consistently using the target vocabulary in context. This progress was evidenced through activities where students effectively described objects, actions, and places using learned vocabulary. The improvement in vocabulary retention was particularly notable when students participated in competitive and collaborative games, where the need to recall and apply vocabulary in real-time enhanced their retention and confidence. Additionally, the platforms' interactive and dynamic nature promoted motivation and enthusiasm. The analysis showed that 85% of students were actively engaged, with evident excitement and eagerness to participate in tasks. This motivation contributed to a positive learning environment where students felt encouraged to take risks and practice their language skills freely.

However, the evaluation also brought attention to certain limitations. In 40% of the sessions that were observed, technical challenges such as sporadic network problems and restricted device access were experienced. The overall efficacy of the learning process was impacted by these difficulties, which occasionally impeded student engagement and disturbed the activities' natural flow. Even though these problems were quickly resolved and controlled throughout the sessions, they served as a reminder of how crucial it is to have dependable equipment and backup plans when using digital tools in the classroom. The occurrence of these challenges highlighted the fact that the technological infrastructure and assistance offered are just as important to the effective integration of interactive platforms as the quality of the tools themselves.

Interactive platforms significantly improved communicative ability and vocabulary acquisition, according to the reflection process. Students were given lots of chances to utilize the language practically through the integration of communicative tasks with digital resources. This improved their vocabulary retention and increased their confidence in speaking the target language in general. By allowing students to interact with the language

in authentic settings, these platforms enhanced the significance and relevance of their education. Despite the technical challenges encountered during the implementation phase, the results underscore the overall value of these tools in creating an engaging and effective learning environment. The ability of interactive platforms to motivate students, increase participation, and support vocabulary learning demonstrates their potential as powerful tools in language education. The combination of these factors highlights the effectiveness of integrating digital tools with communicative tasks to promote language development in young learners.

## **Discussion**

The data gathered from this study demonstrates that interactive platforms have a significant impact on first-grade children's vocabulary learning and retention, particularly when applied to communicative tasks. In this section, we consider how these findings complement the students' backgrounds and our own observations considering key educational principles mentioned above.

Wordwall, Bamboozle, and Kahoot offline were among the platforms used to promote student motivation and active engagement, which improved vocabulary retention. This is in line with the Communicative Language Teaching (CLT) approach, which prioritizes interaction and language use in authentic circumstances as the main objectives of language learning. These platforms promoted meaningful usage of the target language by giving students the opportunity to practice vocabulary through genuine and intentional discussion. Furthermore, by relating new terminology to students' prior knowledge and real-world situations, the exercises promote relevant learning while improving comprehension and retention. Learners were able to understand the language in a relevant and useful way by employing dynamic and engaging activities. By allowing students to build on existing information, this method strengthened long-term retention by fostering meaningful relationships.

The application of the Zone of Proximal Development (ZPD) was evident as the teacher guided students through tasks slightly beyond their independent capabilities, providing scaffolding and support as needed. The interactive nature of the platforms allowed students to progress at their own pace, while targeted guidance ensured they could achieve higher

levels of understanding and performance. This was particularly valuable for PIAR students, who benefited from individual support and adaptable activities that met their unique needs. It was observed that teacher guidance played a crucial role in facilitating learning, emphasizing the importance of the teacher's role as a mediator who adapts the tools to meet the learners' needs. Consistent monitoring and personalized feedback helped maintain focus and engagement, ensuring meaningful and effective learning experiences.

The teacher's function as a guide was one of the most significant findings of this study. To ensure that students were making effective use of the platforms, the teacher's engagement was essential. We observed how teacher mediation affected the learning process by providing focused assistance and helping the students with challenging activities. Activities that required students to produce language in a communicative manner whether through speaking or listening made this very clear. The findings also demonstrate how interactive platforms promote communicative competence by encouraging learners to engage in real-life language use. Students were able to practice speaking, listening, and responding in English, boosting confidence and fluency.

This study has a few limitations that need to be considered. The comparatively small sample size is one drawback because the study was limited to a certain subset of first graders. This implies that the results might not apply to different ages or student populations. Furthermore, the study did not fully investigate other language abilities like grammar or writing, instead concentrating on vocabulary acquisition. Future studies should be expanded to encompass a more thorough method of language acquisition. The study's time range, which might not have been sufficient to assess the long-term effects of interactive platforms on language acquisition, was an additional limitation. How these platforms impact retention over an extended length of time may be the subject of future research.

In summary, interactive platforms significantly improve vocabulary learning and retention. But only when combined with communicative, cooperative, and inclusive teaching strategies do they reach their full potential. Young learners need a balanced strategy that incorporates pedagogy, technology, and social interaction to achieve the best language acquisition results. Focusing just on technology is insufficient; teachers still play a crucial role in promoting and directing learning. To ensure that technology and pedagogy collaborate to produce

interesting, significant, and productive learning experiences, future research should keep examining this relationship. To guarantee that every student realizes their maximum potential in language development, it is crucial to think about how these platforms can be continuously modified and incorporated into many educational situations as we go forward.

### **Conclusion**

In accordance with Misirova (2022) and Xin Li et al. (2021), who found that technology-enhanced learning environments improve vocabulary retention through engagement and multimodal exposure, this study's findings demonstrate that interactive platforms, when integrated into communicative tasks, significantly enhance vocabulary acquisition and retention among first-grade learners. From the research question to the data analysis, a clear connection emerged between student engagement, interactive technology, and vocabulary learning outcomes. By fostering realistic language use in everyday contexts, the study showed that these tools support meaningful learning, motivation, and participation of which are in line with the principles of Communicative Language Teaching (CLT). By giving students, the chance to communicate with a purpose, the platforms reinforced vocabulary acquisition in a dynamic and contextualized way.

However, several challenges and areas for improvement were identified. One of the main challenges is the need for continuous teacher support to ensure effective and meaningful use of these platforms. This is particularly crucial for students struggling with reading skills in their mother tongue (PIAR), who require additional guidance and scaffolding to fully benefit from interactive tools. The findings underscore that technology, while valuable, cannot replace the personalized pedagogical support essential for fostering meaningful learning and language development.

It is important to recognize a few research gaps in addition to the investigation. First, only students from one bilingual school were included in the study's sample, which would have limited the range to which the results might be applied. A more varied sample could provide a clearer overview of the ways in which interactive platforms affect vocabulary acquisition in different learning environments. Additionally, there is a knowledge gap regarding interactive platforms' long-term consequences on learning because their effects on vocabulary retention were not examined.

Contextual elements like parental participation and student motivation, which weren't thoroughly analyzed but may have affected the outcomes, represent another significant gap. To have a deeper understanding of how these platforms work in various learning situations, future study might take these elements into account. Additionally, the study only looked at a few platforms; expanding the scope to include more interactive tools could provide additional information about the best platforms for vocabulary learning. Finally, the research did not specifically address how students with reading difficulties, particularly those still developing literacy skills in their native language, interact with these platforms. Investigating how interactive platforms can be adapted for students with learning challenges would be an important area for further research.

This research provides a useful viewpoint on the application of educational technologies for communicative vocabulary instruction. This study advances the area. It emphasizes how crucial it is to match digital tools with pedagogical ideas like meaningful learning and the Zone of Proximal Development (ZPD) to establish inclusive and productive learning environments. According to the results, interactive platforms are excellent resources for language acquisition, but their usefulness hinges on careful integration, assistance from teachers, and ongoing modification to accommodate students' changing requirements.

In conclusion, interactive platforms, especially when based on good teaching methods, have the potential to improve vocabulary acquisition in communicative situations. It also emphasizes how important it is for teachers to critically examine how they utilize technology, making sure that it supports and supplements conventional teaching techniques rather than taking their place. The research's conclusions inspire more investigation into the efficient use of educational technology to promote inclusive and thorough language learning.

## **References**

- Albiladi, W. S., & Khlood K., A. (2019). Blended Learning in English Teaching and Learning: A Review of the Current Literature. *Journal of Language Teaching and Research*, 10, 233-238. doi:DOI: <http://dx.doi.org/10.17507/jltr.1002.03>
- Al-Jarf, R. (2022). Learning Vocabulary in the App Store by EFL College Students. *International Journal of Social Science and Human Research*, 5, 216 - 225.

- Andrews, D., Lieshout, E., & Kaudal, B. B. (2023). How, Where, And When Do Students Experience Meaningful Learning? *International Journal of Innovation in Science and Mathematics Education*, 28-45.
- Ausubel, D. P. (2002). *Adquisición y retención del conocimiento: Una perspectiva cognitiva*. Ediciones Morata. Recuperado de [https://books.google.com/books/about/Adquisici%C3%B3n\\_y\\_retenci%C3%B3n\\_d el\\_conocimien.html?id=VufcU8hc5sYC](https://books.google.com/books/about/Adquisici%C3%B3n_y_retenci%C3%B3n_del_conocimien.html?id=VufcU8hc5sYC)
- Campos, M. J. (2018). Benefits of Visual Supports in Learning. Retrieved from <https://www.mariajesuscampos.es/beneficios-de-apoyos-visuales-en-el-aprendizaje/>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- García García, E. (2024). Las plataformas digitales como recurso didáctico para reforzar el aprendizaje del inglés en educación primaria. *Ciencia Latina Internacional*, 8, 3006 - 3022. doi:[https://doi.org/10.37811/cl\\_rcm.v8i1.9633](https://doi.org/10.37811/cl_rcm.v8i1.9633)
- Gomez-Giraldo, J. S. (2021). Promoting Dialogic Action through the Expansion of. *HOW*, 29, 84-104. doi: <https://doi.org/10.19183/how.29.1.647>
- Gómez, J., & Molina, A. (2020). La educación inclusiva y el enfoque diferencial en Colombia. *Revista Colombiana de Educación*, 79, 73-92.
- Kemmis, S., McTaggart, R., & Nixon, R. (2014). *The Action Research Planner. Doing Critical Participatory Action Research*. Springer.
- Khidirova, M. K., & Nashirova, S. B. (2023). Communicative Task-Based Approach in ELT. *Pindus Journal of Culture, Literature, and ELT*, 6, 111-115.
- Learning Styles. (2023). The Power of Visual Learning in Education. Retrieved from HYPERLINK "<https://estilosdeaprendizaje.org/el-poder-del-aprendizaje-visual-en-la-educacion/>" \t "\_new" <https://estilosdeaprendizaje.org/el-poder-del-aprendizaje-visual-en-la-educacion/>
- López-Rincón, C., & Pérez-Salazar, D. (2021). Estrategias pedagógicas para la inclusión educativa. *Revista Educación y Desarrollo Social*, 15(2), 165-182.
- Misirova, N. (2022). Teaching English and Innovations at Schools. *International Journal of English Literature and Social Sciences*, 7, 141-147. doi:10.22161/ijels
- Ministerio de Educación Nacional. (2017). Decreto 1421 de 2017: Por el cual se reglamenta en el marco de la educación inclusiva la atención educativa a la población con discapacidad. Recuperado de <https://www.suin-juriscol.gov.co/viewDocument.asp?ruta=Decretos/30033428>

- Prieto-Andreu, J., Gómez Escalonilla Torrijos, J., & Said-Hung, E. (2022). Gamificación, motivación y rendimiento en educación: Una. *Revista Electrónica Educare*, 26, 1-23. doi:<http://doi.org/10.15359/ree.26-1.14>
- Qasserras, L. (2023). Systematic Review of Communicative Language. *European Journal of Education and Pedagogy*, 4, 17-23.
- Reiser, R. A., & Dempsey, J. V. (2018). *Trends and issues in instructional design and technology* (4th ed.). Pearson.
- Rofiah, N. L., & Waluyo, B. (2024). Effects of gamified grammar and vocabulary learning in an english course on EFL students in Thailand. *Teaching english with technology*, 24, 22-46. doi:  
<https://doi.org/10.56297/vaca6841/LRDX3699/DJL1101>
- Sartika, K. D., Heriyawati, D. F., & Elfianto, S. (2023). The use of Blooket: A Study of Student's Perception Enhancing English. *Academic Journal of English Language and Education*, 7, 357-368. doi: <http://dx.doi.org/10.29240/ef.v7i2.7406>
- Teymouri, E. (2024). The Role of Digital Tools in Enhancing Vocabulary Acquisition: A Study on Interactive Platforms. *Journal of Language Teaching and Learning*, 14(2), 101-115.
- Vargas-Saritama, A., & Espinoza-Celi, V. (2024). Gamified Learning Environments for Vocabulary Development in EFL Contexts. *Innovations in Language Education*, 29(1), 45-60.
- Xin Li, E. S., Lik Chiew, M. T., & Yunus, M. M. (2021). Improving Lower Primary Students' Vocabulary Retention. *International Journal of Academic Research in Business & Social Sciences*, 11, 1514-1526.
- Zhang, Y. (2022). Interactive Digital Tools for Vocabulary Learning in Young EFL Learners. *International Journal of Educational Technology*, 21(3), 78-92.