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TITLE

The impact of using Kahoot on developing EFL ninth- grade students' vocabulary.
Research work presented to obtain the academic title of Magister in English Language Pedagogy.

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Dedication

To my beloved baby,

When the day comes that you can read these words, I want you to know how much I love you. You are my constant source of inspiration and motivation. Despite the moments when I had to be absent while mommy was studying, your unconditional love has always been my greatest strength.

Anlly M.

First of all, I want to dedicate this thesis to God for being my guide during these years of study, without his wisdom and blessings I would not have achieved this goal. To my beloved parents, Gloria and Efren, for being my support and source of inspiration, whose words of encouragement pushed me to continue forward to fulfill my dreams. To my brothers and my sisters, who have undoubtedly thrust on me, providing me their support during the challenges that I faced throughout my master's degree.

This work is also dedicated to my dear Husband Brayan, who has been my source of motivation to improve myself every day, motivating me day by day to achieve this long-awaited goal. I want to thank him for his patience and love. Finally, I would like to dedicate this thesis to my son Mathias, who has been my greatest inspiration to complete this master's degree and by whom I have been motivated to achieve this title, thank you my son for motivating me every day.

Diana O

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Resumen

La presente investigación tiene como objetivo analizar el impacto de Kahoot como recurso tecnológico en el aprendizaje de vocabulario de los estudiantes de inglés como lengua extranjera. Este estudio se llevó a cabo en un colegio público de la provincia de Loja, donde participaron un total de 40 estudiantes de noveno año de Educación Básica. Ellos fueron divididos en dos grupos, uno de ellos asistió a clases tradicionales, mientras que el otro grupo recibió clases utilizando la plataforma Kahoot. Para lograr el propósito de este estudio, se implementó el método cuantitativo y cualitativo. La información se recopiló a través de un pre-test, un post-test, pre survey y un post survey, para lo cual los resultados se plasmaron en tablas. Los hallazgos demostraron que Kahoot facilitó la adquisición de vocabulario de los estudiantes ya que esta plataforma permitió a los participantes tener acceso a una gran variedad de recursos que les ayudaron a aprender vocabulario de una mejor manera. Además, los alumnos mencionaron que les gustaría seguir usando Kahoot ya que esta herramienta les permite adquirir vocabulario divirtiéndose mientras aprenden.

Palabras clave: Kahoot, vocabulario, estudiantes.

Abstract

This research aims to analyze the impact of using Kahoot on developing EFL ninth-grade students' vocabulary. This study was carried out in a public school in the province of Loja, where 40 students voluntarily participated. They were divided into two groups; one attended traditional classes, while the other received classes using the Kahoot platform. Researchers implemented a quantitative and qualitative method to gain a more comprehensive understanding of the object study. A pre-test and post-test were applied to students to measure the effectiveness of this technological tool. Also, a survey and interview were conducted to determine students' perceptions of this implementation. Results demonstrated that Kahoot facilitated students' vocabulary acquisition as this platform allowed the participants access to various resources that helped them learn vocabulary better. In addition, students felt engaged and motivated when working with this tool, mentioning that they would like to continue using Kahoot since this tool allows them to acquire vocabulary while having fun while learning.

Keywords: Kahoot, vocabulary, students.

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Introduction

Information and Communication Technologies (ICT) are necessary tools that allow English teachers to integrate different skills and improve the learning process. Incorporating technological resources in the English classroom has many advantages that must be taken into consideration. Harmer (2007). For example, the significant increase in students' motivation as technology helps to increase the student's interest in learning in an easier and more fun way.

Likewise, technology minimizes students' fears and pressure to participate since they are already familiar with new technologies. In addition, technological resources encourage autonomous learning and promote critical thinking by considering the different learning styles. Finally, technology promotes the construction of a wide-range vocabulary, which will make learning meaningful and valuable for students (Vergara and Balboni, 2011).

Mujtaba and Mustafa (2013) mentions that ICT is a fundamental element to learning English vocabulary as a foreign language, as it provides learners with opportunities to facilitate access to various activities that help students acquire the necessary vocabulary to correctly convey their ideas.

Melor, Lubis, and Lin (2009) also claims that the use of ICT for learning EFL vocabulary allows learners to access all kinds of information instantly and that is why technology represents a great opportunity for students to be exposed to wide range of vocabulary. Thus, incorporating new digital tools or resources can help students to be exposed to information and how vocabulary is used in different topics. Therefore, students will learn vocabulary more easily. Kahoot is the first of

many technological resources that facilitate vocabulary learning. This resource has very dynamic activities that are of interest to students such as memory games, quizzes, videos, images, and diagrams to your questions to amplify engagement, etc. Thus, students are interested in learning vocabulary in an easy and fun way (Balboni et al., 2011).

This research project was conducted at Colegio de Bachillerato Manú in Loja, Ecuador, an educational institution, that offers English as a Foreign Language (EFL) subjects to its students. However, traditional vocabulary teaching methods have shown limited effectiveness in engaging students and promoting vocabulary acquisition. Asqa (2013) mentions that to face this challenge, it is necessary to explore the potential impact of technological resources on the vocabulary learning of students of English as a foreign language. In particular, the proposal aims to investigate the use of Kahoot as a technological resource to enhance vocabulary learning among at Colegio de Bachillerato Manú students during the 2023-2024 academic year.

Further research is needed to explore Kahoot's impact on English vocabulary development among ninth-grade students at Colegio de Bachillerato Manú. While Kahoot has proven effective in language teaching, its application in public high schools remains understudied. The study aimed to address the following research questions: Which vocabulary method, the traditional or Kahoot is more effective in enhancing vocabulary skills? How effective is Kahoot in enhancing EFL Vocabulary in 9th-grade students at Colegio de Bachillerato Manú? and What are the perceptions of students about using Kahoot to enhance EFL vocabulary?

This research is justified by the need to add new vocabulary teaching and learning strategies through a technological tool. By investigating the impact of Kahoot, this study can contribute to improving the vocabulary acquisition and engagement of EFL learners in the specific context. The results can inform the school's language teachers, curriculum developers, and the Rector about the effectiveness of Kahoot and guide their decision-making processes in terms of its integration into the curriculum.

This research aligns with the university's research line of innovation and applied technologies in language learning activities. By examining the impact of technology resources on vocabulary acquisition outcomes, the study is also aligned with the topic of implementing TICS TO improve the learning process. It involves empirical research to collect data on EFL students' vocabulary acquisition outcomes, perceptions, and attitudes toward Kahoot and the potential challenges and opportunities of incorporating it into the EFL curriculum.

This research aims to analyze the impact of using Kahoot on developing EFL ninth-grade students' vocabulary.. This study was carried out in a public school in the province of Loja, where 40 students voluntarily participated. They were divided into two groups; one attended traditional classes, while the other received classes using the Kahoot platform. Researchers implemented a quantitative and qualitative method to gain a more comprehensive understanding of the object study. A pre-test and post-test were applied to students to measure the effectiveness of this technological tool. Also, a survey and interview were conducted to determine students' perceptions of this implementation. Results demonstrated that Kahoot

facilitated students' vocabulary acquisition as this platform allowed the participants access to various resources that helped them learn vocabulary better. In addition, students felt engaged and motivated when working with this tool, mentioning that they would like to continue using Kahoot since this tool allows them to acquire vocabulary while having fun while learning.

The students have an A1 level of English, which means they have basic proficiency in the language. The main problem is the lack of knowledge of the vocabulary in English as a foreign language, which affects their language learning. Limited vocabulary hinders students' ability to communicate effectively. They struggle to find the right words to express their thoughts, ideas, and opinions, resulting in frustration and difficulty engaging in conversations or writing coherently. In addition, the lack of internet access at home has affected their language proficiency. Therefore, the research aims to determine the impact of technological sources when teaching vocabulary.

Ultimately, the research benefited students by providing information on effective language teaching methods that can be tailored to their specific needs and limitations. By improving their vocabulary skills, students can be better prepared to communicate in English, which can open opportunities for their future education and employment prospects.

The study was developed in a school consisting of two buildings, each with two floors. The school has a total of 12 classrooms. In addition, there are two departments, the technical area and the science area. This information provides an understanding of the physical infrastructure and facilities available at the school

where the research was conducted. The availability of the computer center suggests that there is enough space to accommodate the students and perform the activities using Kahoot, making it effective. It can be emphasized that in the institution the students only have 3 hours of classes of English a week, so this affects the performance of the students and progress in learning the vocabulary of the English language. However, the institution has the technological resources to be able to make use of the Kahoot digital platform and achieve different learning, obtaining significant results.

In addition, the students at Colegio de Bachillerato Manú learn English as a foreign language with traditional teaching methodology, following the study plan established by the Ministry of Education. Likewise, the Institution's technological resources have not been adequately used in implementing innovative teaching methodologies for second language learning.

The practical contributions of this proposal include providing evidence-based insights into the effectiveness of Kahoot for vocabulary learning, informing the development of strategies and guidelines for integrating Kahoot into the EFL curriculum and improving vocabulary teaching practices to increase student engagement and vocabulary acquisition.

By providing evidence of excellent vocabulary teaching procedures using technological resources, the proposal addresses a need for professional development among EFL teachers at Colegio de Bachillerato Manú. Therefore, this proposal contributes to the field of EFL vocabulary learning by merging quantitative and qualitative data to get a comprehensive understanding.

This study offered more insights into using technology to improve 9th-grade students' vocabulary through action research in which an intervention measured the impact of the Kahoot application on these students' vocabulary. The project investigated Kahoot's potential as a technological resource for improving vocabulary learning and increasing the incorporation of technology in language education.

Finally, the proposal aims to increase these EFL students' vocabulary which is an important part of language competency and can help them succeed academically and in their future possibilities in a globalized society.

The sections of this study were organized into three chapters: Literature Review, Method, and Results and Discussions. Chapter I establishes the theoretical position and justification of the fundamental aspects related to the topic, supporting the problem in question. It analyzes bibliographic sources of various authors, and the background of the problem, linking the theoretical basis with the solution perspectives. Chapter II details the methodological strategy used to achieve the specific objectives of the degree work. It includes methods and techniques used, research instruments, target group, processing, and analysis of results. Chapter III deals with the discussion and analysis of results in correspondence with the elaboration and validation of a proposal, stating benefits, viability, and feasibility. It describes the structure, characteristics, objectives, and technological requirements of the proposal. Likewise, conclusions are established based on the outstanding results and recommendations, which can be considered for the future.

Chapter I

1.1. Literature Review

In the field of English language teaching, innovative tools and strategies are constantly emerging to enhance students' learning experience. This mixed method action-research study was focused on the impact of implementing Kahoot! to develop vocabulary in ninth-grade students. This section provides some concepts and definitions of the variables to be analyzed in detail, a brief introduction to frame the context of the research, and describes related theses or research papers. This research not only addresses a critical area of language pedagogy but also contributes to the broader discourse on the integration of technology in education.

This section includes bibliographic information related to the topics of the present research, which was extracted from different sources such as books, studies, and scientific journals. They are analyzed in detail to support the research proposal about the implementation of Kahoot to improve vocabulary skills. Furthermore, some definitions such as Kahoot application, word recognition, and kind of vocabulary will be given, and, in turn, the theoretical focuses of gamification and Useful ICT to Learn EFL Vocabulary will be added to this chapter.

1.2. Kahoot as an independent variable

1.2.1 Kahoot Definition

According to Altawalbeh & Irwanto (2023) Kahoot is a free game-based learning platform that allows the entire class to participate at the same time. Kahoot can be used to improve student participation and comprehension through real-time

quizzes. Kahoot allows users to design surveys, a discussion platform, and online examinations to increase engagement.

Currently, didactic resources are very popular in the classroom. There are many platforms that not only allow the active participation of all students but also generate immediate feedback, such as the Kahoot platform.

1.2.2 Using ICT in EFL Learning

The use of ICT in the classroom has opened new possibilities for learning English as a foreign language. ICT provides teachers with a variety of technological resources that contribute positively to the learning process. Using technology in EFL classes facilitates students' learning assessment because teachers can use many devices or technological resources such as computers, different websites, and apps to evaluate the learner's progress (Solano, 2017).

ICT Mishra & Koehzler (2016) affirm that ICT plays an important role in the EFL learning process. In this case, when the learners use dynamic resources such as games applications, videos, or others, the environment of the classroom becomes more enjoyable. For this reason, it is important to emphasize that integrating technology into the classroom, demands educators to develop technological skills and look for innovative resources online to engage students and maintain a dynamic environment in the class (Nomass, 2013).

1.1.3 Advantages

According to Hasram et al. (2020) affirm that technology tools are fundamental tool that allows English teachers to integrate different language skills into learning. Various resources such as videos, websites, blogs, and social networks can be used. Certainly, technology provides the opportunity for students to find entertainment and motivation to share information, explore new areas of knowledge, be autonomous, and above all build better social skills.

Additionally, Zhu (2020) states incorporating technology tools in the English classroom has many advantages such as, for example, the significant increase in students' motivation seeing that it minimizes fears and pressure due to the knowledge they have in the field of new technologies.

Thus, it encourages autonomous learning, encourages critical thinking, and respects different learning styles and rhythms, and, last but not least, the construction of better social skills is advantageous because it makes learning meaningful and valuable for them (Torres,

1.3. Useful ICT to Learn EFL Vocabulary

Learning English vocabulary through ICT helps students learn new words in many ways facilitating their learning process (Tebeweka, 2021). With the use of ICT, learners can work in several technological tools and resources that can be adapted to their needs (Endang et al., 2019).

Kahoot, Educaplay, and Quizlet are the most used ICT resources used to learn vocabulary. These resources offer a variety of activities and games from many educational levels in both types of learning, formal and informal (Gonzalo & Camilo, 2019).

Kahoot is a platform that aims to be a fusion between a learning tool and games. The objective of this technological resource is that students can learn by playing, for which they can have access to a series of questionnaires or kahoots with questions and answers, surveys, and various other types of elements (Gonzalo & Camilo, 2019).

Quizlet is another technological application that aims to facilitate vocabulary learning. It is characterized by presenting a series of words with their respective graphics that facilitate the acquisition of vocabulary. Likewise, it allows for reinforcing the content learned through games that in the end present the results through statistical figures to reinforce the necessary aspects (Gonzalo & Camilo, 2019).

Another technological resource that can be used in vocabulary learning is Educaplay. It is a platform that allows learners to reinforce vocabulary by playing a variety of games. This platform is aimed to help students learn while having fun since it offers a variety of interactive activities that can be adapted according to the student's needs such as riddles, complete sentences, crosswords, dialogues, order letters, order words, creating maps, word search, video quiz and more (Educaplay, 2021).

The teacher can use some games to help students to learn vocabulary. Playing games can help students improve their vocabulary especially when they have to follow stories, so they need to understand the general idea of the game, an aspect that allows the student to be interested in learning unfamiliar vocabulary and keep a vocabulary glossary in to understand and successfully win the game (Tebeweka, 2021).

Technological tools should need to be considered in learning vocabulary since they create a good class environment. They increase the dialogue between students and keep students active while developing vocabulary activities, especially when learning through gamification (Gonzalo & Camilo, 2019).

1.2.3 Gamification

According to Lin, M., & Kaur (2018) Gamification is the incorporation of games into learning activities, often known as gamification, in the context of education refers to the usage of educational systems designed with gaming designs but implemented in non-game situations, such as education.

Technology has grown by leaps and bounds and information technology, together with the Internet, has brought with it a diversity of didactic resources applied to the field of education, creating an opportunity to improve the teaching-learning process.

1.2.4 Kahoot!: Gamification for Student Motivation and Learning

According to Lin, M., & Kaur (2018) gamified education relies on intrinsic motivation, stimulating an individual's involvement. People enjoy (or experience pleasure) while learning, game-based learning approaches boost learners' interest in the subject matter, making them more engaged and focused on their learning.

Kaur & Nadarajan (2020) states that the primary goal of using gamification-based classroom activities is to "motivate and increase user activity and retention" through a "rewards and reputation system." Multimedia materials in classroom teaching enhance independent and collaborative learning, foster critical thinking and problem-solving skills. Game-based activities motivate students to learn autonomously, reducing language learning concerns, and creating a positive atmosphere. Following instructions in games provides feedback and exposure to the target language, aiding language acquisition.

Gamification is sustainable or strengthened dependent on an individual's willingness to attain the desired objective. This urge, however, is conditional on the individual's level of enthusiasm. In essence, games in any form can improve classroom motivation through involvement. Lin, M., & Kaur (2018) defined Kahoot! as an online game that encourages both collaboration and autonomy in the classroom.

1.2.5 Advantages of the use of computer technology in EFL instruction

According to Mubarak (2013), the utilization of computer technology in English as a Foreign Language (EFL) instruction offers numerous benefits. Firstly, it makes the teaching-learning process more engaging and simpler. Students gain

access to independent learning opportunities through the Internet, facilitating self-paced learning and providing resources for practice and language use. Moreover, learners can assess their progress and receive feedback, fostering self-directed learning and relating language skills to career and personal development. Additionally, computer-assisted instruction shifts the focus to the learner, encouraging autonomy and collaborative learning experiences. Furthermore, the integration of technology promotes student participation, interaction, and active engagement, ultimately providing crucial exposure to the target language and fostering a positive classroom atmosphere for both learners and teachers.

1.2.6 How does Kahoot! work?

According to Lin, M., & Kaur (2018), learning games like Kahoot! can be used to assess whether learning objectives have been met. As a result, game-based learning activities such as quizzes serve the aim of reviewing topics given. Learning games can be used to teach a variety of theories, skills, and behaviors, as well as languages, creativity, and communication.

Kahoot is a free platform, that teachers can access through the following link <https://kahoot.com/> and create their account. The platform allows teachers to create their own quizzes, use or copy quizzes created by other users, and get a report of the students evaluated. Students do not need to register, just with a code they can access and participate in the resource shared by the tutor.

On the other hand, (Llerena & Rodríguez, 2017) explained that when writing questions on this site, you have several possibilities. Uploading films, photos, and music to excite students' thinking or simply bring a cheery spirit to the

quiz are options. Questions can be timed from 10 to 120 seconds to allow pupils to select the proper option for the displayed question. Character limits apply to both the question and the responses. Questions are limited to 80 characters, while replies are limited to 60 characters.

Likewise, Graham (2015) argues that discussion Kahoot consists of only one question with no correct or incorrect response and no points allocated; results are displayed at the end of the timed answer period and can be utilized to start a debate. Similarly, survey Kahoots do not contain right or wrong answers or distribute points, but they can have an unlimited number of questions. Furthermore, Graham (2015) states that Kahoot! has a large user community of educators eager to share their expertise. Check out the "Kahoot! Journal" for more information, such as "hacks, getting started tips, free learning games, and other inspiring ways to play Kahoot!" (<http://blog.getkahoot.com/>)

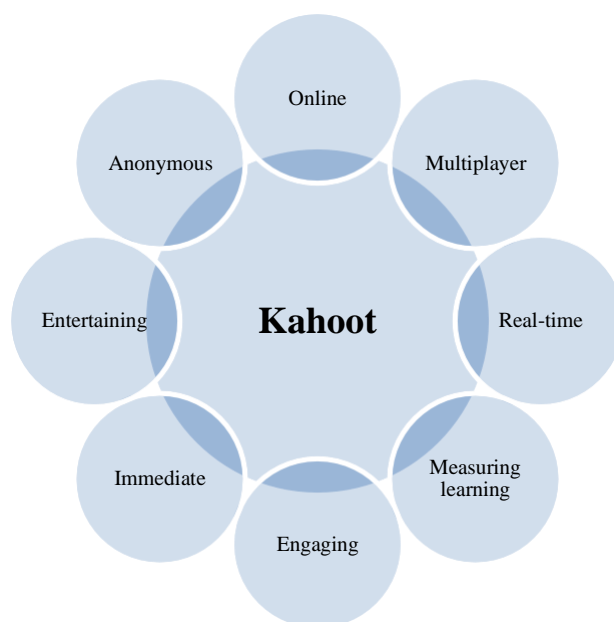
Games in the classroom, when intelligently developed, promote student motivation and engagement, thus improving learning. The Kahoot! platform, with its easy game-building tool, allows instructors to avoid the technical challenges of developing a digital game and instead focus on instructional objectives. According to Torres (2021) users should understand three key aspects of Kahoot!: Create, Play, and Share. In the Create phase, users swiftly generate questions or modify templates with multimedia elements. During Play, setting up groups enhances engagement, with students answering questions on their devices. In the Share phase, participants can construct and share Kahoot! games for collaborative learning.

1.2.7 Characteristic of Kahoot!

According to Mahbubah & Anam (2022) Kahoot has eight features:

Figure 1

Kahoot characteristics



Note: Adapted from “Students’ perceptions on the implementation of Kahoot! In English Language teaching”, (p. 24), Mahbubah & Anam, 2022, *Lingua Scientia*, 29 (1).

1.2.8 Theory base of Kahoot to improve vocabulary

1.1.8.1 Richard Mayer’s Cognitive Theory of Multimedia Learning

This theory supports the independent variable as Multimedia Learning let people learn from multimedia them. Mayer (2014) statea that learning occurs through the construction of mental models from verbal and visual stimuli. Learners engage in processes such as selecting, organizing, and integrating information to build these models. The theory emphasizes the effectiveness of presenting

information in both words and pictures to facilitate learning, supported by research findings.

1.1.8.2 Piaget's cognitive development theory. On the other hand, regarding vocabulary variables Piaget's Cognitive Development Theory focuses on the stages of mental development in children, emphasizing the importance of experiences, assimilation, and adaptation in learning. Piaget delineates four stages: sensorimotor, preoperational, concrete operational, and formal operational, each characterized by specific cognitive achievements. Piaget's theory provides insights into age-appropriate instructional practices and the acquisition of vocabulary through cognitive development stages. **(Rabindran & Madanagopal, 2020).**

1.3 Vocabulary as dependent variable

1.3.1. Definition

Vocabulary is an essential aspect of a language that can be defined as a set of words that make up Foreign Language Learning (Odinokaya, et al., 2021). In the same way, Lightbown & Spada (2017) determine that vocabulary is considered an important component in language acquisition and one of the elements of language that a speaker needs to express their ideas.

Additionally, Ghazal (2007) states vocabulary is like the blocks of the language since these words are used to label ideas, things, and actions allowing people to transmit the intended meaning. Vocabulary can also refer to the set of words that a person uses daily to communicate their ideas. Nukus (2021) states that a wide range of vocabulary is perceived as an important aptitude for the

development of all language skills within communication, as they are considered to demonstrate intelligence, level of education, and cultural background.

For this reason, it is crucial that learners master vocabulary since it allows them to express ideas and understand other people's sayings (Mofareh, 2015). Certainly, vocabulary learning is essential for language learning since if students have a limited vocabulary, it will interfere with their correct and fluent communication (Romero-Villamil & Guzman, 2020).

1.3.2 Importance

English vocabulary is essential for effective communication since without sufficient knowledge of words people cannot understand others or express their ideas (Norrbitt, 2019). Certainly, Pikulski & Templeton (2004) assert that without grammar people can express very little, but without vocabulary, nothing can be transmitted. Even without placing words in the correct order or using appropriate grammar, people can still communicate by using words and expressions (Lightbown & Spada, 2013).

Similarly, Alfadil (2020) claims that the acquisition of productive vocabulary is important to developing learners' communication skills. Encarnación & Elizabeth (2019) highlights another essential aspect of vocabulary. In which, students instinctively recognize the importance to learn vocabulary in the English language. That is to say, students feel the need to learn words that help convey a message. Therefore, Cynthia & Johnson (2019) shows that students should have a positive attitude toward learning vocabulary to communicate efficiently.

1.3.3 Advantages

The use of ICT to acquire vocabulary offers a wide variety of advantages. Some advantages are that ICT enables students to look for complementary materials to reinforce the vocabulary they have already learned in class. Learners can look for material that is already made for their level and use it as a complement for practicing and improving the vocabulary they still need to master (Omer & Abdulrahman, 2020).

In this regard, students have access to material that is designed for their needs and level of proficiency, which helps them to be more independent in their learning while boosting their motivation to keep learning with didactic tools. This independence in learning also helps students to work on their mistakes and self-assess the progress of their vocabulary acquisition (Hockly, 2020).

Another advantage is using a variety of resources, such as digital tools, enhances student motivation, leading to improved vocabulary acquisition compared to traditional course books. Students are more eager to explore diverse tools, becoming active learners who control their language learning process, thus maximizing their learning potential. (Barani et al., 2016)

Furthermore, ICT in EFL teaching enables privacy, individuality and interactivity. Not all students feel comfortable in classes that they may think are not at their classmates' level, or where all students are progressing at the same pace. New technologies favor the student's personal organization, an essential competence in all areas of life (Bilová, 2018).

In this way, it can be concluded that the advantages of ICT tools become a valuable tool to improve vocabulary learning since ICT provides opportunities to develop their vocabulary through many activities while boosting their confidence, engagement, autonomy, and self-assessment (Atiqo, 2018).

1.3.4 Kinds of Vocabulary

Husnanissa (2019) mentions that vocabulary is such a crucial thing for everyone that needs to be learned to understand someone else's utterance. More specifically, Fries classifies the vocabulary into four types as follows: In understanding word types, content words denote concrete nouns, verbs, adjectives, and adverbs, while function words express grammatical relationships within sentences. Substitute words represent specific individuals or entities, and distributed words vary in use based on grammatical context. For junior high school, prioritizing content words in teaching materials is recommended, focusing on tangible concepts for early learners.

1.3.5 Types of Vocabulary

In English, vocabulary means every part of speech which is used to construct the sentences when people communicated each other. It includes noun, verb, adjective, adverb, pronoun, preposition, and conjunction. There are some types of vocabulary. Hatch and Brown (2001) classify vocabulary into two types, namely, content words and functional words.

1.2.5.1 Content words. Content words encompass nouns, verbs, adjectives, and adverbs, each serving distinct linguistic functions. Nouns identify people, places, or things,

while verbs denote actions or states of being with tenses like present, past, and future. Adjectives describe nouns, providing additional information about qualities, and adverbs modify verbs, adjectives, or other adverbs, conveying details about manner, place, time, frequency, or certainty.

1.2.5.2 Functional Words. In this study, function words, such as conjunctions, articles, and auxiliaries, are identified as those that express grammatical relationships within sentences. However, the researcher focuses solely on content words, including nouns, adjectives, adverbs, and verbs, as they are commonly used in daily conversation and align well with the English curriculum for Junior High School students.

1.3.6 Aspect of Vocabulary

The concept of a word can be defined in various ways, but three significant aspects teachers need to be aware of and focus on are form, meaning, and use (Nation, 2001).

The understanding of words involves three main aspects: form, meaning, and use. Form refers to pronunciation, spelling, and word parts like prefixes, roots, and suffixes, as seen in the word "uncommunicative." Meaning encompasses the concept and associations of a word. Use involves grammatical functions, collocations, and constraints. Each aspect has both receptive and productive dimensions, resulting in comprehensive lexical knowledge. Nation (2001) declared there is both a receptive and productive dimension, so knowing these three aspects for each word or phrase involves 18 different types of lexical knowledge, as summarized in Table.

Table 1*Components of Vocabulary Knowledge*

Aspect	Component	Receptive Knowledge	Productive Knowledge
Form	Speaking	What does the word sound like?	How is the word pronounced?
	Writing	What does the word look like?	How is the word written and spelled?
	Word part	What parts are recognizable in this word?	What word parts are needed to express the meaning?
Meaning	Form and meaning	What meaning does this word form signal?	What word form can be used to express this meaning?
	Concepts and referents	What is included in this concept?	What items can the concept refer to?
	Associations		

		What other words does this make people think of?	What other words could people use instead of this one?
Use	Grammatical Functions	In what patterns that the word occurs?	In what patterns must people use this word?
	Collocations	What words or types of words occur with this one?	What words or types of words must people use with this one?
	Constraints on use (register, frequency)	Where, when, and how often would people aspect to meet this word?	Where, when, and how often can people use this word?

Note: Adopted from *Nation* (p.27), by Paul Nation, 2001, Cambridge University Press.

As shown in Table 1, Nation's framework constitutes a set of 18 questions which were classified into three categories, and each includes receptive and productive aspects: (a) knowledge of form, which contains spoken & written form and word parts; (b) knowledge of meaning, which consists of form and meaning, concepts & references and associations; and (c) knowledge of use, which includes

grammatical functions, collocations, and constraints on use, such as register and frequency. This framework, which defines vocabulary knowledge from morphological, semantic, and pragmatic viewpoints, demonstrates the strong relationship between all components of vocabulary. Meanings of words could be derived from the word form and context in which they are used. In the meantime, word forms and word meanings are also conducive to the improvement of vocabulary ability in real communication. However, Nation understands that this framework of vocabulary knowledge is an inadequate categorization, with much more space for improvement in future study. For instance, it is difficult to measure language learners' vocabulary depth only through the description in his framework. And because the categories in his framework are so closely connected, it is difficult to tell the difference between the defined terms using this categorization.

1.4. Previous studies

The research is supported by different previous qualitative and quantitative studies in terms of the two proposed variables. In the international field, for example, Melo & García (2021) investigated the perceptions and attitudes young Mexican learners of towards the use of the Kahoot! application for learning English vocabulary. The study applied a mixed method study focused on students in language courses between the ages of 7 and 12, studying mainly English at "Level Nine", roughly equivalent to CEFR A2+. A homogeneous sampling strategy was used, selecting participants with previous Kahoot! experience and similar levels of English proficiency (A2+). A mixed methodological approach was used, combining quantitative data collection through a four-item Likert-scale survey administered

through Kahoot! and qualitative information obtained from focus group interviews in Spanish.

The key findings of the related thesis emphasize Kahoot!'s ability to positively influence student motivation, participation in the classroom, and overall vocabulary learning. Moreover, it significantly contributes to vocabulary acquisition. It focuses on English language learners' perceptions of the use of Kahoot! in English language courses. The results indicate positive opinions about Kahoot! as an innovative tool for vocabulary acquisition, which increases motivation and class participation. Overall, the study highlights the potential of technological integration in language teaching with the need for careful planning and teacher support.

Afify & Latif (2020) in their research studies the influence of the online application Kahoot on technical vocabulary learning and design enthusiasm among learners. The study applied a quasi-experimental technique including a pre-post exam to assess vocabulary and a questionnaire to assess motivation.

The results shows there was a statistically significant difference between the experimental group, with a mean of 14.4 and a standard deviation of 2.16, and the control group mean of 11.26 with a standard deviation of 1.61. There are multiple potential reasons for these results. The reason for these results is due to the prompt feedback the students received after answering the questions through Kahoot, this allowed them to compare their answers with others. As a consequence, students expressed to feel more motivated in the learning process

There are also national studies such as the one done by Cuenca (2021) which delves into strategies to enhance English vocabulary acquisition among 38 students

in Machala city, focusing on the utilization of digital tools and their impact on vocabulary development. Technological resources elevate vocabulary learning, with consideration for student engagement and motivation were investigated. Emphasizing the efficacy of digital tools in vocabulary learning, it demonstrated how Kahoot as an interactive platform can significantly boost student engagement. The importance of gamification and interactive exercises in language learning was underscored, rendering vocabulary acquisition more enjoyable and effective.

This mixed method study also highlights the necessity for teachers to integrate technology into their teaching methods to better support vocabulary development. It shares a common focus on technology-enhanced vocabulary learning and offering valuable insights and strategies. A non-experimental, descriptive research design was employed, focusing on observing and describing subjects' behavior without manipulation.

Theoretical and empirical methods were used including observation, diagnostics, and surveys. Content analysis was used to process data which finally offered valuable insight. In Ecuador, traditional English teaching methods prevail, resulting in limited classroom interaction and uneven language skill development. Students revealed insufficient English vocabulary proficiency, prompting the need for a transformative approach. A system of contextually relevant, flexible, and inclusive enrichment activities, rooted in constructivist theory, was devised. These activities aimed to enhance English vocabulary through a tutorial application and Kahoot platform in a virtual environment.

The study analyzed the performance of three indicators: Lexical, Syntactic, and Morphological. The results showed a statistically significant difference between the two groups. The Lexical indicator increased from 1.76 to 2.5, the Syntactic indicator increased from 1.86 to 2.56, and the Morphological indicator increased from 2.00 to 3.16. The final test results demonstrate an increase in scores for all three indicators. The study also found that utilizing Kahoot positively impacted English teaching and learning, boosting student engagement and motivation, and students expressed satisfaction with vocabulary improvement within the curriculum.

Locally Torres (2021) in the thesis “Kahoot! and Quizlet as a scaffolding strategy enhance English language vocabulary among Ket preparation students at English speak up center, afternoon session in Loja city year” used these platforms as instructional tools. This action research delves into the efficacy of these tools in vocabulary education, employing scientific, descriptive, analytical-synthetic, and statistical methods for research.

As result, Ket preparation students faced challenges in effective communication due to vocabulary issues like misspellings and incorrect usage of words and idioms. Implementing Kahoot! and Quizlet as scaffolding strategies successfully addressed these problems. As a result, significant enhancements were observed in their English vocabulary across various aspects. The grades increased from 3,3 to 7,5 out of 10 with the appropriate use of Kahoot! and Quizlet activities. The mean scores obtained in the pre-test in each vocabulary aspect were for meaning from 0,8 to 2,5; for spelling from 0,7 to 1,5; for antonyms from 1,3 to and

2,5 and for idioms from 0,5 to 1. On the other hand, all students felt encouraged to learn vocabulary using Kahoot! and Quizlet. Kahoot! and Quizlet. These tools offered them a different way and environment to learn vocabulary and encouraged them to have a good participation in each activity, which reinforced the enhancement of their vocabulary knowledge. One of the most remarkable strength is the collaborative skills when interacting in the games and values such as respect to the teacher. Students became more engaged, leading to improved grades and increased competence in English vocabulary usage.

Chapter II

The chapter presented in the following pages will delve into the different aspects of the research methodology. How the study was carried out, the type of method chosen, the process of selecting the participants, and finally, the instruments used to collect data for both the diagnosis and the presentation of the information.

2.1 Research approach

This study is a mixed-method action research that determined the effectiveness of Kahoot in enhancing the vocabulary of A1-level students. Action research is a systematic method used by academics to collect and enhance data regarding their educational settings, teaching methods, and student learning. It employs quantitative or qualitative methodologies and seeks answers to specific, practical problems. Teachers investigate these issues, gather and evaluate data, and adjust based on their findings. Action research may address local, practical concerns such as classroom challenges, as well as empower individuals to overcome obstacles to their self-development and self-determination. (Creswell J. W., 2012)

There are some phases in actions research that were followed in this study:

Figure 2

Phases of action research

Note: Elaborated by Martinez and Ordonez (2024).

2.1.1. Phase 1. Initial reflection

During a non-participant observation, the researcher saw that students in the ninth year have difficulties in expressing and recognizing words in English about subjects concerning their environment or everyday life because they were not used to vocabulary activities. This situation allowed the researcher to recognize vocabulary knowledge as an issue among learners who do not have opportunities to express themselves clearly during their English classes. Being this concern, the researcher asked himself whether some different strategies would better prepare students to enhance their English language vocabulary. Therefore, having read some mainstream literature about vocabulary competence, the researcher found that games will empower learners to apply this system and therefore have better written

and oral communication through the appropriate use of word order, tense, number, and choosing the correct words.

2.1.2. Phase 2. Planning

Consequently, to remedy the weaknesses in the English language vocabulary, the activation-connection-affirmation lesson plan will be presented, which is organized with self-correction strategies, such as correction, self-review, and feedback. Within the lesson plan, the Kahoot platform will be used for vocabulary learning. The data obtained through the data collection instruments will be used to consider the most appropriate ways to improve English vocabulary through the use of Kahoot! The objective of using the Kahoot platform in vocabulary learning is to corroborate if ninth-grade students can learn through this platform as well as have the opportunity to express themselves well through correction that will eventually improve their knowledge of English vocabulary.

2.1.3. Phase 3. Action

The intervention plan will be developed during 9 sessions of 45 minutes each one during 5 weeks period of time. As is usual, things will rarely go precisely as expected, therefore some minor changes or deviations will be made to meet possible drawbacks.

2.1.4. Phase 5. Reflection

Once finished the intervention plan, the researcher will reflect critically upon the effectiveness of using Kahoot to learn English vocabulary at Colegio de Bachillerato Manú, a morning session in Loja City during the 2023-2022 school year.

2.2 Research Methods

This study used a mixed-method to determine the effectiveness of Kahoot in enhancing the vocabulary of A1-level students. According to (Creswell, 2009), this kind of research incorporates both qualitative and quantitative data, as well as philosophical assumptions and the application of both approaches. It goes beyond just gathering and evaluating data, using both methodologies in tandem to improve the overall strength of the study, outperforming either qualitative or quantitative research.

The combination of quantitative and qualitative methods offered a better understanding of the project topic. As a quantitative method, it involved collecting and analyzing numerical data to measure and compare vocabulary learning outcomes through a pre-test, post-test, and know about students' perceptions through pre-survey, and post-survey. As a qualitative method, the research approach focused on collecting comprehensive perceptions and experiences related to using Kahoot for vocabulary learning. It involved qualitative data collection methods to understand the students' perspectives, beliefs, and attitudes toward this technological resource. Researchers applied interviews to students.

This study made a general description of the data collection that results from the intervention plan. The following general methods were applied during the research:

According to Nigel Cross (2022) the scientific method facilitates the study of self and peer correction strategies intended to enhance vocabulary and will help in the observations done both before and during the intervention. This method

facilitated the prediction of a possible solution, as well as assisting in the collection of data to make relevant predictions and the analysis of it.

2.3. Matrix operationalization

Bhandari (2022) mentions that operationalization involves converting abstract notions into quantifiable facts. Some notions, such as weight or age, can be easily quantified, whereas others, such as spirituality or worry, cannot. This process allowed researchers to acquire information about students' perceptions of this intervention. Operationalization also eliminates subjectivity, lowers the possibility of research bias, and improves the dependability of the research as can be seen in the next.

The independent variable defined is Kahoot, according to (Altawalbeh & Irwanto, 2023) it is a free game-based learning platform that allows the entire class to participate at the same time. It includes the following dimensions: First, gamification with its indicators of the incorporation of game-like elements into educational environments and utilizing games for learning vocabulary. Second, collaborative learning, which encompasses team-based activities utilizing Kahoot games and peer assessment. Third, real-time assessment including immediate teacher feedback and learning progress visibility, forms another dimension.

Fourth, interactive learning, highlighted by engagement and active participation, utilizes games, videos, and visual aids to foster an enjoyable and interactive learning experience. Lastly, attitudes toward the application are measured through indicators such as motivation, concentration, and confidence in

answering questions within the Kahoot environment. This comprehensive framework enables the analysis of Kahoot's impact as a gamified learning tool, considering its various dimensions and associated indicators in educational settings.

Table 2

Operationalization of independent variable

Independent Variable	Conceptual Definition	Dimensions	Indicators	Scales
Kahoot	Kahoot is a free game-based learning platform that allows the entire class to participate at the same time (Altawalbeh & Irwanto, 2023)	Gamification	Usage of game-like elements in an educational environment	Strongly agree Agree Disagree Strongly disagree
			Learning vocabulary through Games	
		Collaborative leaning	Collaborative learning through team-based (Kahoot) games.	
			Peer assessment	
		Real-time Assessment	Immediate Teachers Feedback	
			Learning Progress Visibility	
		Interactive learning	Engagement and active participation	
			Use games, videos, visual aids to make learning fun and interactive	
		Attitudes toward the application	Motivation	
			Concentration	
Confidence in answering Kahoot!				

Note. Elaborated by Martinez and Ordonez (2024).

In the dependent variable, vocabulary stands as a fundamental component, representing a collection of words crucial for foreign language learning (Odinokaya, Krylova, Rubtsova, & Almazova, 2021) Conceptually, vocabulary encompasses the lexicon of a language, comprising words and their meanings. Within this construct, three dimensions are discernible. Firstly, the form dimension, indicated by writing, focuses on the physical appearance and structure of words. Secondly, the meaning dimension delves into the semantics of vocabulary, examining aspects such as meaning, concepts, references, and associations that

words carry. Lastly, the use dimension, highlighted by grammatical functions, explores how vocabulary is employed within the context of language, encompassing its syntactic and grammatical roles.

Table 3

Operationalization of dependent variable

Dependent variable	Conceptual definition	Dimensions	Indicators	Scales
Vocabulary	Vocabulary is an essential aspect of a language that can be defined as a set of words that make up Foreign Language Learning (Odinokaya, et al., 2021).	Form	Writing	Domain Reach Proximal reach Do not reach
		Meaning	Meaning	
			Concepts and references	
			Associations	
Use	Grammatical functions			

Nota. Fuente: Elaborated by Martinez and Ordonez (2024).

2.4. Instruments

In this section, the data collection instruments used in the study are described. The instruments were carefully selected to align with the research objectives and to gather comprehensive data on the effectiveness.

2.4.1. Pre-test and Post-test

A pre-test was carried out to determine the students' vocabulary level before applying the intervention. This test consisted of various types of questions which will be selected according to the vocabulary topics that are planned to be taught. Once the intervention is finished, both groups: the intervention and control groups TOOK a post-test, which is similar to the pre-test in terms of the structure of the questions. This post-test was applied to verify how effective the implementation of the Kahoot application was on the students' vocabulary development during their vocabulary teaching process.

2.4.2. Pre -survey and post-survey

Creswell (2012) states that survey research is a prominent approach in education. Survey research involves administering a survey to a sample or the full population to gather information about attitudes, beliefs, behaviors, and traits. In this study, it was imperative to apply a pre-survey an initial assessment tool to gather baseline data on the participants' familiarity with the English as a Foreign Language (EFL) vocabulary and their general attitudes toward technology-assisted learning. It was before the quasi-experimental phase of the study.

The purpose of this survey was to understand the participants' starting point, which helped in making comparisons with the post-test results and assessing any changes or improvements in the perception and vocabulary knowledge for the study. After carrying out the post-test, the participants answered a post-survey to find out the perception of the students about the use of Kahoot for learning EFL vocabulary. The survey included statements that students must choose based on a Likert-type scale (strongly agree, agree, disagree, and strongly disagree) according to what they considered most accurate based on their experience with Kahoot.

2.4.3. Interview

Creswell (2012) defines interviewing as a prominent method of qualitative research, just as observation. A qualitative interview involves asking interviewees open-ended questions and recording their responses. The investigator wrote down and enter the data into a computer file for interpretation. In the investigation, interviews were conducted with a few students to obtain in-depth qualitative data. These interviews involved open-ended questions and provided an opportunity for

students to express their thoughts, experiences, and challenges encountered during the Kahoot intervention. The interviews were audio-recorded and transcribed for further analysis.

2.5. Validation of instruments

This research proposal was guided and revised by specialized professors to implement the tools and received approval; it was considered convenient to call upon this expert, given her renowned experience in educational issues. The validation dossier contains the cover letter with the expert tutor's acceptance to orient the research. (Appendix J). Moreover, the operationalization matrix with both variables Kahoot and vocabulary to know the impact of using this tool for learning vocabulary. All these instruments were revised carefully item by item either the pre-test or post-test. Likewise, the survey and the pre-survey and post-survey were examined in detail by following the tutor's advice to refine the tools which were focused on the objectives and the research questions to enhance content validity.

2.6. Population, sample, and sampling

The delimitation of the population for this research involved focusing specifically on the ninth grade" at Colegio de Bachillerato Manú in the city of Loja. However, the study's scope was narrowed down to a sample of the ninth grades: class "A" and "B" at this Institution. This delimitation allowed for a concentrated investigation into the impact of Kahoot on vocabulary skill ensuring in-depth analysis and a comprehensive understanding of the research topic.

The sampling method is non-probabilistic since it was selected non-randomly. Bhandari, (2023) It was justified based on practical considerations and the specific context of the research. Given the limited time and resources available, non-probability sampling was considered appropriate for the study. This method allowed for a focused selection of participants, facilitating an in-depth examination of the effectiveness of the gaming methodology, which can be used to assess and review student knowledge among ninth graders. The sample selection procedures involved a deliberate selection of class A, consisting of 20 students, as the main sample group. This selection was based on the intention of applying the vocabulary through the use of the Kahoot platform which has a variety of games to evaluate its impact. Class A was exposed to the methodology provided a direct basis for evaluating its effectiveness. Class B, with 20 students, served as a comparison group to evaluate possible differences arising from the applied methodology.

Determining the units of analysis focused on individual students, each serves as a distinct unit of analysis. This allowed for an accurate assessment of the impact of juicing vocabulary activities on the Kahoot platform. The students worked individually, class A of the experimental group was exposed to the game methodology through Kahoot, while class B constituted the control group following the traditional approach. The selection procedures, supported by these considerations, aim to ensure research focused on the impact of using Kahoot on developing EFL ninth-grade student's vocabulary. Description of the intervention plan.

2.7 data analysis and the ethical considerations

2.7.1 Data Collection and Compilation

Data processing started with the collection of raw data from the pre-test, post-test, and student pre-survey and post-surveys and interviews. The replies, accurate and wrong, were collected and collated into a structured dataset. Similarly, answers to the participant's survey, which included views, attitudes, and experiences, were collected, and categorized for future study.

2.7.2. Data Entry and Coding

The acquired data were meticulously entered and coded to ensure correctness and uniformity. Responses from closed-ended survey questions were methodically entered into a computerized format. This systematic approach facilitated the organization of data for analysis. Additionally, the coding of responses allowed for the identification of themes, aiding in the exploration of valuable insights and the discovery of recurring patterns.

2.7.3. Descriptive Analysis

Descriptive analysis was the first stage in analyzing quantitative data. Basic statistical metrics such as frequencies, percentages, means, and standard deviations were used to describe the student's performance on the pre-test and post-test. These studies offered an overview of the students' present language skills, strengths, and growth opportunities.

2.7.4. Thematic Analysis

Thematic analysis was conducted on the qualitative data gathered from interview responses. The coded themes underwent thorough examination to reveal

prominent trends, recurring narratives, and significant patterns in students' perspectives, challenges, and expectations regarding vocabulary acquisition. This analysis enhanced the understanding of the contextual factors shaping language learning within a specific educational setting.

2.7.5. Comparative Analysis

A comparison analysis was performed by comparing the outcomes of pre-test with the post-test. This comparison revealed details about the students' improvement and development in vocabulary before and after the intervention. It aided in determining the influence of the suggested methodological approach on language proficiency development while also validating the success of the game-based exercises.

2.7.6. Triangulation and Integration

To confirm the findings' reliability and validity, a triangulation technique was used, combining quantitative and qualitative data. The quantitative findings of the pre-test and post-test were combined with the quantitative insights obtained from the pre-survey and post-survey. This integrative analysis provided a thorough view of the effectiveness of the study.

2.8. Findings: initial diagnose

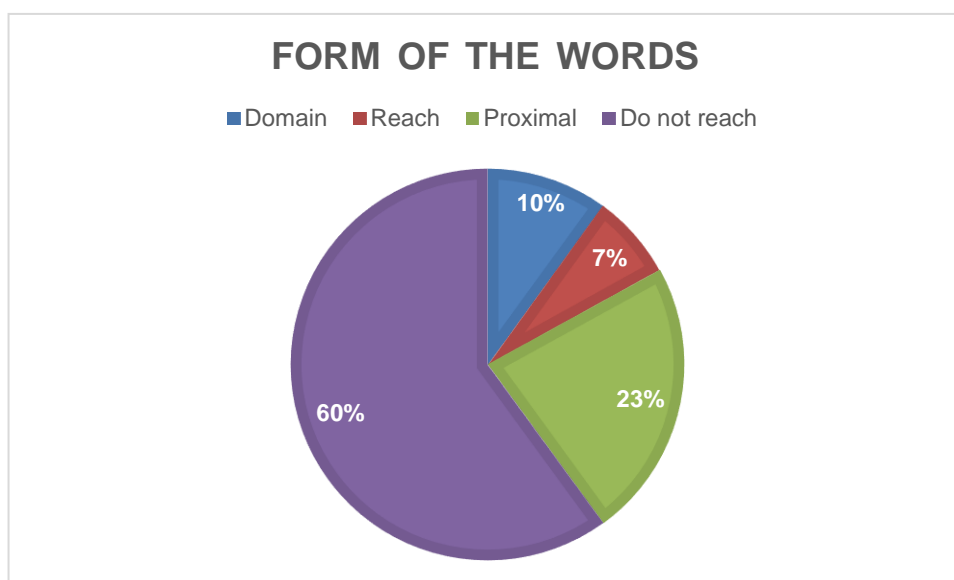
This section encompasses and presents the results obtained from the instruments of the diagnosis phase. For this purpose, the information was analyzed and interpreted, and a proposal was presented.

2.8.1 Pre-Test

Considering the analysis of the pre-test. It is worthy to remark that the results were examined considering the students' knowledge in terms of word form, meaning, and use. Aspects that were graded considering the Education Ministry's four valid domains in mind: Domain= 9-10; Reach = 7-8; Proximal reach = 5- 6.9; Do not reach = 1- 4.9.

Figure 3

Vocabulary pre-test: Form of the words

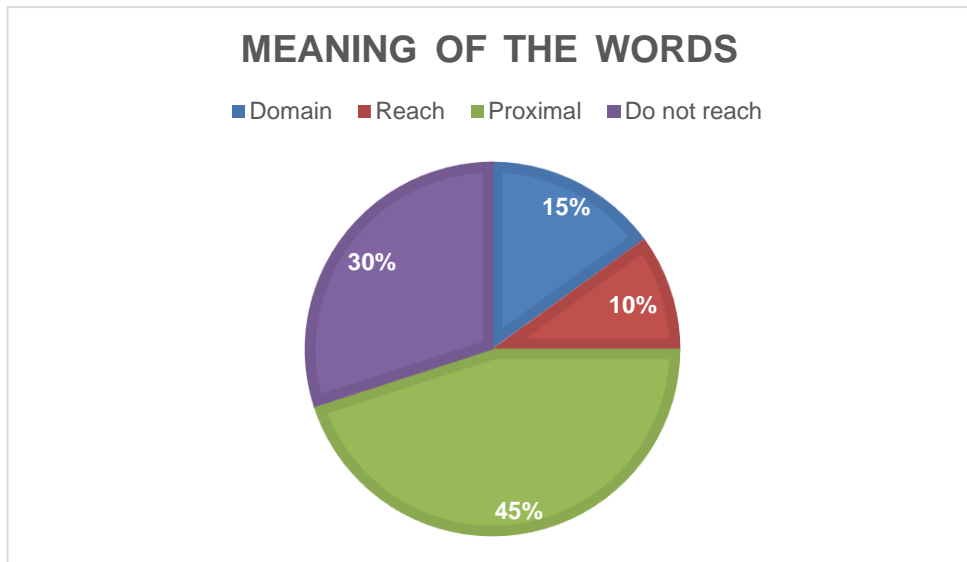


Note. statistical data exposing: Domain, Reach, Proximal reach, Do not reach

The results in figure 3 shows that a 45% of students did not reach the ability to write words correctly by considering its form. This result was owing to spelling problems, a feature that revealed the incapacity of the participants to place letters in the right order to create coherent and understandable words.

Figure 4

Vocabulary pre-test: Meaning of the words

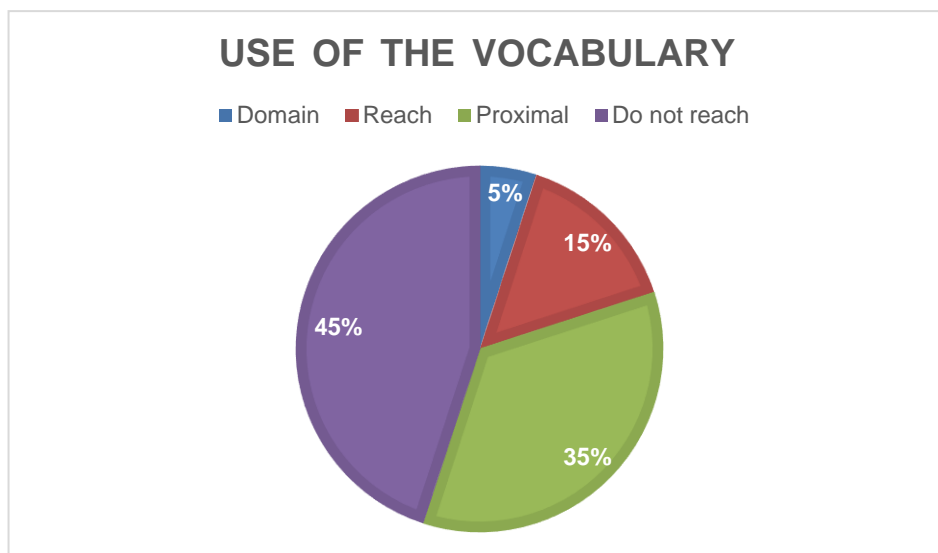


Note. statistical data exposing: Domain, Reach, Proximal reach, Do not reach

Figure 4 discloses the students' knowledge of the meaning of the vocabulary before the intervention. According to the results displayed in this graphic, a vast majority of students (45%) lacked a broad vocabulary, making it difficult for them to decode the meaning of the words to successfully complete the activities.

Figure 4

Vocabulary pre-test: Use of the words



Note. statistical data exposing: Domain, Reach, Proximal reach, Do not reach

Bearing in mind the students' ability to use the words correctly considering a given context, figure 5 shows that a 45% of the learners did not reach this ability, evidencing sentences where the vocabulary usage was not suitable with the provided context. This result was owing to the incapacity of the participants to analyze a situation to choose the correct word.

2.8.2. Pre- survey

Considering the data of the survey, it is important to highlight that it was examined considering the scale of Likert (Strongly agree, agree, disagree, and strongly disagree) where the students had to choose the option that mostly agrees with their perception about the use of digital resources to learn and reinforce vocabulary during the English classes.

The pre-survey analysis presents insightful findings regarding students' attitudes and experiences with technology-based learning tools, particularly in the context of vocabulary acquisition. Table 1 illustrates that before the intervention, most students (55%) strongly agreed, and 45% agreed, that their teachers frequently employed technology to teach vocabulary. This highlights a familiarity with technological resources within the classroom environment. However, despite this familiarity, the analysis reveals the next:

Table 2 delves into students' previous exposure to gamification-based learning platforms, indicating that a significant majority (85%) have used such tools before. However, it is noteworthy that despite their prior experience, these platforms were seldom utilized during English classes, suggesting a missed opportunity for integrating engaging learning methods into the curriculum.

Moving on to Table 3, it's apparent that nearly all students (95%) either strongly agreed or agreed that the use of Kahoot would benefit their EFL vocabulary learning. This positive perception suggests a high level of interest and motivation among students for interactive and gamified learning experiences. By incorporating Kahoot into the curriculum, educators can harness this enthusiasm to enhance student engagement and foster effective vocabulary acquisition.

Interpreting the results on table 4, almost all the students contemplate that using Kahoot would be helpful for acquiring vocabulary because it presents the words in a funnier way, where they can develop their vocabulary through many activities while boosting their confidence, engagement, autonomy, and self-assessment because they can practice whenever and wherever they are.

Table 5 illustrates that 55% of students would like to engage in vocabulary collaborative learning with their classmates, there appears to be a noticeable preference for collaborative learning strategies when it comes to vocabulary acquisition in the classroom. This degree of agreement shows that students are moderately to strongly interested in actively engaging in group learning activities designed to enhance their vocabulary.

Considering the results in Table 6, with 60% of students strongly agreeing, it is evident that most students want fast feedback while they are learning new language. Given the high degree of agreement, it appears that students view immediate feedback as extremely helpful and important when taking vocabulary classes. With instant feedback, students can quickly spot and fix mistakes, which strengthens their learning and encourages a better comprehension of vocabulary ideas. Additionally, it gives pupils immediate feedback so they may assess their development and modify their learning methods as necessary.

Coming forward the analysis of Table 7, given the high degree of strong agreement (55%), it appears that a sizable percentage of students think Kahoot is an engaging and useful tool for encouraging student participation in the classroom. Students appear to respond well to Kahoot's interactive features, competitive aspects, and gamified learning methodology, which encourages them to participate more actively in the learning process. This implies that introducing Kahoot or comparable platforms into English lessons may result in increased student enthusiasm, engagement, and participation.

Continuing ahead with the results on Table 8, there is a general consensus that using multimedia tools to help with vocabulary learning can greatly increase vocabulary recall and retention. The large proportion of students who strongly agreed (65%) shows that they have a good degree of faith in the effectiveness of multimedia resources when it comes to learning vocabulary as opposed to more conventional approaches. Videos, audio files, interactive presentations, and digital flashcards are examples of multimedia materials that provide dynamic, multisensory experiences that actively engage students and improve vocabulary retention.

The results obtained through the pre-survey are detailed below:

Table 4

Results obtained from the pre-survey

Statements	Strongly agree	Agree	Disagree	Strongly Disagree
Gamification				
1. My teacher usually uses technology to teach vocabulary.	55%	45%	0%	0%
2. I have used gamification-based learning platform for vocabulary learning.	85%	0%	15%	0%
3. I think that the use of Kahoot would help me to learn EFL vocabulary.	50%	45%	5%	0%
Collaborative Learning				
4. I would like to use technology when learning vocabulary.	55%	40%	5%	0%

5. I would like to engage in vocabulary collaborative learning with my classmates.	40%	55%	5%	0%
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Real-time Assessment

6. It would be good to receive instant feedback in my vocabulary classes.	60%	30%	10%	0%
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Interactive learning

7. I think I will feel more engaged to participate actively in the class of play Kahoot in my English classes.	55%	45%	0%	0%
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8. I think that the use of multimedia will enhance my ability to retain and recall English vocabulary more effectively than traditional methods.	65%	25%	10%	0%
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Note. Elaborated by Martinez and Ordonez (2024)

Chapter III

3.1. Validation of the proposal

The validation of the proposal "The impact of the use of Kahoot in the vocabulary development of ninth grade EFL students" encompasses theoretical, empirical, and practical dimensions to ensure its feasibility, viability, and benefits. Based on the established theoretical framework, which highlights the advantages of incorporating Information and Communication Technologies (ICT) in language learning, particularly Kahoot, the proposal aligns with existing literature on enhancing vocabulary acquisition through technology (Harmer, 2007; Vergara & Balboni, 2011; Mujtaba & Mustafa, 2013; Melor, Lubis, & Lin, 2009). This theoretical foundation provides a basis for exploring the potential impact of Kahoot on vocabulary learning among ninth-grade EFL students.

Empirical validation involves the pre-test results and previous experiences to support the rationale and objectives of the proposal. This proposal aims to address the limited effectiveness of traditional vocabulary teaching methods and explore the potential of Kahoot to enhance vocabulary acquisition (Asqa, 2013). Through a mixed-method approach combining quantitative and qualitative data collection methods, the study aims to provide an overview of the effectiveness of Kahoot in improving students' vocabulary proficiency.

Considering the feasibility of applying Kahoot in the classroom is very important for the validation process. Despite difficulties such as limited access to technology due to the school's location in a rural area and restricted instructional time, the proposal recognizes the availability of technological resources at the

school and seeks to leverage them to achieve meaningful learning outcomes. By aligning with the school's language learning objectives and curricular standards, the proposal demonstrates its practical applicability and potential for improving vocabulary teaching practices.

In addition, the validation step involves soliciting input from professionals in the field of language teaching to assess the feasibility and potential benefits of the proposal. By engaging stakeholders such as teachers, curriculum developers, and school administrators, the proposal aims to gather diverse perspectives and viewpoints to inform its implementation and ensure its relevance and effectiveness in the specific context of ninth grade EFL education at Colegio de Bachillerato Manú.

3.2. Theoretical foundations

The theoretical foundations of the research on "The impact of using Kahoot on developing EFL ninth-grade students' vocabulary" draw from two primary theories: Richard Mayer's Cognitive Theory of Multimedia Learning and Piaget's cognitive development theory.

3.2.1. Richard Mayer's Cognitive Theory of Multimedia Learning

According to (Mayer, 2014) The act of multimedia learning involves constructing mental models from both verbal (text or speech) and visual (illustrations, photos, animation, or video) stimuli. Multimedia learning is defined as the integration of words and images, while the term "learning" refers to the process of knowledge acquisition by the learner. The cognitive theory of

multimedia learning, developed by Mayer, centers around the cognitive process of constructing mental models from verbal and visual stimuli.

According to Mayer & Moreno (2005) students have both visual and verbal information processing systems, with aural narration influencing the verbal system and animation influencing the visual system. Learners participate in three cognitive processes during multimedia learning: selecting, organizing, and integrating. Choosing generates a text base, arranging generates a verbally-based model, and integrating connects the two. Mayer (1997) gives a detailed approach as well as five guidelines for employing multimedia to assist students in understanding scientific explanations. Each principle is being researched further.

According to the Multiple Representation Principle, it is preferable to offer explanations in both words and pictures rather than just words. Studies reveal that students who listen to animated narrations and read texts with captioned visuals develop more relevant solutions on problem-solving transfer assessments. This multimedia effect, which is congruent with the cognitive theory of multimedia learning, enables students to construct two mental representations – a verbal model and a visual model – and connect them.

3.2.2. Piaget's cognitive development theory

On the other hand, regarding vocabulary variables, Piaget's cognitive development theory has contributed significantly to our knowledge of how children acquire and learn words. This theory stresses various stages of mental development and gives important insights into children's cognitive development. (Rabindran & Madanagopal, 2020).

Piaget's theory is concerned with the development of logical and scientific thinking in youngsters. It emphasizes the significance of assimilation and adaptation in effective learning. He thought that children learn by their experiences, independently, and with a natural desire to learn.

Piaget proposed four stages of cognitive development: sensorimotor, preoperational, concrete operational, and formal operational. Each stage is distinguished by distinct cognitive achievements and aspirations.

Key features include:

- Sensorimotor stage, object permanence, mental representation, and comprehending cause and consequence are all part of the Sensorimotor Stage.
- Preoperational stage, animism, egocentrism, and symbolic functioning are all part of the Preoperational Stage.
- Concrete Operational Stage is distinguished by logical reasoning, categorization, and comprehension of reversibility.
- Formal operational, logical reasoning and hypothetical thinking are all part of the Formal Operational Stage.

By emphasizing the significance of cognitive development stages, adaptation processes, and age-appropriate instructional practices, Piaget's theory gives useful insights into how children acquire and learn words.

In summary, the theoretical foundations of the research on using Kahoot to develop EFL ninth-grade students' vocabulary encompass Mayer's Cognitive Theory of Multimedia Learning and Piaget's cognitive development theory. These

theories provide a framework for understanding how Kahoot's multimedia format and interactive features can enhance vocabulary acquisition by engaging learners in meaningful cognitive processes and aligning instructional strategies with students' cognitive development stages.

3.3. Characteristics of the proposal

The proposal for this research project on "The impact of using Kahoot on developing EFL ninth-grade students' vocabulary" encompasses several distinct characteristics, each contributing to its innovative approach and potential impact on language learning.

Firstly, the research design adopts a mixed-method action research approach, combining quantitative and qualitative methods to determine the effectiveness of Kahoot in enhancing the vocabulary of A1-level students. By conducting pre-tests to assess students' vocabulary levels before intervention and post-tests afterward, the study aimed to measure the impact of Kahoot on vocabulary development accurately. This methodological rigor ensures a comprehensive evaluation of the intervention's effectiveness.

Second, the deliberate selection of two classes, A and B, each with 20 students, serves as the main sample and comparison group, respectively. Class A receives the intervention using Kahoot, while class B acts as the control group, following traditional teaching methods. This careful selection allows for a direct comparison between the two teaching approaches.

Finally, the study incorporates Information and Communication Technologies (ICT), specifically Kahoot, as a key component of the intervention

plan. Building on existing literature highlighting the benefits of ICT in language learning, the proposal leverages dynamic Kahoot activities to engage students in vocabulary acquisition. By using technology to create a stimulating and interactive learning environment, the research aims to enhance students' motivation, autonomy, and critical thinking skills, while promoting the building of a large vocabulary.

3.4. Objectives of the proposal

3.4.1. General objective

To create a series of Kahoot vocabulary activities for developing vocabulary skills among ninth-grade English as a Foreign Language (EFL) students.

3.4.2. Specific objectives

- To create Kahoot activities through a well structure lesson plans for weeks aimed at enhancing vocabulary acquisition among ninth-grade EFL students, consisting of nine sessions lasting 45 minutes each over five weeks.
- To apply Kahoot activities plan targeting specific vocabulary learning objectives identified for ninth grade EFL students.
- To evaluate the effectiveness of the Kahoot intervention in improving the vocabulary of the ninth grade EFL students, utilizing pre-test and post-test assessments conducted within the intervention period.
- To explore ninth-grade EFL students' perceptions and experiences regarding the use of Kahoot for vocabulary development utilizing post surveys and interviews after the intervention period.

3.5. Structure and Dynamics of Proposal Components

The structuration and implementation of using Kahoot to develop EFL ninth-grade students' vocabulary encompasses some paramount components of the proposal such as the diagnostic, implementation, and evaluation stages. This involves a systematic process addressed to achieve the main objective, this research is needed to investigate the influence of Kahoot on the vocabulary development in English of students as a foreign language at Colegio de Bachillerato Manú.

Firstly, the diagnostic phase was carried out through the design of a pre-test to determine the students' vocabulary level before applying the intervention. This test consisted of various types of questions which will be selected according to the vocabulary topics that are planned to be taught.

Secondly, seven lesson plans were elaborated with a variety of activities addressed to strengthen the vocabulary skills as seen in Appendix H. The intervention took place over five weeks, and the topics were selected according to the English book taught during the different activities using Kahoot sessions, considering the student's needs and preferences based on the pre-test results.

Finally, a post-test with similar structure of the pre-test was applied to both groups to verify how effective the implementation of the Kahoot application was on the students' vocabulary development during their vocabulary teaching process. After carrying out the post-test, the participants of the experimental group answered a survey and interview to find out the perception of the students about the use of Kahoot for learning EFL vocabulary.

3.6. Description of Methodological Requirements.

The influence of using Kahoot on EFL ninth-grade students' vocabulary development is the research project for which the methodological requirements have been defined. Through systematic and meticulous planning, researchers have ensured the successful implementation of the study.

3.6.1. Methodological Requirements

In terms of methodology, this proposal combined mixed-method research; trustworthy data that matched the study questions was gathered using both quantitative and qualitative techniques. Pre- and post-test assessments were used by the researchers, and surveys were used to tabulate data regarding the thoughts and sentiments of the students. Through student interviews and classroom observations, they also gathered qualitative data. This all-encompassing approach guaranteed a thorough comprehension of the research question. All the students who were picked for the task wanted to take part. A thorough study was conducted to provide recommendations and a conclusion following the data collection.

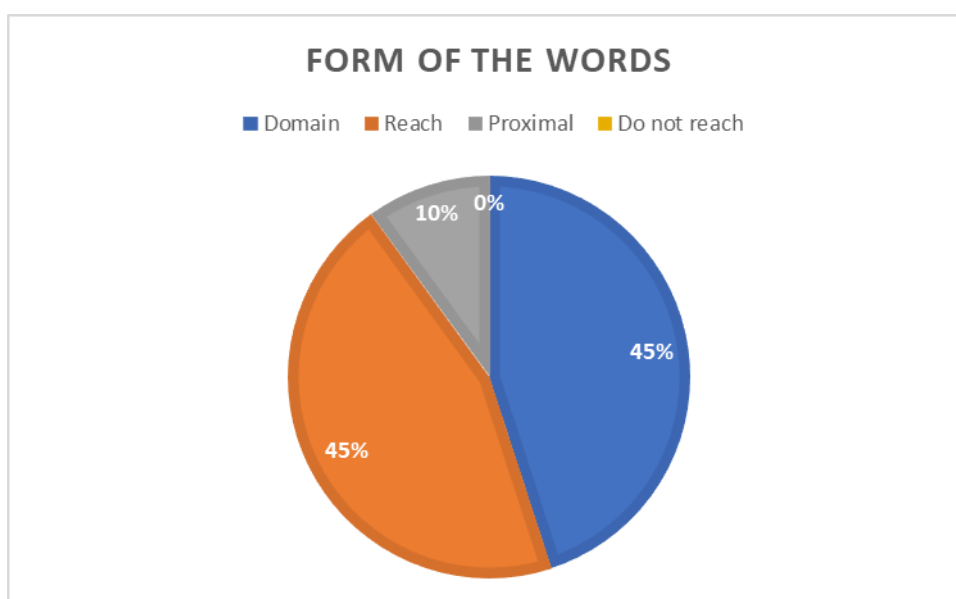
3.7. Analysis and discussion of the results obtained from the implementation of the proposal

After researchers executed the intervention with nine vocabulary sessions, a post-test was taken to forty A1-level students of Colegio de Bachillerato Manú in Loja City. The post-test was similar to the pretest; it comprised several types of questions to measure how effective the implementation of the Kahoot application was on the students' vocabulary development. The post-test findings taking into

consideration each domain (domain= 9-10; reach p= 7-8; Proximal reach = 5- 6.9; do not reach = 1- 4.9) are interpreted and detailed below.

Figure 6

Vocabulary post-test: Form of the words



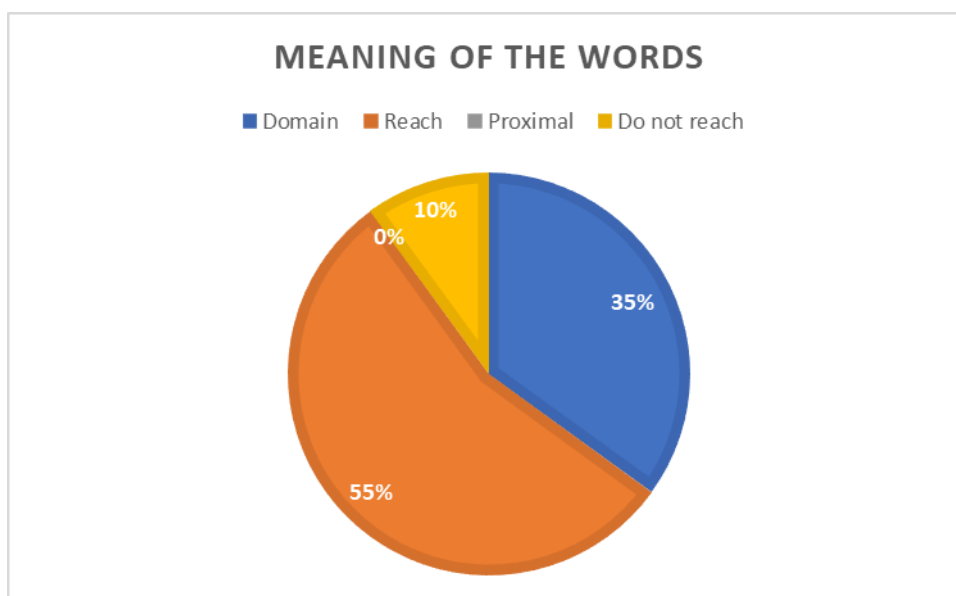
Note. statistical data exposing: Domain, Reach, Proximal reach, Do not reach

It is shown in figure 6 that a vast majority of the students were able to write the words correctly considering their form (45% domain and 45% reach), evidencing in this way a significantly improvement considering the results got in the pre-test (10% domain and 7% reach). These results show that spelling skills can be greatly enhanced by using Kahoot, which transforms the learning process into an entertaining and interactive game. These findings are aligned with the ones got by Vergara and Balboni (2011) who stated that teachers can design spelling word-focused Kahoot quizzes, where students compete with one another to accurately spell words within a time restriction, a gamified approach that not only increases

the fun factor of spelling drills but also fosters student engagement and healthy competitiveness. Additionally, it is necessary to mention that the students were able to form the words correctly since with Kahoot's instant feedback feature, children can quickly learn from their errors and reinforce proper spelling.

Figure 7

Vocabulary post-test: Meaning of the words



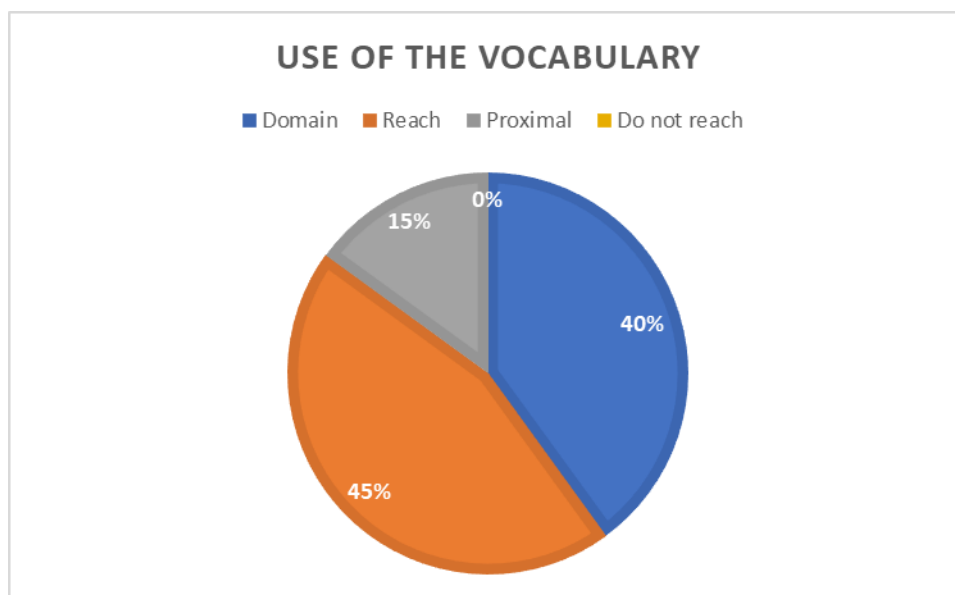
Note. Statistical data exposing: Domain, Reach, Proximal reach, Do not reach

After the use of Kahoot for helping students to understand the meaning of the words. A vast majority of students (35% reach and 55% domain) were able to improve this ability. Comparing these results with the ones from the pre-test, it is seen a high improvement since the students, before the intervention, were not able to understand the meaning of some words (15% domain and 10% reached). These results suggest that Kahoot is an effective platform's gamified approach that helps students improve their vocabulary' understanding thanks to the variety of activities

that help students' booster the analysis of some words in a given context. These results are in concordance with Altawalbeh and Irwanto (2023) who state that Kahoot is a platform that has proven a highly efficiency in aiding students to comprehend better the vocabulary, this is possible since the quizzes and challenges not only expose students to new words, but also, they prompt them to recall and apply the meaning of the words in real scenarios.

Figure 8

Vocabulary pre-test: Use of the words



Note. Statistical data exposing: Domain, Reach, Proximal reach, Do not reach

These results show the efficacy of Kahoot in bolstering the vocabulary used in a given context. According to the results displayed in figure 8, A majority of students (40%) were able to domain the correct use of vocabulary by following a context; as well as, a 45% of learners reached this ability. Comparing these results

with the ones obtained in the pre-test, it is significantly noticed the enhancement that students have developed. In the pre-test, the students

3.7.1. Results Obtained: Analysis of the Research Questions

To answer the research questions "Which vocabulary method, the traditional or Kahoot, is more effective in enhancing vocabulary skills?" and "How effective is Kahoot in enhancing EFL Vocabulary in 9th-grade students at Colegio de Bachillerato Manú?" the following results were obtained from the pre-test and post-test (after the intervention) applied to an intervention group with Kahoot and a control group with traditional classes:

Table 5

Pre-test and Post-test mean outcomes.

Pre - Test and Post Test Results		
Test	Classes without Kahoot	Classes with Kahoot
Pre - Test	7.80	7.00
Post - Test	8.00	9.50

Note. Elaborated by Martinez and Ordonez (2024)

During the pre-test phase, neither the control nor the intervention group used Kahoot to improve their vocabulary. The control group, which used traditional procedures, obtained a mean score of 7.80. In contrast, the intervention group, in which Kahoot was subsequently included for vocabulary instruction, obtained a slightly lower pre-test score of 7.00. This shows that students in the intervention group started from slightly lower levels of vocabulary ability than their peers in the control group.

In the post-test phase, significant differences appear between the control and intervention groups. In the control group, which did not use Kahoot, the mean score climbed slightly from 7.80 in the pre-test to 8.00 in the post-test. This implies a small gain in language abilities among students who only used traditional approaches. In contrast, the intervention group, which included Kahoot, had a significant increase in mean score from 7.00 in the pre-test to an outstanding 9.50 in the post-test. This huge rise demonstrates the remarkable improvement in vocabulary abilities among students actively participating in Kahoot-based activities.

Furthermore, the coefficient of variation offers information on the variability of results within each group. The coefficient of variation in the control group, which used traditional methods, was 1.80, showing that students' vocabulary scores varied moderately. In contrast, in the intervention group, where Kahoot was used, the coefficient of variation was higher at 2.50, indicating that scores varied more among students who engaged in Kahoot activities.

3.8. Analysis and Discussion of the Results Obtained from the post-survey and the interview

A post-survey and an interview were conducted with the participating students to answer the research question What are the perceptions of students about using Kahoot to enhance EFL vocabulary? The collected data provide valuable insights into the students' perspectives regarding the effectiveness and impact of using Kahoot for vocabulary enhancement in an English as a Foreign Language (EFL) context. Through the post-survey and interview, students' attitudes, opinions,

and experiences related to Kahoot as a learning tool for vocabulary acquisition were explored and documented. These findings serve as a basis for understanding the students' perceptions and can inform future decisions regarding the integration of technology in language learning.

Post-survey analysis

Table 6

Statement: Kahoot was easy to use when developing the activities.

Answers	Frequency	Percentage
Strongly agree	15	75%
Agree	5	25%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 6 presents the results of the post-survey question regarding the ease of use of Kahoot for developing activities. Most students, 75%, strongly agreed that Kahoot was easy to use for this purpose, while 25% agreed with the statement. Interestingly, no students disagreed or strongly disagreed, indicating a high level of consensus among participants regarding the user-friendliness of Kahoot for activity development. These results suggest that students found Kahoot to be a convenient and accessible tool for creating learning activities, which may have positively influenced their overall perception of using Kahoot to enhance EFL vocabulary.

Table 7

Statement: The use of Kahoot helped me to learn EFL vocabulary.

Answers	Frequency	Percentage
Strongly agree	13	65%
Agree	7	35%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 7 illustrates that the majority of students, comprising 65%, strongly agreed that Kahoot aided them in learning EFL vocabulary, while 35% agreed with the statement. Notably, no students disagreed or strongly disagreed, indicating unanimous consensus among participants regarding the beneficial role of Kahoot in vocabulary learning. These findings suggest that students perceived Kahoot as an effective tool for enhancing their vocabulary acquisition, reflecting positively on the effectiveness of Kahoot as a pedagogical resource in EFL instruction.

Table 8

Statement: Kahoot was a creative resource to learn EFL vocabulary.

Answers	Frequency	Percentage
Strongly agree	11	55%
Agree	9	45%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 8 portrays the findings from the post-survey question regarding the perception of Kahoot as a creative resource for learning EFL vocabulary after the intervention. The data indicate that most students, comprising 55%, strongly agreed that Kahoot was a creative resource for learning EFL vocabulary, while 45% agreed. Notably, none of the students disagreed or strongly disagreed, showcasing unanimous consent among participants regarding the creativity of Kahoot in vocabulary learning. These results underscore the effectiveness of Kahoot as an innovative and engaging tool in facilitating vocabulary acquisition in EFL education.

Table 9

Statement: I received immediate feedback from teachers when using Kahoot

Answers	Frequency	Percentage
Strongly agree	14	70%
Agree	6	30%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 9 indicates that a significant majority, comprising 70% of the participants, strongly agreed that they received immediate feedback from teachers when utilizing Kahoot. Additionally, 30% of the students agreed with the statement. Notably, none of the respondents expressed or strongly disagreed, indicating unanimous consensus among the participants regarding the prompt feedback provided by teachers during Kahoot sessions. These results emphasize the

effectiveness of Kahoot in facilitating real-time feedback, contributing to an interactive and engaging learning experience for students.

Table 10

Statement: I had a clear understanding of my own learning progress during the intervention.

Answers	Frequency	Percentage
Strongly agree	9	45%
Agree	11	55%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 10 shows the post-survey results completed following the Kahoot interaction with students. According to the statistics, a sizable majority, 55%, agreed, with 45% strongly agreeing that they had a clear comprehension of their learning progression. Surprisingly, no participants voiced dissent or significant disagreement. These findings indicate that the Kahoot intervention improved students' perceptions of their learning progress, implying that they could successfully track and grasp their achievements during the intervention.

Table 11

Statement: The use of games made learning fun and interactive for me.

Answers	Frequency	Percentage
Strongly agree	16	80%
Agree	4	20%
Disagree	0	0%

Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 11 shows, a large majority of respondents, 80%, strongly agreed that using games made learning more enjoyable and participatory. Meanwhile, the remaining 20% agreed with the sentiment. Fortunately, no one expressed dissent or significant disagreement. These findings imply that including games like Kahoot significantly increased students' involvement and pleasure in the learning process, producing a pleasant and engaging teaching atmosphere.

Table 12

Statement: I liked the variety of activities that Kahoot had to learn vocabulary.

Answers	Frequency	Percentage
Strongly agree	11	55%
Agree	9	45%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 12 shows that most respondents (55%), strongly agreed that they enjoyed the range of activities provided by Kahoot. Additionally, 45% of interviewees concurred with this opinion. Notably, no respondents voiced dissent or serious disagreement with the statement. These findings show that students evaluated Kahoot as a platform that provided various interesting vocabulary

learning exercises, emphasizing its usefulness in delivering various learning experiences to accommodate different learning preferences and styles.

Table 13

Statement: I felt highly engaged during the program/intervention.

Answers	Frequency	Percentage
Strongly agree	14	70%
Agree	6	30%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 13 in the findings shows that a large majority of respondents, 70%, strongly agreed that they felt very engaged during the intervention con Kahoot. Furthermore, 30% of respondents agreed with this opinion. Notably, no respondents voiced dissent or serious disagreement with the statement. These data indicate that the Kahoot intervention significantly increased student engagement, highlighting its usefulness in increasing active involvement and interest in the learning process.

Table 14

Statement: I felt motivated when using Kahoot.

Answers	Frequency	Percentage
Strongly agree	11	55%
Agree	9	45%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

Table 14 According to the findings, a considerable majority of respondents (55%), strongly agreed that they felt driven when using Kahoot. Furthermore, 45% of participants concurred with this assertion. Notably, no respondents voiced disagreement or severe disagreement. These data show that the use of Kahoot effectively inspired motivation among students, implying that it had a role in increasing their engagement and interest in learning activities.

Table 15

Statement: I would like to continue learning EFL vocabulary through Kahoot.

Answers	Frequency	Percentage
Strongly agree	16	80%
Agree	4	20%
Disagree	0	0%
Strongly Disagree	0	0%
Total	20	100%

Note. Elaborated by Martinez and Ordonez (2024)

In table 15 the results show a high level of enthusiasm among respondents, with 80% strongly agreeing that they would like to continue learning EFL vocabulary using Kahoot. Furthermore, 20% of the participants agreed with the assertion. Notably, none of the respondents disagreed or strongly disagreed, indicating a unified willingness to continue using Kahoot as a tool for vocabulary development. These data illustrate Kahoot's efficacy in keeping students interested and committed to learning English vocabulary.

Interview analysis

Similarly, once the intervention was completed, along with the post-survey, an interview was conducted with a group of students to understand their perception of using Kahoot in English vocabulary learning, yielding the following results.

Table 16

Analysis of interview

Theme	Sub Themes	Codes
Positive Perceptions	Fun Activities	“Kahoot has fun activities” S2 “Kahoot has many fun activities, viewing pictures or playing games help them retain vocabulary” S4 “I liked it a lot, it was fun, all the students were attentive and focused” S1
	Competition	“I liked Kahoot, I could compete with my classmates, which made me keep my eyes on the activity to finish fast and win”. S3
	Enjoyment	“The games are fun because I can compete with my classmates, and the images and sounds on the computer are different from other classroom activities” S1
	Learning Motivation	“kahoot, I like to use it because I can compete and win, the teacher incentivizes us with a candy or extra point” S3
	Confidence Boost	“With Kahoot I have no shame, because it is through the computer and that gives me confidence in answering even if I make a

		mistake my classmates won't make fun of me and the teacher gives me feedback" S2
Negative Perceptions	Technical Issues	"I am not an expert in technology" S4
	Limited Resources	"There are not enough computers for everyone and we have to be divided into groups" S4
	Interruptions	"Sometimes the internet was down, I couldn't finish playing, and other teammates won" S1

Note. Elaborated by Martinez and Ordonez (2024)

The students in the intervention group expressed overwhelmingly positive perceptions of using Kahoot to enhance EFL vocabulary. They found the activities to be engaging, especially enjoying the fun activities and the competition aspect. One student mentioned, "Kahoot has many fun activities, viewing images or playing help me retain vocabulary," highlighting the enjoyment factor.

Additionally, they felt motivated to participate in class, with one student stating, "Playing and learning at the same time." The immediate feedback from the teacher also played a role in boosting their confidence, as one student mentioned, "I felt good, sometimes I got the answers right and sometimes wrong, but next time I won't make mistakes."

However, there were challenges such as technical issues and limited resources, with students expressing frustration when the internet connection was unreliable or when there weren't enough computers for everyone. Despite these problems, the students overwhelmingly stated their willingness to continue using Kahoot in their English classrooms since it is interesting and engaging, as one

student noted, "Yes, because I like to play, it's fun, and because I can compete with my classmates and the class is not boring."

3.9 Limitations in the Study

The study the impact of using Kahoot on developing EFL ninth- grade students' vocabulary provided useful data, although important limitations should be kept in mind. To begin with, the sample size of two classes of 20 learners each may limit the generalizability of the results.

Furthermore, the intervention's five weeks and nine sessions may not have allowed for a thorough evaluation of Kahoot's long-term impacts on vocabulary learning. Extended intervention durations and follow-up examinations may provide more information about the long-term impact.

Finally, the intervention highlighted the obstacles in the accessibility of technology, such as restricted access to computers or concerns about Internet connectivity; likewise, many of the students did not know how to use the computer efficiently, due to the limitations suffered by the environment due to It is an institution in a rural area. However, the extent to which these barriers may have influenced participation or outcomes was not fully investigated.

Conclusions

The usage of Kahoot considerably enhanced students' ability to write words correctly in terms of form, with the vast majority improving above pre-test scores. This progress is due to Kahoot's gamified approach, which turns spelling exercises into interesting games. Additionally, Kahoot's fast feedback function enables students to quickly learn from their mistakes, emphasizing appropriate spelling and efficiently improving spelling abilities.

Kahoot proved to be an incredibly successful tool for helping students comprehend the meaning of vocabulary terms. The majority of students improved in this area following the intervention, indicating that Kahoot's diverse activities aid in greater comprehension of word in context. This conclusion is consistent with previous studies demonstrating that Kahoot encourages students to recall and apply word meanings in real-world circumstances, improving their vocabulary comprehension.

The intervention utilizing Kahoot resulted in significant enhancements in students' capacity to employ vocabulary appropriately within context. A majority of students exhibited mastery of this skill post-intervention, underscoring Kahoot's efficacy in fostering vocabulary usage through interactive activities and context-based challenges.

Students principally enjoyed Kahoot, seeing it as a useful and entertaining tool for vocabulary development. They like Kahoot's engaging and enjoyable character, competitive components, and the range of activities available. Students

also felt motivated, interested, and confident when using Kahoot, which they attributed to the platform's gamified approach and rapid feedback aspects.

Despite significant technical problems and restrictions in technological accessibility, such as limited computer access and internet connectivity concerns, students showed a strong willingness to continue utilizing Kahoot for vocabulary acquisition. They found Kahoot pleasant, motivating, and advantageous to their language development, demonstrating its potential as a significant resource in EFL education, particularly in rural areas or settings with inadequate technology infrastructure.

Recommendations

It is suggested that teachers and students must be conscious of the importance of using technology tools in their classes since it allows English teachers to integrate a variety of interactive activities that can be adapted according to the student's needs and learning strategies.

Teachers are recommended to use technology in the classroom since opens up new possibilities for learning EFL vocabulary, in the same way, ICT provides the teachers with a variety of technological resources that contribute positively to the learning process.

It is recommended that teachers look for innovative technological tools to motivate students in class and build up their vocabulary learning such as Kahoot, which is one of the resources that help students feel motivated to learn and practice vocabulary.

Teachers should encourage students to use Kahoot to practice vocabulary by themselves and improve their proficiency in the language, their technological skills, and their learning autonomy.

Bibliografía

- Afify, S. S.-D., & Latif, E. M. (2020). The Effectiveness of Kahoot on Technical Vocabulary Learning and Motivation of Engineering Students . *Journal of education - FOED - AL Azhar University*, págs. 610-633.
- Alfadil, M. (01 de Marzo de 2020). Effectiveness of virtual reality game in foreign language vocabulary acquisition. *Computers & Education* , 153. doi:10.1016/j.compedu.2020.103893
- Altawalbeh, K., & Irwanto, I. (2023). Game-Based Learning: The Impact of Kahoot on a Higher Education Online Classroom. *Journal of Educational Technology and Instruction, II*, 30-51. Obtenido de <https://ijeti-edu.org/>
- Bhandari, P. (6 de May de 2022). *Scribbr*. Obtenido de <https://www.scribbr.com/methodology/operationalization/#:~:text=Variables%20are%20properties%20or%20characteristics,and%20indicators%20is%20called%20operationalization.>
- Bhandari., P. (21 de June de 2023). Population vs. Sample | Definitions, Differences & Examples. *Scribbr*. Obtenido de <https://www.scribbr.com/methodology/population-vs-sample/#:~:text=A%20population%20is%20the%20entire,t%20always%20refer%20to%20people.>
- Burney, S., & Saleem, H. (2008). Inductive and Deductive Research Approach., (págs. 1-22). doi:10.13140/RG.2.2.31603.58406
- Creswell, J. (2009). *Research Design* (Third ed.). California: SAGE Publications.

- Creswell, J. W. (2012). *Educational research : planning, conducting, and evaluating quantitative and qualitative research*. United States of America: Pearson.
- Cuenca, W. (2021). *The use of Kahoot Platform to Encourage Vocabulary in English*. Machala: Universidad Técnica de Machala.
- Cynthia and Drew Johnson. (2016). Why Teach Vocabulary? *YUMPO*, 1-15. Obtenido de <https://www.yumpu.com/en/document/view/40748776/why-teach-vocabulary-by-cynthia-and-drew-johnson>
- Encarnación, E., & Elizabeth, V. (2019). The impact of the use of songs in the learning of English vocabulary in 8th grade students of Cariamanga school. *Universidad Tecnica Partocular de Loja*, 10-15. Obtenido de <https://dspace.utpl.edu.ec/bitstream/20.500.11962/23974/1/Escaleras%20Encarnaci%c3%b3n%2c%20Viviana%20Elizabeth%20-%20INGLES.pdf>
- Ghazal, L. (05 de January de 2007). Learning Vocabulary in EFL Context Throught Vocabulary Learning Strategies. *ResearchGate*, 1(2), 84-91. Obtenido de file:///C:/Users/LENOVO/Downloads/Learning_Vocabulary_in_EFL_Contexts_through_Vocabu.pdf
- Graham, K. (2015). TechMatters: Getting into Kahoot!(s): Exploring a Game-Based Learning System to Enhance Student Learning. *LOEX Quarterly*, 42(4), 6-7. Obtenido de <https://commons.emich.edu/loexquarterly/vol42/iss3/4/>
- Harmer, J. (2007). *How to teach english* (Second ed.). England: Person Educational Limited. Obtenido de

https://www.academia.edu/29550207/How_to_Teach_English_2nd_Edition_Jeremy_Harmer

Husnanissa, A. (2019). MEASURING ENGLISH STUDENTS' VOCABULARY SIZE. *Munaqosah*, 29-50. Obtenido de <http://repository.radenintan.ac.id/9640/1/A%20THESIS%202.pdf>

Kaur, P., & Nadarajan, R. (2020). Language learning and teaching using Kahoot! *International Journal of Modern Education*, II(5), 19-28. doi:10.35631/IJMOE.25003

Lightbown, M., & Spada, N. (2013). *How Languages are Learned 4th edition - Oxford Handbooks for Language Teachers* (Vol. 4). United Kingdom. Obtenido de [https://books.google.com.ec/books?hl=es&lr=&id=5PadBgAAQBAJ&oi=fnd&pg=PT11&dq=Lightbown,+P.+%26+Spada,+N.+\(2013\).+H](https://books.google.com.ec/books?hl=es&lr=&id=5PadBgAAQBAJ&oi=fnd&pg=PT11&dq=Lightbown,+P.+%26+Spada,+N.+(2013).+H)

Lightbown, P. M., & Spada, N. (2017). *How Languages are Learned* (Vol. 6). Oxford University Press. Obtenido de http://www.saint-david.net/uploads/1/0/4/3/10434103/how_languages_are_learned.pdf

Lin, D. T., M., G., & Kaur, M. (2018). Kahoot! It: Gamification in Higher Education. *Pertanika*, 26(1), 565-582. Obtenido de <http://www.pertanika.upm.edu.my/>

Llerena, E., & Rodríguez, C. (2017). Kahoot! A Digital Tool for Learning Vocabulary in a language classroom. *Publicando*, 12(1). Obtenido de

https://revistapublicando.org/revista/index.php/crv/article/view/673/pdf_4

78

Mahbubah, L., & Anam, S. (2022). Students' perceptions on the implementation of kahoot! In English Language teaching. *Lingua Scientia*, 29(1), 23-32.

Obtenido

de

<https://ejournal.undiksha.ac.id/index.php/JJBI/article/view/35644>

Mayer, R. (2014). *The Cambridge Handbook of Multimedia Learning* (Vol. II). New York, United States of America: Cambridge University Press.

Mayer, R., & Moreno, R. (2005). A Cognitive Theory of Multimedia Learning:

Implications for Design Principles. *ResearchGate*, 1-11. Obtenido de

https://www.researchgate.net/publication/248528255_A_Cognitive_Theory_of_Multimedia_Learning_Implications_for_Design_Principles

https://www.researchgate.net/publication/248528255_A_Cognitive_Theory_of_Multimedia_Learning_Implications_for_Design_Principles

McCombes, S. (22 de June de 2023). Descriptive Research | Definition, Types,

Methods

&

Examples.

Scribbr.

Obtenido

de

<https://www.scribbr.com/methodology/descriptive-research/>

Melo, M., & García, S. (2021). *Young learners' evaluation of using Kahoot to learn vocabulary in English at Cursos de Extensión Universitaria (CEU) BUAP*.

México: Benemérita Universidad Autónoma de Puebla.

Melor, Y., Lubis, M., & Lin, C. (1 de January de 2009). Language Learning via

ICT: Uses, Challenges and Issues. *WSEAS Transactions on Information*

Science and Applications, VI, págs. 1453-1467. Obtenido de

https://www.researchgate.net/publication/234793968_Language_learning_

via_ICT_Uses_challenges_and_issues/link/5dd27f09a6fdcc7e138a8d79/download

Melor, Y., Lubis, M., & Lin, C. (2009). Language Learning via ICT: Uses, Challenges and Issues. *WSEAS Transactions on Information Science and Applications*, 1453-1467. Obtenido de https://www.researchgate.net/publication/234793968_Language_learning_via_ICT_Uses_challenges_and_issues/link/5dd27f09a6fdcc7e138a8d79/download

Mofareh, A. (2015). THE IMPORTANCE OF VOCABULARY IN LANGUAGE. *International Journal of Teaching and Education*, 3(3), 1-14. doi:DOI: 10.20472/TE.2015.3.3.002

Mubarak, M. (2013). The use of computer technology in EFL classroom: Advantages and implications. *International Journal of English Language & Translation Studies*, 1(1), 44-51. Obtenido de www.eltsjournal.org

Mujtaba, S., & Mustafa, M. (13 de April - June de 2013). The Use of Computer Technology in EFL Classroom: Advantages and Implications. (D. o. Studies., Ed.) *International Journal of English Language & Translation Studies*, 1(1), 44-51. Obtenido de https://www.researchgate.net/profile/Mustafa-Pathan/publication/301612905_The_use_of_computer_technology_in_EFL_classroom_Advantages_and_implications/links/571d0a1e08aee3ddc56ac52b/The-use-of-computer-technology-in-EFL-classroom-Advantages-and-implication

- Mujtaba, S., & Mustafa, M. (2013). The Use of Computer Technology in EFL Classroom: Advantages and Implications. *International Journal of English Language & Translation Studies*, *1*, 44-51. Retrieved from https://www.researchgate.net/profile/Mustafa-Pathan/publication/301612905_The_use_of_computer_technology_in_EFL_classroom_Advantages_and_implications/links/571d0a1e08aee3ddc56ac52b/The-use-of-computer-technology-in-EFL-classroom-Advantages-and-implication
- Nigel Cross, J. N. (2022). Design method and scientific method. *ScienceDirect*, *2*, 195-2001. doi:[https://doi.org/10.1016/0142-694X\(81\)90050-8](https://doi.org/10.1016/0142-694X(81)90050-8)
- Norrbbit, S. (2019). Understanding vocabulary acquisition, instruction, and. *Cambridge University Express*, 261-274. doi:[doi:10.1017/S0261444819000053](https://doi.org/10.1017/S0261444819000053)
- Nukus, K. (2021). The Definition of Vocabulary and Behaviorist Learning Theory. *Karakalpak State University*, 168-170. Obtenido de https://www.researchgate.net/profile/Saltanat-Kaypova/publication/357131692_Na_pereseceonii_azykov_i_kultur_2021_119/links/61bce1741d88
- Odinokaya, M. A., Krylova, E. A., Rubtsova , A. V., & Almazova, N. I. (27 de August de 2021). Using the Discord Application to Facilitate EFL Vocabulary. *Education Science*, 1-11. doi:doi.org/10.3390/educsci11090470

- Pérez, A., Pérez, P., & Méndez, C. (2016). The learning outcomes in the study program format of school subjects belonging to the General Training Area at UJAT: A syntactic and semantic analysis. *Perspectivas docentes* 60. México: Universidad Juárez Autónoma de Tabasco (UJAT). Obtenido de <https://dialnet.unirioja.es/descarga/articulo/6349221.pdf>
- PIKULSKI, J., & TEMPLETON, S. (2004). Teaching and Developing Vocabulary. *Houghton Mifflin Company*, 1-12. Obtenido de file:///C:/Users/LENOVO/Downloads/Teaching_and_Developing_Vocabulary_Key_t.pdf
- Rabindran, & Madanagopal, D. (September de 2020). Piaget's Theory and Stages of Cognitive Development. *Scholars Journal of Applied Medical Sciences*. doi:10.36347/sjams.2020.v08i09.034
- Rohman, D., & Fauziati, E. (February de 2022). Gamification of Learning in the Perspective of Constructivism Philosophy Lev Vygotsky. *V(1)*, págs. 4467-4474. doi: [doi:https://doi.org/10.33258/birci](https://doi.org/10.33258/birci).
- Romero-Villamil, J. L., & Guzman-Martinez, C. P. (27 de July de 2020). Learning Vocabulary. *Gist Education and Learning Research Journal*(21), 7-25. Obtenido de file:///C:/Users/LENOVO/Downloads/Learning_Vocabulary_Through_Instructional_Subtitle.pdf
- Toma, F., Diaconu, D., & Popescu, C. (2021). The Use of the Kahoot! Learning Platform as a Type of Formative Assessment in the Context of Pre-

University Education during the COVID-19 Pandemic Period. *Education Sciences*, XI. Obtenido de <https://www.mdpi.com/2227-7102/11/10/649>

Torres, D. (2021). *Kahoot! and Quizlet as a scaffolding strategy enhance english language vocabulary among Ket preparation students at English speak up center, afternoon session in the Loja city during 2020–2021 school year.* Loja: Universidad Nacional de Loja.

Torres, D. (2021). *Kahoot! And quizlet as a scaffolding strategy enhance english language Vocabulary among ketpreparation students at english speak up center, afternoon session in the Loja city during 2020–2021 school year.* Loja, Ecuador: Universidad Nacional de Loja.