UNIVERSIDAD NACIONAL DE CHIMBORAZO

FACULTAD DE CIECIAS DE LA EDUCACIÓN, HUMANAS Y TECNOLOGÍAS

CARRERA DE PEDAGOGIA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

TITLE OF THE RESEARCH WORK

The usage of digital flashcards to teach English vocabulary

Trabajo de Titulación para optar al título de Licenciatura en Pedagogía de los Idiomas Nacionales y Extranjeros

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Riobamba, Ecuador. 2025

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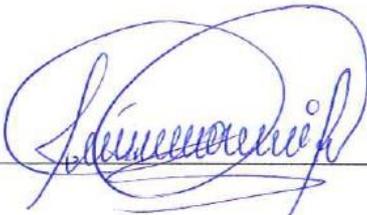
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DEDICATORY

To God, for fulfilling His promise in this journey that has now come to an end: **" Commit your works to the Lord and your plans will succeed" (Proverbs 16:3)**. *In every step and every challenge, I felt His faithfulness, granting me the peace and courage needed to move forward.*

To my son, Benjamin Zarate you are the light of my life and the reason behind so many of my efforts. I dedicate this thesis to you with the hope that it inspires you to pursue your own dreams with passion and perseverance.

To my friend, Jorge Zárate Your example is a daily inspiration, and your guidance is invaluable in every step I take. I know the path of learning is extensive, but having you as a mentor gives me the certainty that, with your help, I will achieve my dreams. Thank you!

To my mother, Maria Carmen Guamushi Ganan Thank you for planting in me the seed of knowledge and for teaching me the value of effort. I hope this achievement makes you feel proud, just as I am proud to be your daughter. I love you very much."

To my brothers, Andy Espinoza and David Guamushi hank you for being a fundamental part of my life, for enriching each day with your presence and love. I love you all very much, more than words can express.

To my grandmother and Brother Grabiela Nono Ganan , Henry Espinoza Though their voices are no longer heard, their presence lives on in my heart. This achievement is also yours, for your light has guided me this far. With love and eternal gratitude.

Nathaly Espinoza

ACKOWLEDGEMENT

To   God for guiding me on the path of good and for giving me wisdom and strength to move forward in the most difficult moments of my life and allowing my goals and objectives to be fulfilled.

To the National University of Chimborazo, especially to the National and Foreign Languages Pedagogy Career that formed me as a professional and opened the doors to educate me in such a prestigious institution, to my teachers who taught me their knowledge.

Finally, I thank my family for trusting me despite the difficulties and my friends Omar Condor and Ricardo Manzano, Gloria Monar, Malu Escobar, Adriana Leech, Camila Granizo who brightened my days during these eight semesters, without their company nothing would have been the same.

Nathaly Espinoza

GENERAL INDEX

RESUMEN

Las flashcards digitales son un ejemplo de herramienta tecnológica que tiene un gran impacto en la educación, ya que ayudan a los alumnos a adquirir nuevo vocabulario que se considera relevante para el aprendizaje del inglés. Por esta razón, el propósito de esta investigación fue analizar cómo están siendo utilizadas las flashcards digitales para enseñar vocabulario en inglés a los estudiantes del segundo año de Educación General Básica «A» de la Unidad Educativa Cristiana «Nazareno», ciudad de Riobamba, provincia de Chimborazo. La naturaleza dinámica e interactiva de las flashcards digitales, que utilizan contenidos visuales y auditivos cautivadores para enseñar vocabulario, las está haciendo cada vez más populares en los entornos educativos. Metodológicamente, esta investigación siguió un enfoque cualitativo. El diseño del proyecto de investigación es exploratorio, de nivel diagnóstico. La población estuvo conformada por 30 estudiantes de segundo año de Educación General Básica de la Unidad Educativa Cristiana "Nazareno" de Riobamba, provincia de Chimborazo. Para la obtención de la muestra, por ser pequeña, no necesitará de un cálculo muestral. Las técnicas utilizadas fueron la observación y la entrevista. Los instrumentos utilizados fueron la Guía de Observación y la Guía de Entrevista, a través de los cuales se recogieron y analizaron los datos. Los resultados mostraron que las flashcards digitales son eficaces para introducir vocabulario nuevo captando la atención de los alumnos y favoreciendo la comprensión inicial. Sin embargo, el uso poco sistemático de actividades contextualizadas e interactivas limitó la capacidad de los alumnos para retener y aplicar el vocabulario en situaciones de la vida real. Esta falta de variedad y de tareas creativas, debida a menudo a la escasez de tiempo, afectó a la competencia general de los alumnos en materia de vocabulario.

Palabras claves: Flashcards digitales, Aprendizaje de vocabulario, Enseñanza del inglés, Tecnología educativa.

ABSTRACT

Digital flashcards are an example of a technological tool that has a big impact on education since they assist pupils acquire new vocabulary that is regarded to be relevant to learning English. For this reason, the purpose of this research was to analyze how are the digital flashcards being used to teach English vocabulary to the students of the second year of General Basic Education "A" of the Christian Educational Unit "Nazareno", city of Riobamba, province of Chimborazo. The dynamic and interactive nature of digital flashcards, which use captivating visual and aural content to teach vocabulary, is making them more and more popular in educational settings. Methodologically, this investigation followed a qualitative approach. The research design project is exploratory, diagnostic level. The population was made up of 30 students of second-year General Basic Education students at Unidad Educativa Cristiana "Nazareno" in Riobamba, Chimborazo province. To obtain the sample, since it is small, it will not need a sample calculation. The techniques used were observation and interview. The instruments used were the Observation Guide and the Interview guide, through which the data were collected and analyzed. The results allowed concluding that digital flashcards are effective in introducing new vocabulary by capturing students' attention and supporting initial understanding. However, the inconsistent use of contextualized and interactive activities limited the students' ability to retain and apply the vocabulary in real-life situations. This lack of variety and creative tasks, often due to time constraints, affected students' overall vocabulary competence.

Keywords: Digital flashcards, Vocabulary learning, English teaching, Educational Technology.

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CHAPTER I

1. REFERENTIAL FRAMEWORK

1.1 INTRODUCCION

Knowing Vocabulary is one of the essential things we do while learning any new language. However, second-year General Basic Education students at Unidad Educativa Cristiana"Nazareno" in Riobamba, Chimborazo province, present a deficient level of English vocabulary competence despite having high technology resources. This is due to a failure in utilizing digital tools, paper flashcards and relying too heavily on old school methods that that do not promote active participation or contextual learning.

Digital flashcards have demonstrated to be an effective tool for learning vocabulary, as they present the words in a visual and repetitive way, which facilitates their memorization and recognition. But, at the Unidad Educativa Cristiana "Nazareno", they´ve been unable to materialize these tools. The goal of the research is to analyze how digital flashcards are being applied in teaching English vocabulary, discover mistakes made by a teacher during their usage and provide amendments that will enhance pupils' linguistic competences. It also aims at investigating acceptance of these tools and student perception towards their teacher using them.

The importance of this research lies in the need to adapt teaching strategies to current technological and pedagogical demands. Through detailed observation and critical analysis of teaching practices, practical and effective solutions are expected to be provided that not only improve students' academic performance but also enrich the educational experience by making it more interactive and engaging. It also seeks to understand students' preferences and perceptions to ensure that the technological tools used align with their needs and expectations.

1.2 PROBLEM STATEMENT

Unidad Educativa Cristiana "Nazareno" is a private institution of city Riobamba, in the Chimborazo province the school has well-established equipment in terms of technological resources and infrastructure for teaching English. Despite the school's well-equipped facilities and advanced technological resources for teaching English, students

demonstrate a low level of vocabulary competence. This issue stems from the ineffective utilization of digital tools, particularly digital flashcards, in vocabulary instruction.

The primary problem is how dependent they are on old-school pedagogical techniques like rote memorization, which for the most part disengage students and practically ignores technology altogether. A significant impact of these antiquated practices is the passive nature of learning, as well as very low retention rates, contributing to the stagnation of the students' ability to learn languages and understand content. Learning vocabulary should be active rather than passive. Without context, rote learning alone does not promote comprehensive comprehension and memory recall. (Schmitt & Schmitt, 2020).

During practical classes, the researcher has identified few keys issues. A significant issue lies in the continued use of traditional teaching methods that that do not take full advantage of available technology. Vocabulary instruction is often mechanical and lacks innovation, contributing to students' disinterest and low vocabulary competence. Specialized tools such as digital flashcards are not being adequately utilized to boost learning results. "Teaching strategies must be varied and contextual to enhance vocabulary retention and use" (Nation, 2001), something which is not happening with a current teaching methodology being implemented at this institution.

The Critical Problem at Unidad Educativa Cristian Nazareno is the improper utilization of digital flash cards in vocabulary building; this causes inadequate word skills among students. This issue needs a fundamental rethinking of the way we are teaching today and strategies for making memory power tools much more interactive, dynamic. This may indeed be achieved by implementing interactive and digital learning methodologies that are based on some proven language theories.

1.3   PROBLEM FORMULATION

How are the digital flashcards being used to teach English vocabulary to the students of the second year of General Basic Education "A" of the Christian Educational Unit "Nazareno", city of Riobamba, province of Chimborazo, school year 2024-2025?

1.4 JUSTIFICATION

This work is important because it enhances the field of vocabulary learning in English, allowing to know and apply appropriate techniques that allow second year parallel "A" students to increase their vocabulary in an effective way. For this reason, digital flashcards are new tools used by teachers in the classroom for teaching vocabulary with the purpose of improving the students' communication skills during the learning process.

The purpose of this research is to determine the correct use of digital flashcards as a technique to teach vocabulary to students of second level of General Basic Education parallel "A" of the Unidad Educativa Cristiana "Nazareno" located in the city of Riobamba, province of Chimborazo, during the academic year 2024-2025.

This research is significant to increase vocabulary. It is also useful for teachers who are using digital flashcards to have a guide on how to use these flashcards and be used effectively in their classrooms, as well as this research is very useful for teachers who want to enter the world of technology and want to apply this technique of teaching vocabulary.

The beneficiaries were 40 students of the 2nd level of General Basic Education parallel "A" of the Unidad Educativa "Nazareno ", and an English teacher. To develop this research, the researcher had a two quimestrals period from May to December, with the collaboration of the teacher and the authorities of the Unidad Educativa Cristiana "Nazareno".

The viability of the research lies in its low cost, as well as in the unconditional cooperation of the tutor, the English teacher of the institution, the students and the resources of the library. Finally, it was feasible in time, space and resources.

1.5 OBJETIVES: GENERAL AND SPECIFICS

1.5.1 GENERAL OBJECTIVE

To Analyze the usage of digital flashcards when teaching English vocabulary to students coursing the Segundo Año de Educación General Básica "A" at Unidad Educativa Cristiana Nazareno, in the city of Riobamba, Chimborazo province, during the academic period.

1.5.2 SPECIFIC OBJECTIVES

- ✓ To describe the criteria used to select digital flashcards an English lesson.
- ✓ To Identify the process for using digital flashcards when teaching English vocabulary.
- ✓ To determine the effectiveness of using the digital Flashcards based on students' perspectives for vocabulary learning.

CHAPER II

2. THEORETICAL FRAMEWORK

2.1 INVESTIGATIVE BACKGROUND

The theoretical framework developed below shows concepts, information aimed at the educational field that will information directed to the educational field that will help to understand the present research work. research. Next, it is presented the background containing several bibliographic researches in digital repositories of their respective national and international universities, as articles related to the research project.

Search in the repository of the Universidad Central del Ecuador, as part of the research project presented by Gómez Pupiales Rocio Elizabeth to obtain a degree, with the topic "Digital brochures in the teaching of English vocabulary". Based on the main objective of the research project, which was to determine how digital flashcards contribute to the teaching of English vocabulary as a didactic material for 2nd grade students of the Carlos Alvarez Miño Suizo Private Educational Institution, after having used a field research following a qualitative-quantitative approach, it was finally concluded that: The use of digital flashcards contributes to the lexical development of the English language by decreasing the interference of the sound-graphic relationship of the foreign language, in addition it can be evidenced that teachers consider that the use of digital flashcards is the best option for teaching and learning vocabulary in the classroom due to flexibility and easy handling.

Searching in the repository of the Universidad Tecnica de Ambato in the research work prior to obtaining the degree made by: Unaucho Guala Evelyn Gissela in the year 2023 with the topic: " Digital Flascards and vocabulary learning ".Taking into account the main objective of the research project which was, To analyze the use of digital flashcards on vocabulary learning at seventh grade "A" "Oxford" High School and after having used field research following a quantitative approach finally concludes that: The use of digital flashcards The use of digital flashcards complements the learning process because, although they are perceived as an innovative and dynamic tool by students, their impact on vocabulary level is not significant. This indicates the need to integrate additional strategies to effectively improve vocabulary acquisition.

Another important article show The findings revealed that students who tended to use digital dictionaries had more significant increases in their vocabulary than those using traditional methods. The book user group had a mean score of 47.2 at the beginning of the study, which increased to 82.0 after the intervention hence showing that digital dictionaries are effective tools for enhancing vocabulary due to their flexibility (Yulsardi & Ratmanida, 2021)

Effects of Digital Tablet Use in the Study of Second Language (L2) Vocabulary Learning than Paper Worksheets at Different Levels of English - Worksheets are considered one of the best tools for vocabulary teaching. These participants were divided into three groups based upon their levels: beginner, intermediate, and advanced ... 139 Japanese Students Receive, Both Digital and Paper Flashcards - The results of this study indicate that students with lower backgrounds in English proficiency could greatly benefit from digital flashcards for vocabulary learning. However, students with higher English proficiency achieved similar results using both methods (Ashcroft et al., 2018)

In the article titled "Using Canva to Design Effective Flashcards for Young Learners

Young Teaching says that flashcards for children are used in EYL (English for Young Learners) programs because, they help students make vocabulary connections. We emphasize that they are useful and effective tool for teaching English. Back to reality. Improves understanding and recall of key concepts. These resources not only boost students' confidence, but also develop basic skills such as communication, reading and listening. The constant revision of vocabulary combined with dynamic activities and a well-organized visual design greatly enhances learning- In conclusion, flashcards are a flexible and effective tool for teaching English and Canva is a useful solution that can facilitate design and adaptation to the learner's needs (Fitria et al., 2024).

Lastly the article called Mobile-assisted academic vocabulary learning with digital flashcards shows that learning academic vocabulary on mobile devices (e.g., Quizlet) using digital flashcards is more effective than using traditional word lists. Digital learners using digital worksheets made greater progress in both academic vocabulary and self-regulation skills. These results can be attributed to the features of digital worksheets, such as intermittent repetition and progress tracking, which allow learners to better manage their time, set goals and continuously assess their learning. The study emphasizes that the use of

mobile technology not only enhances learning outside the classroom, but also motivates students to engage independently and continuously in the learning process (Boroughani et al., 2023).

2.2 THEORETICAL Framework

This theoretical framework is based on scientific data that will aid the researcher in comprehending the main aspects affecting the study of digital flashcards and their effect on vocabulary learning.

2.2.1 Pedagogical Theories in Digital Language Learning

Different pedagogies inform the incorporation of digital technologies in language learning. Among them, the theory is the constructed approach to learning by Piaget and Vygotsky: learning emanates from interaction with the immediate environment. Piaget indicated that learning was most optimal when students construct their knowledge through active exploration-discovery, meaning students learn best when the activities they are engaged with are hands-on and require them to test out prior knowledge while also developing new skills. Alternatively, Vygotsky dealt with the importance of social interaction-culture in learning, and a key aspect of Vygotsky's theory is the Zone of Proximal Development (ZDP), interpreted as the difference between what a learner can accomplish independently and what he/she is capable of doing with assistance or collaboration; in fact, Vygotsky pointed out that this is where learning takes place most efficiently, and where scaffolding occurs: scaffolding--structured help from teachers, peers, or tools. In this context, digital tools are very important for the facilitation of individual and collaborative learning processes. They enable the learners to take on an active role in their learning, challenging learning concepts by immediate feedback, adaptive support, and opportunities for independent practice, fully aligned to their own learning (Jonassen & Rohrer-Murphy, 1999).

Another approach that follows up on this aims at interactive communication and authentic activities as a method of language teaching, which is known as task-based language teaching (TBLT). Digital tools provide environment and scaffold communication for task-based activities like interactive exercises, quizzes, and collaborative projects

(Willis, 2021). These exercises help develop a dynamic and hands-on learning environment that encourages learners to apply language on real-life contexts.

2.2.2   Benefits of use technology in the classroom

Technology has had substantial effects on education through changing the nature of the learning process on students and teaching process on teachers as its major advantages are personalization of learning, encouraging active participation, developing digital skills, and optimization of collaboration and resources in the classroom ,these effects attest to the good influence of technology on modern education (Walden University, s. f.).

- Active modes of in-class interaction: Technology itself makes those subjects that are usually perceived as boring multifaceted and interactive; therefore, it facilitates real involvement on the part of students in the process of learning.
- -Accommodates individual needs of the student: Using technology tools, instructors can tailor their teaching method to problematic students by molding it according to diverse learning styles and competencies, leading to more inclusivity in the teaching process than personalized learning.
- Provides immediate access to educational resources: Technology offers broad and quick access to educational materials, tools and content, making it easier for both teachers and students to explore topics with greater depth and flexibility.
- Develops key competencies for the workplace: Incorporating technologies into the educational environment allows students to acquire digital skills that will be essential to their success in a job market increasingly focused on the use of technological tools.

2.2.3   Role of technology in education

The role of technology in education now occupies the central position in the teaching and learning process at larger scale. Rather than just being a supplement, technology functions as an effective medium linking the theory behind education with practice and thereby enabling the creation of more authentic, inclusive and effective learning environments. Within an expanding global environment, such technology tools allow pupils and educators to access new teaching resources and extend the process of education in various situations and together with various objects (Altlnay, 2020) .

Through the use of technologies, education can be revolutionized as it provides clear possibilities to individualize learning for each student and meet their needs. It incorporates changing not just the learning fabric but processes and products as well to fit the students' interests, readiness, and learning approaches. For instance, the employment of tablets and mobile and interactive apps give teachers options on how to vary their teaching strategies which makes the teaching approaches more inclusive. Such models as TPACK and SAMR set out a well-defined approach which can be followed in embedding technology in education as a tool to enhance rather just replacing the conventional one (Altlnay, 2020).

In addition, technology plays a crucial role in the adoption of new educational trends, such as the implementation of learning management systems, the use of big data to improve results, and the incorporation of open resources that promote equity and accessibility. These tools not only improve educational quality, but also help reduce gaps, allowing more people to access meaningful learning opportunities .

However, for technology to fulfill its transformative potential, it is essential to overcome certain challenges. This includes proper planning, ensuring the necessary infrastructure, access to technical support and training of teachers so that they can efficiently integrate technological tools into their daily practices. A solid organization and a strategic vision in the implementation of technology are fundamental to ensure its positive impact on learning.

To conclude, technology in education is not only a complement, but also an accelerator of transformational education. The effective integration of ICT becomes a construction of more energetic, inclusive and personalized learning experiences for 21st century learners, a boost to the development of academic competencies and a proactive desire and approach to student learning.

2.2.4   Digital Tools

Digital tools can be divided into two main categories: hardware, which includes physical devices such as computers, tablets and smartphones, and software, which includes apps and platforms to facilitate learning, such as Google Classroom, Edmodo, Moodle or gaming tools such as Duolingo and Bussu . These tools combine technology to enrich the learning experience with interactive and collaborative activities. Non-digital tools include

traditional materials and methods that do not require technology, such as worksheets, whiteboards, physical textbooks and oral communication activities such as discussions or presentations.

2.2.5 Platforms for flashcard creation

- **Canva:** It's one of the most useful tools for building teaching cards as it has a very functional interface to work with and allows you to change multiple settings. It has templates already created and all they need is some adjusting to have the different themes and styles which can help create great looking cards. In addition, it has an extensive library of images, icons and fonts, allowing you to add visual and textual elements to highlight key points. It also offers options for real-time collaboration, facilitating teamwork, and allows designs to be exported in a variety of formats for both print and digital distribution. Thanks to its cloud-based storage, projects can be accessed from different devices, providing flexibility and security. Canva is available on mobile devices, making it accessible at any time .

- **Quizlet:** This is another active learning tool and is one of the most popular websites featuring this capability, allowing users to create customized learning maps. It allows adding text, images, and even sound, which encourages multisensory learning. Among its most salient features are its various learning modes, including interactive games and automatic assessments. This not only makes the learning process more dynamic, but at the same time allows students to reinforce knowledge in a playful way. This is a very great tool in both individual and group learning because it gives one an avenue to share and collaborate in developing the learning materials.

- **Anki:** Anki is one of the very popular learning tools that has left its mark on the use of digital flashcards through the use of the spaced repetition technique.The objective of this spacing strategy is information retention to reach its optimal duration by showing a study item according to the progress being recorded by the system. Anki is highly customizable, with advanced multimedia features supporting text, image, audio, and even video items. This capability, together with synchronization across systems, or an active sharing community publishing decks about anything, allows students to train themselves in topics ranging from linguistics through medical sciences to computer science. As Anki would have it autonomous and effective learning, in a flexible manner, with advanced tools for memorizing large volumes.

2.2.6   Vocabulary Acquisition Theories

Comprehensible Input Hypothesis: Comprehensible Input Hypothesis: Comprehensible Input Hypothesis was given by Stephen Krashen holds that second language acquisition occurs when the learner receives and processes linguistic information slightly above his or her current level of proficiency. This input is often referred to as i+1, or the material should be comprehensible but challenging. Krashen argues that, when the learner is exposed to comprehensible language in meaningful contexts, he or she can internalize structures and vocabulary naturally, without the need for constant explicit instruction. (Krashen, 1985).

Noticing hypothesis: Richard Schmidt's noticing hypothesis highlights the role of conscious attention in the process of language development. It means that for the learning to be permanent, learners have to notice the linguistics forms embedded in the content being delivered to them. That is, mere contact with the language does not guarantee assimilation; the learner must pay active attention to form, meaning, and usage for the material to be processed in long-term memory. This theory stresses the need for activities and strategies that promote focus on vocabulary and its function in discourse, thus ensuring that new words do not go unnoticed (Schmidt, 1990).

Lexical Approach: The Lexical Approach, proposed by Michael Lewis, considers that the fundamental unit of second language learning is not the individual word, but larger lexical units, such as collocations, fixed expressions and prefabricated sequences. Under this perspective, the lexicon is not limited to isolated lists of words, but is acquired through exposure to patterns, frequent combinations and real contexts of use. For example, instead of teaching the words "make" and "decision" separately, the Lexical Approach suggests presenting the expression "make a decision" as a lexical unit, a "chunk" that students internalize in an integrated way. In this way, the learner learns not only the meaning of the word "decision," but how it is used in conjunction with the verb "make" to convey a complete and natural idea in speech. This approach fosters fluency and communicative competence, as the learner recognizes and reproduces lexical fragments without having to construct them word for word each time he/she wishes to express him/herself (Lewis, 1993).

Multimodal Learning Theories

Multimodal learning theories, among which Richard Mayer's proposal stands out, focus on how the brain processes information presented in different modes (visual, auditory, textual). According to Mayer, the coherent combination of images, sound and text can improve comprehension and retention of content, provided that cognitive overload is avoided. This theory assumes that learning is more effective when information is carefully integrated and presented in a comprehensible and engaging way, allowing learners to build stronger mental connections between verbal and nonverbal representations of the material, favoring vocabulary consolidation (Mayer, 2009).

Second language acquisition: vocabulary acquisition in a second language is significantly enhanced when words are presented with appropriate frequency and in authentic communicative contexts. This strategy does not focus on the sole preservation of isolated meanings but enhances the comprehension of cultural subtleties, linguistic registers and certain applications of the lexicon in real life situations. In addition, interaction with words more than once within the tasks with communicative purpose makes the learner more sensitive to idiomatic conventions and confidence to use the vocabulary. Constructive feedback, which is the view of a correct approach through the proper time and positive encouragement, makes it easier to fix such learnings and terms misuse. As a result, the words become more deeply integrated into the learner's linguistic repertoire, favoring not only access to them in everyday communication, but also their flexible transfer to new contexts and communicative situations (Schmitt, 2008).

Dual Coding Theory: dual Coding theory emphasizes the importance of combining verbal and visual stimuli to optimize lexical learning. According to this perspective, the mind processes information through two complementary channels-the verbal, linked to language, and the nonverbal, associated with images-which makes it possible to generate richer and more diverse mental representations. By incorporating images, illustrations or visual elements along with words, the learner not only anchors new vocabulary to a meaningful referent, but also facilitates its storage in long-term memory. This multisensory integration reduces the likelihood of forgetting, as there are multiple mental access routes to the same concept, and promotes faster retrieval in real communicative situations. Therefore, by supporting the written or oral text with visual supports, the learner acquires a more solid

cognitive scaffolding, increasing retention, deep understanding of the lexicon and the ability to transfer it to authentic contexts of use (Paivio, 1986).

2.2.7 Vocabulary

According to the Real Academia de la Lengua it is the set of 'terms that make up a language or language' therefore they are words that a person masters and uses in their conversations, in the teaching-learning process of the English language it is a fundamental element, it develops the communicative competences of the people. By implementing it from early childhood onwards, language fluency will be achieved at higher levels.

The majority of vocabulary is inadvertently learned through indirect word exposure, according to scientific study on vocabulary instruction. By reading widely on their own, participating in rich spoken language activities at home and at school, and hearing books read aloud to them, students can incidentally pick up vocabulary. For long-term vocabulary development, reading volume is crucial (Cunningham & Stanovich, 1998)

Vocabulary refers to a listing or set of words for a positive language, in addition to a listing or set of words that a speaker of a language may use to communicate. It means that vocabulary is the phrase that is used to communicate by means of the speaker in a sure language (Hatch & Brown, 1995). On the other hand , vocabulary is described as the words a person wishes to know in order to communicate successfully; words in talking (expressive vocabulary) and phrases in listening (receptive vocabulary). For that unique purpose, vocabulary performs an important function in language (Neuman & Dwyer, 2009).

The different professional Richards also consider vocabulary as a middle factor of language proficiency with a purpose to affect how the learner speak, concentrate, study and write. This indicates that without a right approach in obtaining new vocabulary, the inexperienced persons will face a few difficulties in using the language itself (Richards et al., 2022).

Finally, from the definitions above, it may be concluded that vocabulary is a set of words which might be very essential to be mastered by way of the novices if you want to be capable of talk in a certain language. Vocabulary is taken into consideration as a essential

detail in language getting to know, it offers the simple wishes for the newbies on how they talk, concentrate, study and write.

- **Types of vocabulary**

There are kinds of vocabulary. The first one is receptive vocabulary also referred to as passive vocabulary and the second one is productive vocabulary called active vocabulary (Hatch & Brown, 1995).

- Receptive Vocabulary: the words that the learner acknowledges and understands in a sure context but which he cannot produce is referred to as receptive vocabulary. In other phrases, receptive vocabulary refers to words that a person can realize and reply to, even when he can not produce the ones words.
- Productive vocabulary: is the phrases which the learner is aware can also pronounce efficaciously and use constructively mainly in talking and writing. Productive vocabulary essentially decided by the quantity of phrases someone can write or speak.

In conclusion, receptive vocabulary information manner the functionality to comprehend a phrase whilst the learner sees or hears it. On the alternative hand, productive vocabulary knowledge approach the know-how to supply a phrase when the learner can use it in their writing or speech.

- **Criteria to select vocabulary**

Professors should teach their students vocabulary sufficient to enable them to initiate and maintain a dialogue in a foreign language (Thornbury, 2007). To achieve this goal, teachers should follow some basic standards when teaching vocabulary such as:

- Students' levels: The level of the students and their needs, taking into account the social and cultural context.
- Their interests: Students' personal interests, which can be a valuable source of motivation.
- The words/ expresions/terminology/intruccions: Use of words, expressions and terms that students need to actively participate in lesson activities.

- Words and expressions: Teaching frequently appearing and relevant vocabulary, along with terms related to the lesson, to facilitate understanding.

John Dewey, a leading philosopher and educator, argued that learning is most effective when it connects with the natural interests of students. Dewey does not restrict the objective of education to socialization because education is not just about adaptation. For Dewey, education has a clear psychological component because prior to any educational action it is necessary to know the interests of each student. According to him, the purpose of education is to train the student so that with what they learn from experience they can transform society. Designing tasks based on personal interests ensures that the educational process is more inclusive, meaningful and effective (Ruiz, 2013).

Vocabulary teaching should be aligned with the specific objectives of the course to ensure that students acquire the linguistic tools necessary to meet the educational goals. According to his theory, the vocabulary selected should be directly related to the activities and competencies that students are expected to develop, so that there is coherence between what is taught and what is intended to be achieved. This alignment ensures that the vocabulary is not a disconnected element, but an integral part of the learning process, allowing students to understand its purpose and use it effectively in the proposed activities. When vocabulary and objectives are aligned, the practical utility of what is learned is reinforced, fostering meaningful learning and increased motivation to actively participate in the educational process (Nation, 2001).

- **Teaching Vocabulary**

In order to be successful in teaching vocabulary, the teacher needs to identified the difficulties faced by the students. From the difficulties, the teacher could find the proper way to help the students learn vocabulary. However, the teacher can use some techniques to reach their goals in teaching vocabulary. The procedure in teaching vocabulary is divided into three stages wich are presentation production and practice (Cross, 1991).

1. Presentation

The teacher introduces the new vocabulary in a meaningful context, using resources such as dialogues, texts, images or real situations that facilitate understanding and retention of the

words. This stage focuses on the meaning and use of the vocabulary in specific contexts. In this phase, there are four steps that can be followed in teaching vocabulary. There are sound and meaning, repetition, written form, and illustrative sentence.

- Sound and Meaning

The teacher repeats the new words two or three times for their students. The college students may additionally be proven that means and definitions of the words on the identical time. The trainer need to make sure that everybody within the can virtually hear and recognize what is being said.

- Repetition

The teacher instructs the students to repeat the words sometimes and also Test their pronunciation. If a media is used in this step, the teacher wishes to make certain that the whole class have a clear view to it.

- Written Form

The teacher can write down the new words on the white board, then pick up one to two students to examine it aloud to their classmates. This step is to control the students to partner the written form of the brand new phrases with its pronunciation.

- Illustrative Sentence

After following the three steps above, in this stage the teacher can make an illustrative sentence to present an example for the scholars of using the brand new words in a sentence. To ensure that the kids fully understand the new vocabulary, the teacher can use the most basic words.

2. Practice

Students engage in supervised activities that give them a disciplined approach to learn new terminology. These exercises could involve guided role-plays, matching words with visuals, phrase completion, or repetition. The objective is to help people remember and use words correctly by reinforcing their form and sound.

3. Production

In this phase, students apply the vocabulary learned in more free and communicative activities, such as debates, essays, oral presentations or simulations of real situations. This stage seeks to foster fluency and the ability to use the new vocabulary spontaneously and appropriately in a variety of contexts. In conclusion, students should be able to use the new vocabulary in speaking and writing activities.

2.2.8 Digital Flashcards

As technology advances, many researchers are converting traditional paper-based flashcards to digital flashcards. Several studies have shown that the use of digital flashcards is useful for language learning. When learning specialized academic vocabulary, these cards can increase student engagement (Xodabande et al., 2021) . Digital vocabulary cards integrate multimedia elements, data analysis, and periodic review systems that help review the cards and optimize retention of information (Colbran et al., 2015).

The usefulness of paper flashcards can be enhanced by using technology to assist students in learning new vocabulary. In addition, digital flashcards are described as a computerized system designed for use on electronic devices and projectors. The following are some websites that help users create and use digital flashcards: Anki (ankisrs.net), Quizlet (quizlet.com), and Word Engine (wordengine.jp) (Yowaboot & Sukying, 2022).

- **Types of digital Flascards**

Flashcards are useful tools for learning at any age, even as young as 6 months. For babies, the pictures and colors help develop visual memory and basic object recognition. As they get older, flashcards adapt to teach vocabulary, basic concepts and cognitive skills. In older children and adults, they remain effective for studying complex topics and learning languages, making them a versatile and valuable resource for all educational levels there are four types of digital Flascards (Edla, 2024).

- **Classic Flashcards:** These cards are digitized versions of the traditional cards. One side of the card contains the question and the other the answer. Tap the card to reveal the answer. These flashcards are ideal for memorizing basic concepts

and vocabulary for example: A tablet screen that displays the word "Apple" and, when tapped, reveals an image of an apple.

- **Image and text flashcard:** Representative images associated with the text description comprise a flashcard that will greatly serve the pedagogic function in facilitating learning by making an association with visual and textual memories. For those learners with a high level of visualization, flashcards have special help because an image is capable of exciting memory visually, while it serves storage. Besides that, they are also suitable for learning a foreign language vocabulary and reinforcing some basic notions in other fields as well by promoting memorization and long-lasting learning. For instance, A screen showing the picture of a cat with the inscription "This is a cat."

- **Text and video flashcard:**These are learning tools that combine written texts with audio-visual for enrichment in learning. Here, the text is developed in the video through visual demonstration or detailed explanations that will definitely help in learning practical skills or procedures or abstract/complex concepts. This format is ideal for students who learn best with audiovisual stimuli because video content enables more interest and retention of information. Example: A screen containing the word "Greetings" that enables a video of greetings to be learned in English..

- **Interactive flashcard:** The interactive flashcard is an educational means that actively involves students in their learning process. This can be done through drag-and-drop options, click-and-reveal questions, or matching exercises, which make studying even more dynamic and engaging because it promotes direct participation and stimulates memory through the practice of active exercises. Example: A screen where kids can drag letters to form the word "House".

- **Effectiveness of digital flashcards in the classroom**

They are very effective and practical for memorizing and learning information; they manage to decrease the interference of the sound-graphic relationship of English, and at the same time it is an interesting technique to present new vocabulary through the use of technology.

The key to optimizing the impact of digital flashcards on English language learning lies in personalizing their use. Adapting this tool to the individual needs of the students and

to the specific objectives of each unit can lead to more satisfactory learning outcomes. After tabulating and analyzing the data from this study, it can be concluded that the use of electronic flashcards will greatly contribute to English language learning if teachers use them in accordance with the objectives of each lesson and employ appropriate learning strategies (Ticona Cabana, 2022).

The result of this research, both digital and paper flashcards helped to improve the vocabulary of class 7.2 students at SMPN 30 Makassar. First Test It shows a very great increase in vocabulary with either kind of flashcard used, hence, both useful in learning. However, they do not find any significant difference when comparing digital and paper flashcards directly. In other words, digital and paper flashcards served equally well in learning new words among subjects (Rachmadi et al., 2023).

Digital flashcards are effective in improving the learning of English vocabulary among Thai primary school students in an EFL context. They were divided into experimental and control groups. The experimental group outperformed the controlled group in both receptive and productive vocabulary knowledge by using digital flashcards. Besides this fact, the participants of the experimental group performed very positive attitudes towards the digital flashcards, which are presented in visual and audio aides, making it easier to learn with the aim of improving their vocabulary. These findings give support for the value of digital flashcards in teaching vocabulary to children and underline their effectiveness in language learning contexts (Yowaboot & Sukying, 2022).

2.2.9   Procedure of Teaching Vocabulary by Using Digital Flashcards

This digital flashcard approach to vocabulary teaching, adapted from the vocabulary teaching framework proposed by Cross and modified by Fauzia, enables a division into four different stages in a more structured and appealing way for the students. Digital flashcards make the conventional techniques modern, employing interactivity that may increase retention and engagement. The following steps this paper, therefore, attempts to illustrate an effective process of teaching vocabulary using digital flashcards.

This digital flashcard approach to vocabulary teaching, adapted from the vocabulary teaching framework proposed by Cross and modified by Fauzia, enables a division into four different stages in a more structured and appealing way for the students. Digital flashcards

make the conventional techniques modern, employing interactivity that may increase retention and engagement. The following steps

- This paper, therefore, attempts to illustrate an effective process of teaching vocabulary using digital flashcards.
- The teacher displays the digital flashcards to the students and begins the lesson by introducing the vocabulary with various instructional strategies.
- Every student is provided the opportunity to show the digital flashcards, where the cards have images with a short description on the back.
- To practice with the flashcards digitally, the teacher can implement a game whereby students are put in several groups using digital flashcards.
- Match the pictures and words in the digital flashcards.
- Observe the progress made by the students and review the learning of the vocabulary by asking them question and conducting the discussion.
- Learners can create a short sentence with the new vocabulary they have learnt.
- Students can make role play with the new vocabulary they have learnt.

These days, digital flashcards are very popular. Students can learn a range of subjects in a more interesting way by using flashcard apps on their phones or tablets. They may now independently produce visually appealing and educational presentations and decks. The sophisticated algorithms in these apps improve learning in ways that have never been achieved before. A few of the many benefits of using flashcards in the classroom are listed in this article. It will also cover how to create flashcards, use them in online education, and use them in the classroom (Dutta, 2021).

CHAPTER III

3. METHODOLOGICAL FRAMEWORK

3.1 RESEARCH APPROACH

This research adopted a qualitative approach, "qualitative research is intended to deeply explore, understand and interpret social phenomena within its natural setting" (Bizualem, 2002). It was characterized by the direct analysis of students' opinions, experiences, and perceptions regarding the use of digital flashcards in vocabulary learning. This approach allowed for a deeper understanding of the dynamics and effects of this educational tool within the study context

3.2 RESEARCH MODALITY

The research modality was diagnostic and field-based. It aimed to identify and analyze the effectiveness of digital flashcards as a tool for learning English vocabulary among second-year General Basic Education students "A" at Unidad Educativa Cristiana "Nazareno." Through a detailed diagnosis of current teaching practices and students' interaction with digital flashcards, the study provided recommendations to improve vocabulary acquisition. The research was conducted using a field modality, which involves studying behaviors that occur in natural settings and gathering first-hand observations from the subjects' perspectives (Maanen, 2011).

3.3 LEVEL OR TYPE OF RESEARCH

The type of research was exploratory, as this approach aimed to provide insights, generate hypotheses, and develop a comprehensive understanding of the potential benefits and challenges associated with this educational tool, "exploratory research is particularly useful for investigating areas that lack extensive prior study " (Goundar, 2012). This study focused on a relatively new and understudied area: the use of digital flashcards in teaching English vocabulary within a specific educational context. The exploratory nature of the research allowed for an in-depth examination of the tool's practical applications, shedding light on both its strengths and limitations.

3.4   STUDY POPULATION

The study population consisted of 30 students in the second year of General Basic Education "A" at Unidad Educativa Cristiana "Nazareno" and one English teacher.

3.5   TECHNIQUES AND INSTRUMENTS FOR COLLECTING DATA

The following techniques and instruments were used for data collection:

3.5.1   Observation Sheet/Guide

In this research, an observation guide was used to evaluate the process of applying digital flashcards in vocabulary teaching. This approach carefully recorded how flashcards were incorporated into lessons, aspect of interactions students had with them, and the success of this approach overall in enhancing vocabulary knowledge. The use of a Likert scale was chosen as it gave a clear mechanism to gauge key indicators of the teaching process in a consistent and structured way, allowing for both the frequency and quality of the observed behaviors to be measured.

3.5.2   Semi structured interviews

Semi-structured interviews were designed to analyze the students' perceptions regarding their use of digital flashcards for vocabulary learning. These interviews provided opportunities for freeform discussion on each of their experiences, strategies, and challenges during the implementation of this tool in the classroom. As a result, an interview was used to fulfill the third specific objective of learning about students' personal experiences with the use of digital flashcards.

CAPÍTULO IV.

4. RESULTS AND DISCUSSION

4.1 ANALYSIS AND DESCRIPTION OF AN OBSERVATION GUIDE

OBJECTIVES	ITEMS	ANALYSIS AND INTERPRETATION OF THE GATHERED RESULTS	CONTRAST WITH THE THEORY
To describe the criteria used to select digital flashcards an English lesson.	• The vocabulary aligns with the students' linguistic proficiency level.	It was observed that the vocabulary presented through the digital flashcards often did not correspond to the level of the students, which made it difficult for them to understand the concepts and decreased their motivation to learn. For example, more complex words such as "vehicle" were used, when it would be more appropriate to use simple terms such as "car", which are easier for young children to understand and remember.	The choice of vocabulary needs to be adapted to the proficiency level of the students to ensure progressive learning. If vocabulary is too advanced or too elementary, it can discourage and frustrate students (Thornbury, 2007).
	• The teacher incorporates topics or vocabulary	It was observed that learning activities were rarely not taking into account the students' personal	John Dewey argued that learning is most effective when it connects with students'

	related to students' personal interests.	interests, which led to a decrease in their intrinsic motivation. This means that students did not feel a personal connection to the tasks or materials and, consequently, their active participation in the lessons was limited. For example, if a child has a strong interest in animals, but an activity does not include this topic, he or she is less likely to participate enthusiastically. Incorporating their interests into activities can make learning a more engaging and meaningful experience, increasing motivation and achievement.	natural interests. According to his theory, educational activities should align with their curiosities and passions, as this fosters intrinsic motivation and active participation. Designing tasks based on personal interests makes learning meaningful and relevant.
	• The teacher uses the necessary vocabulary for students to participate in class activities.	In most of the lessons, the vocabulary was not directly related to the practical activities, which made learning difficult. For example, the teacher taught the names of family members in English ("mother", "father", "sister"), but did not do practical activities such as drawing their family and writing their names in English. This made the	Vocabulary must be intrinsically related to classroom activities so that students understand its purpose and practical application. This reinforces the connection between learning and its actual use (Cross, 1991).

		students unable to apply the words in a meaningful way.	
	• The teacher focuses on high-frequency words or expressions that appear in the context of the lesson.	The digital flashcards included few high-frequency words, which reduced their effectiveness and usefulness in real contexts. The lack of common vocabulary hindered students' opportunity to practice and reinforce its use in different contexts, affecting their linguistic development and meaningful learning.	Stresses the importance of prioritizing high-frequency vocabulary, as these words are essential for building a solid foundation for language learning and enabling more effective communication (Schmitt, 2008).
	• The vocabulary is directly related to the class's learning objectives.	In some lessons, the vocabulary was aligned with the learning objectives, but was not always used to reinforce the content. This made it difficult for students to reinforce and remember the vocabulary. For example, if words such as apple, orange, and banana were learned in one class, they were not included in future activities when new words such as grape and pear were introduced. This resulted in	Aligning vocabulary with learning objectives is essential to ensure that students understand how words apply in academic and everyday contexts (Nation, 2001).

		students not having enough practice remembering and using the vocabulary in different contexts."	
To Identify the process for using digital flashcards when teaching English vocabulary.	**Presentation:** • The teacher introduces vocabulary using clear visuals, sounds, or real-life examples.	The digital flashcards were frequently used as effective visual aids in teaching English vocabulary. The images included in the flashcards contributed significantly to students' retention and comprehension of the words. In addition, it was noted that many of these flashcards incorporated auditory stimuli, such as the pronunciation of the words, which also aided learning. However, the inclusion of real and contextual examples was considerably less common in the observed practices. This lack limited the students' ability to apply the vocabulary learned in practical contexts, thus reducing the transfer of knowledge to real communication situations.	Visual stimulation is key to improving vocabulary retention by activating the visual channel of memory. In addition, the use of digital flashcards reinforces this principle by providing interactive and visually engaging learning (Paivio, 1986).
	• The teacher uses simple sentences to demonstrate the use of new words in context.	Although the digital flashcards presented the vocabulary clearly, there was a lack of reinforcement of its applicability through simple, contextualized	Vocabulary acquisition improves significantly when words are presented,

		sentences. This lack made it difficult for students to fully understand the practical use of the words, limiting their ability to transfer the vocabulary to real communicative situations.	practiced and reinforced in real communicative (Schmitt, 2008).
	Practice: The teacher engages students in activities like matching words to images repeating in groups. The teacher organizes dynamic activities, such as games or songs.	Interactive activities, such as word-image matching and group repetition, were employed occasionally and dynamic activities like games and songs were sometimes incorporated . While these activities successfully promoted student engagement and reinforced vocabulary learning, their irregular implementation limited their overall effectiveness. Regular and structured use of these interactive techniques could enhance participation, improve retention, and create a more dynamic learning environment.	Dynamic and interactive activities promote active learning and motivation. Consistent use of these strategies can improve vocabulary acquisition and retention(Vygotsky, 1978)

Students actively participate in practice activities.	Students partially participated in hands-on activities related to the flashcards. However, the lack of diversity in the activities limited their interest and full participation.	Practical activities should be varied and attractive to fully engage students' interest, encouraging active and meaningful learning (Cross, 1991).
Production: Students use new vocabulary in free activities like role-playing, storytelling, or drawing.	Free activities, such as role-playing and storytelling, were implemented occasionally, sometimes due to lack of time, which reduced opportunities for children to practice new words in a fun and natural way. This lack of regularity made it difficult for the children to remember and apply the vocabulary in everyday situations, limiting their learning and confidence in using the words in real contexts.	Vocabulary acquisition improves significantly when words are presented, practiced and reinforced in real communicative (Schmitt, 2008).

	The teacher encourages all students to participate in creative vocabulary use.	The teacher regularly encouraged participation in creative tasks, fostering an environment conducive to the application of vocabulary.	A positive, low-stress learning environment facilitates language acquisition. By encouraging students to engage in creative tasks, the teacher creates a safe environment where children feel comfortable experimenting with new vocabulary without fear of making mistakes(Krashen, 1985).

4.1.1 The student perspective on the effectiveness of digital flashcards in vocabulary learning.

In accordance with the third specific objective of this study, aimed at "determining the effectiveness of using digital flashcards from the students' perspective in vocabulary learning", semi-structured interviews were conducted with 30 participants (Student_2024_1 to Student_2024_30) . The questions were directed to main dimensions. Such as motivation, ease of use, perceived benefits, difficulties encountered, and suggestions for improvement. The purpose was to understand not only the immediate usefulness of digital flashcards but also their potential long-term impact on vocabulary acquisition and retention.

At first, most participants described the digital flashcards as an engaging and motivating tool. For example, "I like the flashcards because they have colors and make sounds. It's like playing a game" (Student_2024_3). Although this motivation is relevant in the initial stages. Stages of learning: it does not guarantee long-term retention. As stated by one of the students: "I can learn the words, but sometimes I forget them after some time" (Student_2024_7). For this reason, the pedagogical strategies which support initial motivation should be efficient, such as spaced practice, repetition, meaningful contextualization, and authentic use of vocabulary (Schmidt 1990; Lewis 1993).

On usability, all the students interviewed felt that the cards are intuitive and therefore easy to work with: "It's easy because you just touch the screen and the words appear" (Student_2024_12). However, even if it is technically accessible, it does not mean that deep learning takes place. Some students had difficulty understanding how and when to use the learned words. As one student commented, "Some words are hard to understand and I don't know when to use them" (Student_2024_21). This observation underlines the importance of adapting content to the linguistic level of the learners and providing authentic examples and contexts to facilitate understanding.

Another challenge identified was that of contextual relevance: for example, as one student put it, "Sometimes the words don't make sense to me because I never use them" (Student_2024_14), that is, the vocabulary has to be practical and applicable to a real situation. Likewise, "I want to use the words in sentences, but we don't have enough" (Student_2024_25) and "it takes much time for that in class." This supports the claims made by socio-cultural and communication methods as well: interactive contextual circumstances help people learn language (Richards & Rodgers, 1986).

Finally, some suggestions for the development of this learning tool were put forth. One student wanted the use of familiar characters: "I'd like to see characters like Mickey Mouse or Barbie " (Student_2024_2). Another student suggested the use of positive reinforcement-for example, "It would be fun if we could get stars or applause sounds when we answer correctly" (Student_2024_19). This might raise the level of motivation and participation on the part of subjects and bring about more effective learning. Such a suggestion follows current pedagogical trends which support gamification, cultural relevance, meaningful interaction, and experiential learning (Ryan, 1985)

In conclusion, while digital flashcards are engaging to learners at the very outset and readily available, substantive pedagogical integration is needed if long-term retention of vocabulary is envisioned. Initial motivation must be supplemented with systematic practice, contextualization, communicative tasks, and personalization of content. By incorporating It is possible that elements of gamification and authentic activities can actually maximize the effect beyond that of simple immediate memorization to meaningful, long-lasting use. These considerations, leading from key theories of second language acquisition, should form the basis for more complete, versatile, contextual adaptations of digital tools for vocabulary improvement in order to enhance vocabulary retention and then effectively transfer it into real communicative situations.

4.2 DISCUSIION

This research investigated how digital flashcards are used in English vocabulary learning, focusing on their benefits and areas for improvement. Observations show that the use of digital flashcards facilitates the introduction of English vocabulary due to their visual and auditory elements, which capture learners' attention and promote an initial understanding of English vocabulary, suggesting that, although these tools have potential, they could be used more effectively.

One major issue was the weak link between vocabulary learned and real-world application. For example, students learned words such as 'mother' and 'father' but had difficulty using these words outside the classroom without additional practice, e.g. by creating a family tree or writing about their family. Incorporating tasks that reflect real-life situations, such as discussing everyday life or describing personal possessions, can help students understand the connection between vocabulary and everyday life.

Interactive activities such as games and group activities were not used consistently. For example, matching words to pictures or playing word-based games such as charades were used least frequently by the teacher. Such programmes can increase motivation and engagement if used consistently. In addition, students tended to show more enthusiasm when completing challenging tasks, suggesting that routinely incorporating these elements can increase engagement and learning.

Creative activities like role-playing and storytelling, which are essential for practicing vocabulary in a natural context, were implemented in fewer lessons were conducted in fewer of the classes observed. For example, a role-play activity where students act out a conversation in a restaurant or a storytelling task where they use newly learned words could provide opportunities for spontaneous use of vocabulary. Without such activities, students miss valuable chances to develop fluency and confidence in using English.

A further restraining factor was related to the vocabulary. The words picked were sometimes too complicated or not fitting with the students' preferences. For instance, instead of using the simpler term 'car' introducing the term 'vehicle' can lead to irritation and a decrease in motivation. Relating the vocabulary to students everyday activities and interests helps a great deal with retention and involvement.

Feedback and follow-up were also areas of concern. Students did not receive consistent feedback on their progress, making it harder for them to reinforce what they had learned. Simple practices like reviewing vocabulary at the start of each lesson or conducting quick quizzes to test retention could address this issue and provide students with a sense of accomplishment.

Finally, flashcards are an effective tool for learning vocabulary, but their success depends on careful implementation, and teachers should prioritise choosing vocabulary that matches the level and interests of their students and ensure that it is attractive and practical. They should design activities that link vocabulary to real-life situations, such as role-play, storytelling and everyday situations. Consistent use of interactive exercises such as games and collaborative activities can help to keep students interested and motivated. Finally, providing regular feedback and reinforcement through revision and tests can deepen learning and encourage students to apply new vocabulary confidently in real-life situations. Through

these adaptations, digital flashcards can realise their full potential and enable meaningful and effective vocabulary acquisition.

Tabla1.

Appropriate and inappropriate use of digital flashcards for English vocabulary instruction

Digital flashcards	
How they should be used	**How they should not be used**
Connect vocabulary to real life contexts (e.g., creating a family tree,daily routines).	Use vocabulary in insolation without real- world relevance.
Employ interactive activities like games matching tasks and charades to engage students.	Limit lessons to static and repetitive flashcards drills.
Integrate creative exercises such as role-playing and storytelling to practice vocabulary in context.	Avoid dynamic tasks which reduces student participation
Choose vocabulary that reflects students level and interest	Choose vocabulary overly complex

Source: Data obtained from the investigation titled "the usage of digital flashcards"

CAPÍTULO V.

5. CONCLUSIONS y RECOMENDATIONS

5.1 CONCLUSIONS

- The selection criteria for digital flashcards did not always consider the proficiency level and interests of the students, which negatively impacted comprehension and motivation. It is very important to choose words appropriate to the learners' level of communicative competence as well as their particular interests as this in turn will foster greater interest, comprehension and retention of English vocabulary.

- The teaching process with digital flashcards was effective for the initial presentation of vocabulary it did not involve systematic reinforcement and contextualised activities. In the absence of continuous and qualification activities to use the vocabulary in real-world scenarios, the retention of knowledge was limited.

- From the learners' perspective, flashcards are a motivating and accessible tool because they are visual and interactive. However, to be effective, they need to include elements such as familiar characters and creative tasks to consolidate vocabulary and apply it naturally and effectively in communicative situations.

5.2   RECOMENDATIONS

- Vocabulary should be selected based on the learner's linguistic level and personal interests. An initial diagnosis is required to determine the most important words to be taught based on the learner's daily situation and experiences. This will foster greater motivation and facilitate vocabulary comprehension and retention.

- Put in place a teaching methodology that integrates the systematic presentation, practice, and production of vocabulary.These should include a range of contextualized activities such as role-plays, stories or interactive exercises in which students can apply vocabulary to "live" situations. Such dynamic and collaborative activities help us memorize the vocabulary well and use it well.

- Using digital flashcards with personalization and gamification elements. Learner motivation and engagement can be increased by incorporating characters, creative activities like storytelling or sketching, and rewards like stars or clapping noises. In addition, it is important to make repeated and spaced practice to reinforce long-term learning and facilitate the transfer of vocabulary to real communicative contexts.

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ANNEXES

Annex 1: Observation sheet for the fulfillment of specific objectives 1

UNIVERSIDAD NACIONAL DE CHIMBORAZO

FACULTAD DE CIENCIAS DE LA EDUCACIÓN, HUMANAS Y

TECNOLOGÍASCARRERA DE PEDAGOGIA DE LOS IDIOMAS

NACIONALES Y EXTRANJEROS

OBSERVATION SHEET

Description: The instrument was elaborated according to the Theorical Framework. It is composed by 11 indicators which depend on the specific objectives stablished for the research.

Objective 1: To describe the criteria used to select digital flashcards an English lesson.			
INDICATORS	**Often**	**Sometimes**	**Seldom**
The vocabulary aligns with the students' linguistic proficiency level.			
The teacher incorporates topics or vocabulary related to students' personal interests.			
The teacher uses the necessary vocabulary for students to participate in class activities.			
The teacher focuses on high-frequency words or expressions that appear in the context of the lesson.			
The vocabulary is directly related to the class's learning objectives.			

Photography register

Annex 2 : Observation sheet for the fulfillment of specific objective 2

Objective 2: To Identify the process for using digital flashcards when teaching English vocabulary.			
INDICATORS	**Often**	**Sometimes**	**Seldom**
Presentation: The teacher introduces vocabulary using clear visuals, sounds, or real-life examples**.**			
The teacher uses simple sentences to demonstrate the use of new words in context.			
Practice: The teacher engages students in activities like matching words to images repeating in groups. The teacher organizes dynamic activities, such as games or songs.			
Students actively participate in practice activities.			
Production: Students use new vocabulary in free activities like role-playing, storytelling, or drawing.			
The teacher encourages all students to participate in creative vocabulary use.			

Photography register

Annex 3 : Semi structured interview for the fulfillment of specific objective 3

Universidad Nacional De Chimborazo

Facultad De Ciencias De La Educación Humanas Y Tecnologías

Carrera De Pedagogía De Los Idiomas Nacionales Y Extranjeros

Students interview

Objective: To analyze the effectiveness of using the digital Flashcards based on students'

perspectives for vocabulary learning.

Questions

SECTION 1: ICEBREAKER QUESTIONS

1. **What is your favorite toy? Why?**

2. **What is your favorite meal? Why**

3. **What is your favorite sport? Why?**

SECTION 2: FOCUSING QUESTIONS

4. **What technological devices do you use to study English vocabulary? For example, a tablet, a smartphone, a video projector, or a computer?**

5. **How would you describe your experience learning English vocabulary with digital flashcards? Do you find them entertaining?**

6. **After using digital flashcards to learn English vocabulary, how easy is it for you to remember the words later?**


7. **How well can you use the words you learned with the flashcards to form sentences or have conversations in English?**

8. **What do you think about the usefulness or importance of the words you learn with digital flashcards? Why do you think they are useful or not?**

9. **Do you think learning vocabulary related to your interests, such as animals or characters from your favorite movies, would make the process more interesting or effective? Why?**
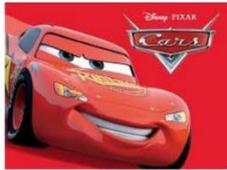
SECTION 3: PROJECTIVE QUESTIONS

10. **If you had a choice, would you use flashcards every day to learn English vocabulary? Why?**

11. How can digital flashcards be improved to make vocabulary learning more exciting for you? What new things would you add?

PD: All the questions will be explained in both languages English and Spanish.

Photography register