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**Topic:**

**DUOLINGO TO ENHANCE ENGLISH VOCABULARY ACQUISITION IN EFL  
YOUNG LEARNERS**

**Research project prior to obtaining the title of Master's in Pedagogy of  
English as a Foreign Language**

**Line of research:**

Innovative pedagogies in english language teaching methodological strategies

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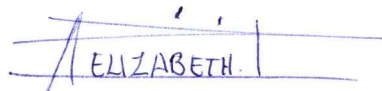
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**STATEMENT OF AUTHENTICITY AND RESPONSIBILITY**

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## DEDICATION

*To the creator of all things, the one who has given me strength to continue when I have been about to fall, therefore, with all the humility that my heart emanates. First of all, I dedicate my work to God.*

*To my parents Julio Pullupaxi and Luisa Galora for being the fundamental pillars and for supporting me unconditionally to allow me to reach this goal in my professional training.*

*To my siblings and grandmother for sharing significant moments together and for being available to listen to me and help me on each moment of my life.*

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## RESUMEN

Este estudio de investigación tuvo como objetivo evaluar el impacto del uso de la plataforma Duolingo para mejorar el aprendizaje de vocabulario en los jóvenes estudiantes de la Unidad Educativa "Unión Nacional de Periodistas". En este estudio investigativo se aplicó un diseño cuasi-experimental en el que participaron dos grupos de estudiantes (grupo de control y grupo experimental). El grupo experimental utilizó la plataforma online Duolingo, mientras que el grupo de control utilizó un método tradicional. Se utilizó un examen estandarizado de Cambridge (Flyers) como pretest y posttest para evaluar el rendimiento de los estudiantes durante el proceso. Es necesario mencionar que el investigador se centró en los sustantivos y verbos dentro del vocabulario. Para el tratamiento, la investigadora utilizó la plataforma Duolingo en la que sólo se matriculó al grupo experimental. Se asignó tres unidades; cada unidad contuvo 4 actividades que los alumnos debieron desarrollar. Al final del tratamiento, los estudiantes fueron evaluados con un posttest para medir sus logros en vocabulario. Por último, se manejó información estadística mediante el uso del programa SPSS para realizar la captura y análisis de datos, demostrando de esta manera la efectividad de la Plataforma Duolingo en la adquisición de vocabulario en el idioma inglés.

**Palabras Claves:** plataforma, Duolingo, adquisición, vocabulario.

## **ABSTRACT**

The need to find new technological tools to learn English led the researcher to investigate the effectiveness of using the Duolingo Platform. Because of this, this study aimed to assess the impact of using the Duolingo Learning Platform to enhance vocabulary acquisition in young learners at “Unión Nacional de Periodistas” school. A quasi-experimental design was applied for this research project where two groups participated (control and experimental group). The experimental group used the Duolingo online platform, while the control group used a traditional method. A standardized Cambridge exam (Flyers) is used as a pretest and posttest to evaluate students’ achievement during the process. It’s necessary to mention that the researcher focused on nouns and verbs within the vocabulary. For the intervention, the researcher used the Duolingo platform where only the experimental group is enrolled. Three units were assigned; each unit contained four activities that students had to develop. At the end of the treatment, students were evaluated with a post-test to measure their vocabulary achievement. Finally, statistical information was managed through the use of the SPSS program to capture and analyze data, demonstrating the effectiveness of the Duolingo platform in the acquisition of vocabulary in the English language.

**Keywords:** Duolingo, platform, vocabulary, acquisition.

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## INTRODUCTION

In recent times, the impact of technology in the educational field has provided various supports to strengthen the pedagogical work of teachers, offering a range of educational possibilities, which can be counted on in cyberspace. In the case of language learning, the application of technologies provides a student-centred learning environment. It enables teachers to vary lesson presentation styles to motivate students of varying interests, provides learning opportunities outside the classroom (hence increasing learner interaction with the language), and is perceived to cater more for individual differences. According to Pacheco (2017), integrating multimedia into the traditional learning environment not only enriches the styles of presentation, but also has the advantage of increasing language retention.

Consequently, the educational platform "Duolingo" stands out for having great acceptance and assent among young people, particularly in the Ecuadorian context. It is undeniable that even today, there are English teachers who continue to impart this knowledge traditionally, ignoring the multiplicity of opportunities offered by technological media and digital environments that are very familiar to students. All digital aids should be chosen by teachers, considering aspects such as ease of access, use, analysis, and reflection of the teachers, who, with their expertise, are responsible for determining the appropriate selection of the technological tool for the English teaching-learning process.

Technology has had a notable influence on teaching processes and, therefore, it has generated new dynamics in our educational, and social context, which can be seen in the classrooms of some public institutions, Gallardo (2019). According to this author, the use of technology allows an optimal feedback, easy-to-use work environments, individual or team work, creativity stimulation and look up for new content. Visual support gives understanding of even the most complex scientific issues for greater intense participation of each student in the learning process.

Moreover, in this condition of being a facilitator or guide of knowledge, teachers must continue to discover and use various network gadgets, incorporating them into their educational practice, Cervera (2021) states that information is deposited in the network. Therefore, the teacher ceases to be a data informer, which means that they become a hiker or explorer of cyberspace.

### **Research problem**

What can be done to help students to improve vocabulary acquisition?

### **Hypothesis**

The Language Learning Platform (Duolingo) enhances the acquisition of English vocabulary.

### **General objective**

To assess the impact of using the Duolingo Learning Platform to enhance vocabulary acquisition in young learners at Unión Nacional de Periodistas school.

### **Specific objectives**

1. To investigate the conceptual foundations of English vocabulary acquisition
2. To diagnose the students' perception of vocabulary learning strategies used in class.
3. To determine the effectiveness of the Duolingo application in vocabulary acquisition.

### **Justification**

The educational challenges faced by English teachers are significant every day; that is why school environments should promote the acquisition of knowledge and students' learning process for their personal, social, and professional development. The teacher has the task of researching, designing, and using the best tools, strengthening the skills and competencies of students. Technological tools, as in this case Duolingo, help build and enhance students' knowledge. For

this reason, the development of this research has been proposed, with the use of this tool for English language learning.

This research is relevant because it intends to assess the impact of using the Duolingo learning platform to enhance vocabulary acquisition in young learners at Unión Nacional de Periodistas school in a meaningful, dynamic and interactive way to develop better skills in the English language. In the social context of the research, it is essential to consider that the students are from different socio-economic strata and have different customs. Society needs an education that strengthens knowledge to advance diverse communicative skills in the English language.

The research seeks to use the Duolingo Platform for students to acquire vocabulary in the English language to enhance listening, writing, reading, and oral comprehension in any context the student are immersed. Therefore, this research is valuable since this process will show results that will strengthen the pedagogical use of ICT (Duolingo) to improve English language learning, specifically vocabulary. The English language today is a global language spoken worldwide; learning its vocabulary from a young age allows students to survive within social groups and overcome different difficulties.

The benefit is that learning English is a means to master a second language and to approve the subject at school while opening up a range of options to travel, work, do business, socialize, and learn everything that surrounds the culture. This research analyzes key aspects of foreign language vocabulary learning, the role of vocabulary in foreign language development, strategies for learning vocabulary, the impact of technology on EFL vocabulary acquisition, and the use of apps like Duolingo to enhance vocabulary learning.

## **CHAPTER I. STATE OF ART AND PRACTICE**

### **1.1. Information and communication technology (ICT)**

Currently, the use of ICT in schools is booming, where the use of the internet, media, resources, and technological tools is essential in the teacher's classes and it allows students to learn dynamically, while leaving aside traditionalism. So, schools have implemented computer labs with internet access and other media. The use of ICT represents a resource of great importance in the classroom because teachers introduce learners to a new technological era where the correct use contributes to the progress of students and teachers. However, teachers are still afraid to enter the era of technology, knowing few technological strategies to teach English.

This new learning space welcomes students to learn how to use these tools and develop the necessary skills for creative and efficient use of these resources in their schoolwork (Martínez, 2018). Now, it is easier to work with students in this technological field because they are digital natives since this new generation has been able to handle all these technological and information tools. However, for most teachers, it becomes difficult to teach a generation that knows new things. Teachers must keep in constant preparation and training to be able to handle this group of students of the new generation. (Carneiro, Toscano, & Díaz, 2020).

The transformation of traditional educational scenarios and the incorporation of ICTs into formal school education is often justified, claimed, or promoted, depending on the case, with the argument of their potential contribution to improving learning and teaching quality. The implications of this change of perspective are clear. On the one hand. It moves from analyzing the benefits of ICTs for teaching and learning to the empirical study of the practical uses that teachers and students make of these technologies in teaching and learning activities (Martínez, 2018). On the other, it links possible improvements in student learning to their participation and involvement in these activities, in which the use of ICTs is essential. From these points of view, ICTs are used as mediating

instruments between students and learning content. Students use technology to access content repositories simply and dynamically, perform simple and complex tasks, explore learning content.

The requirements for proper ICT integration in schools include the curriculum development process and its subsequent implementation, Morrissey (2020). The use of ICT should be reflected in the way students are tested and assessed (Morrissey, 2020, p.83). In addition, ICTs are excellent resources for learning assessment. Access to ICT-based professional development for teachers. Strong support for school principals and ICT coordinators to master their use and facilitate peer learning and resource sharing. Sufficient high-quality digital resources, teaching materials, and examples of good practice to engage students and support teachers.

There are many ways to use new technologies; for example, they have created several programs to learn English. Teachers can implement this type of software for students to learn and practice English entertainingly, make use of electronic dictionaries and have the facility to listen to the pronunciation of words, and have sources of information such as interactive encyclopedias where students are motivated to be more researchers. That is why ICT facilitates the creation of new learning environments, where teachers have the opportunity to transform the educational process and improve the quality of education through the application of technologies.

## **1.2. Characteristics of an educational platform**

A virtual educational platform is a computer environment in which we find many tools grouped and optimized for teaching purposes. Its function is to allow the creation and management of complete courses for the Internet without requiring in-depth knowledge of programming, (Díaz, 2019). An educational platform can be understood as a tool for teachers to create a place for their students to learn interactively through the Internet, because it facilitates the exchange of information, allowing them to put theory into practice, send and receive

assignments, and take evaluations, among other things, depending on the teacher's intention and how the course is designed.

Educational platforms are very beneficial when teaching a subject. Educators can use them as a methodological strategy in any of the planning moments and use them for an extra-classroom task. Students can use these ICTs such as Web platforms, which allow them to obtain better results in developing skills, especially in the communicative competence. Traditional education still prevails in some educational institutions but implementing these technologies will allow them to go beyond the physical space, expanding the learning scenarios.

### **1.3. Duolingo platform**

It was a project initiated by Professor Luis von Ahn and graduate student Severin Hacker. It consists of a website for free language learning. Simultaneously, a crowdsourcing platform for text translation. The service is designed so that as the user progresses in his/her learning process, he/she helps translate web pages and other documents.

Python language programming was mainly used in the development with its challenge-based learning method, since it is based on the resolution of questions and problems. This involves the student in the design and planning of learning, decision making, and research processes, allowing them to work relatively autonomously during most of the time ending in the realization of a final product presented to others (Jones, Rasmussen, & Moffitt, 1997).

Additionally, other websites that offer the possibility of learning English, among other foreign languages, is Duolingo. It is an innovative virtual learning platform that, unlike other sites, offers the opportunity to learn English free of charge. Its official website is [www.duolingo.com](http://www.duolingo.com). Duolingo's work methodology is based mainly on practice, where it is not necessary to read several texts to understand the grammar. However, it automatically understands the meaning of the words and

sentences, and with the help of images and translations, it becomes easier to understand.

The Duolingo platform has been the source of much research worldwide; because of this, the following research supports this research study. An investigation carried out in the Gaming course at the University of Vic-Central. In the course, rules were established to manage student behavior. Some elements of the game used were the use of specific goals, points, feedback in a short time, and the use of Avatars. Regarding positive experiences Contreras (2016) highlights that using such game elements yielded positive results both in the student's performance during the course and in their attitude and motivation.

On the other hand, gamified strategies was used at the high school level in technology subjects. In their experience, they implemented the presence of common elements in gamified solutions, such as experience points, levels, rankings, badges, and challenges of increasing difficulty. Regarding the opinion of the students, it is mentioned that while playing, according to their words, they felt encouraged, happy, calm, and optimistic, Diez, Bañeres, and Sierra (2017).

Similarly, gamified strategies in the context of the faculty of physical activity sciences. For his intervention, he implemented gamification strategies, making use of elements such as setting with narrative, challenges points and levels, as well as the identification of recent innovations, theories, methods and the elements applicable to the research. It is the basis for defining the context and supports how this proposal is innovative, different, or contributes to a particular area of study, Pérez-López (2017).

Duolingo is integrated as a tool for the improvement of English learning, so determining the degree of satisfaction on the part of the students and considering that the adequate employment in Duolingo helps significantly to the improvement in English performance. It has been an easy, comfortable and flexible tool, Cortes, Pérez, Guzmán, and Martínez (2016).

On the other hand, the improvement in student learning by carrying out collaborative practices around a video game. The author analyzes eight experiences focused in particular on collaborative learning. The author demonstrates that online platforms can be used to enhance learning and collaborative work and that, in general, students achieve improvement in learning, Martín del Pozo (2015).

In another investigation it was tested the effectiveness of Duolingo on a sample of Spanish language learners. Study participants were at least 18 years of age, native English speakers, not of Hispanic origin, with non-advanced Spanish proficiency, and residents of the United States of America. The study was conducted for eight weeks. The results reported an improvement of 91.4 points over 100. Most of the participants in the study were successful in improving their Spanish proficiency, Vesselinov (2012).

Another researcher evaluated the Duolingo tool in English learning, intending to strengthen the learning processes of oral and written competencies in the language's geographical context in the municipality of Armenia, Quindío. The Duolingo tool met the expectations since it allowed the integration of topics and in a playful manner so that students become familiar with the language, breaking the fears and apprehensions of learning a new language. The students effectively related the Duolingo tool with the intervention of technology, not only through computer equipment but also through other elements such as tablets or smartphones. Similarly, in many cases, the family members of the students surveyed have allowed them to use the tool as a playful way for creative use of free time, Alzate (2015).

The most important part about the implementation of the Duolingo virtual platform in the process of teaching and learning English is the need to find new technologies at the educational level as a strategy that facilitates the teacher and students' better performance in this process, involving ICT and thus, contributing to the improvement of both linguistic, sociolinguistic and pragmatic skills of the learners as well as the improvement of cooperative work, For Rodríguez (2018).

This application uses adaptive learning technologies, which can adapt the tasks to the level of each student. It is concluded that there are some drawbacks with Duolingo that the students also noted. One of them was the inaccuracy of their translations, which are not always correct, or that sometimes they do not accept other versions, Munday, (2016).

The implementation of Duolingo platform as a tool to strengthen English learning. In this aspect, it is indicated that the interaction and ease of learning offered by the Duolingo platform contribute to carrying out pedagogical strategies at any educational level in order to strengthen students' learning development, Izquierdo and Mestra (2015).

It also highlights the contribution of another researcher showing that ICT has mediation in the teaching and learning of English, facilitates understanding and generates educational innovation in social and technological dynamics as pillars of the behaviors and actions of students. Likewise, it allows the teacher to turn their classes into spaces of interaction between the virtual and real world, providing fair learning and interest for students, Zuleta (2017).

Some other authors elaborated on the implementation of Duolingo as a strategy supported by ICT to strengthen English learning. In this sense, it is expressed that ICTs generate virtual spaces suitable for curricular activities, both at school and the university. Education has been an area that has not been able to escape from this "wave" of technology, and although it is somewhat risky, it can be assured that ICT can become the future teachers. Hence, the strategy implemented and supported by ICT, not only with the use of the application on the computer but on any device, concludes that the level of motivation achieved by students is determinant in the learning of knowledge. That is why the level of effectiveness that is born from that attitude is logical which is a positive result found in the research, Barbosa and Tarazona (2018).

The influence of the use and application of Duolingo on the comprehension of oral texts in English at the secondary level Here, the comprehension ability and

expected achievements before and after the Duolingo application were evidenced. Their homogeneous results showed that this application indicates differences between the control and experimental groups regarding the indicators of comprehension and interpretation of information from English texts, Arapa and Cuadros (2018).

Teaching English effectively and motivating students is a challenging and important goal for English teachers. So, a promising way to effectively teach English and support the interest of learners can be ICT applications for teaching English. Further, currently, there are a lot of ICT tools and applications for developing English skills that English teachers could use in their work. However, not all EFL teachers make use of the availability of various ICT EFL-teaching applications. Also, not all teachers who use ICT applications in fact use them effectively. The experiences and challenges of English teachers in using ICT applications are not studied extensively. Further, there is limited research on how the experiences in using ICT applications differ between novice and experienced EFL teachers, Cocoma and Orjuela (2017).

All these above investigations have supported the researcher in this study due to the good results that were obtained at the end of each research. Based on this, it is necessary to understand why people have decided to choose Duolingo to learn English from anywhere, whether at home, at work, at school. Duolingo, "as a virtual tool," is an innovation that effectively intervenes in developing educational activities in society. In summary, educational technology has become one of the most used tools to improve teaching and learning.

The Duolingo web platform provides various pedagogical activities for the student that is why it is necessary to mention them:

- 1. Translation exercises:** Students translate their language into the language they wish to learn and vice versa.
- 2. Matching exercises:** Students have a certain number of words from both languages the activity consists of matching them.

**3. Listening comprehension exercises:** Students listen to a short sentence and must write it correctly in the target language.

**4. Speaking exercises:** Students must repeat what they hear. The oral expression and comprehension activities benefit students as they support their learning process by reinforcing the construction of the language through repetition and oral comprehension. Duolingo is a free gamified language learning platform (Castillo, Lozano, & Pineda, 2014).

The Duolingo Platform is designed so that users can learn languages. This platform was publicly available in 2012 with more than 300000 users, and its authors carefully used gamification to involve and motivate its users. Based on this, some game elements have been used in its system. Its use is simple, and its activities capture students' attention favoring memorization and, in general, their learning processes. Its access is comfortable and give students the opportunity to connect wherever they are. This Platform gives learners feedback when they make mistakes. Concerning this, it has been evidenced that feedback has a strong and positive effect on students' learning while encouraging the use of technology in the classroom as a teaching tool (Azmat & Nagore, 2018).

### **Resource management and content organization**

Duolingo for Schools is a platform designed exclusively for educators that allows them to track their students' progress. It also gives them access to activities designed for the classroom and allows them to set access according to the age of their students. It is entirely free for students and teachers. Working in the Duolingo for Schools environment is safe, as it has parental controls and student privacy settings that disable the social functions of the platform (forums, sentence discussions, and immersion).

Registration is simple, a Google account, Facebook, or an email address is also requested. It can be accessed by downloading the application available for Android, IOS, and Windows systems. Subsequently, a window appears where students can choose their daily goals, and the time students will devote to studying

the language with Duolingo (Duolingo S., 2019). Although the Duolingo Platform is free, it is convenient to have control if it is used as a didactic resource within the classes. Hernández (2016) stated that when using technology, it is essential to have the presence of the teacher since he is the guide, the orientation, and motivator of the face-to-face classes where he/she combines or integrates students with the online classes.

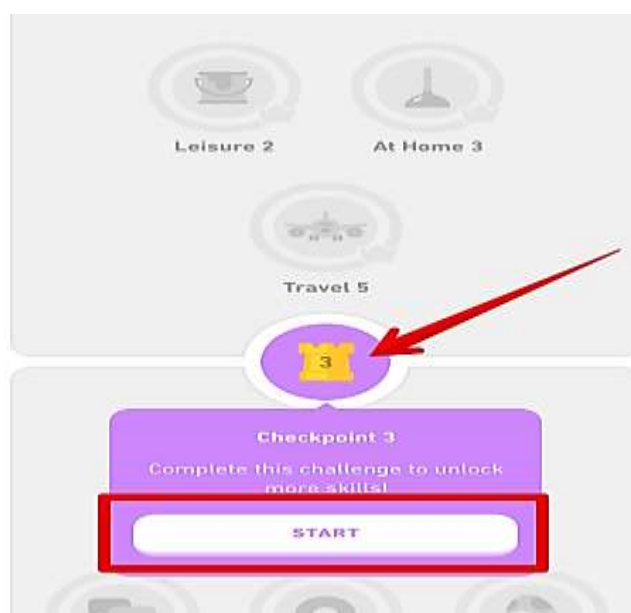
Illustration 1. Duolingo levels



**Source:** Taken from Duolingo platform (<https://www.duolingo.com/>)

Each course in Duolingo comprises modules (the circles in the left image), which are grouped to form skills. Duolingo dictates the order for completing the different modules. New modules only become active once the previous module has been completed. This is also the case for the individual lessons in each module. Lesson 1 must be completed to progress to lesson 2 and so on. That being said, Duolingo allows users to quiz your way out of individual modules as well as groups of modules (skills).

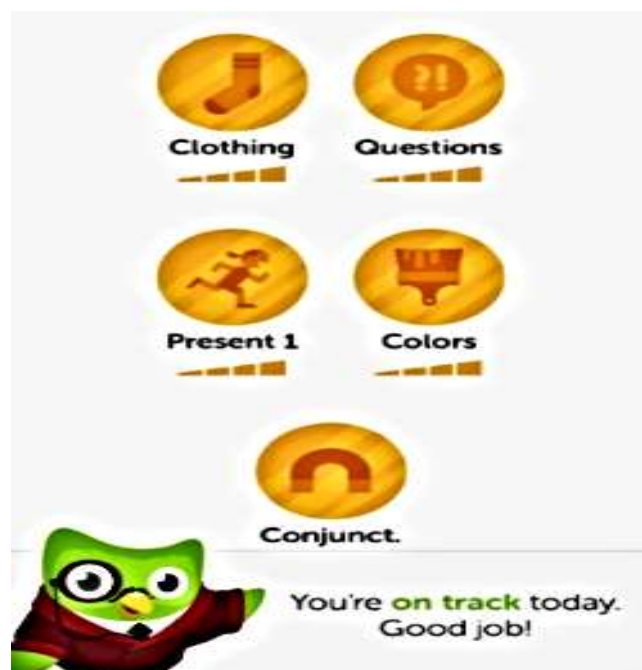
Illustration 2. Duolingo test



**Source:** Taken from Duolingo platform: (<https://www.duolingo.com/>)

Pressing the 'test out' button allows you to take a shortcut if you want to avoid working through individual lessons or modules that cover material with which you are already familiar. However, learners need to pass the exam to do that. The 'test' option applies when starting a new language. Students can start with the basics or take a 'starter test'. Let the application determine their level of fluency. Each lesson in Duolingo comprises a range of activities, such as translation and matching words to their foreign language equivalents. New vocabulary is usually taught in pictures, and grammar points are explained in small dialogue balloons. There are also listening exercises, where users have to type what they hear, and speaking exercises, where they have to say what they hear.

Illustration 3. Duolingo activity



**Source:** Taken from Duolingo platform: (<https://www.duolingo.com/>)

The Duolingo platform keeps track of daily progress. At the end of each lesson, students get a progress report showing the 'streak' of the number of days they have completed in a row. If they have earned any 'lingots' (Duolingo's currency that you earn as you answer things right), it will also be indicated on the screen. Duolingo recognizes that language learners need to feel motivated to guarantee they return to the app and have a bit more fun in the language. Duolingo uses different tricks to keep learners hooked (Benzon, 2015).

### **Theories of learning and language acquisition**

Different theoretical and scientific principles (e.g., behaviorist, mentalist, cognitivist, social cognitive) have contributed to the understanding, predicting, and recognizing human behavior based on their conceptions (Arapa, 2018). Its object of study focuses on acquiring skills and abilities, intending to explain how individuals access information and generate knowledge. Language is not an autonomous faculty or independent of other areas of human cognitive capacity.

Instead, language learning is an internal process that consists of a constant modification of knowledge based on the interaction between information from the environment and the cognitive mechanisms of the mind. Thus, from a cognitivist approach, the acquisition of a foreign language is different from the acquisition of the mother tongue since the former tends to be related to language learning and the latter to language acquisition (Benzon, 2015).

Contrary to cognitivism, the precursor of the social-cognitive approach, Vygotsky (1978), affirms that learning should encourage and evaluate the development of psychological functions through collaborative activities and not through independent or isolated activities. On the other hand, Bruner (1987) points out that the zone of proximal development serves to provide connectivity to a wide range of ideas since it is assumed that the learner possesses two levels of development for learning tasks. A current level, in which students demonstrate what they are capable of doing; and a potential level of development, with which he expresses what he will do in the future with the interaction with his interlocutors.

Indeed, social activity as the engine of human progress and the zone of proximal development is the compelling principle for the cognitivist approach (Pacheco, 2017). Thus, Vygotsky (1978) defined the zone of proximal development as the distance between the actual level of development, determined by the ability to solve a problem independently, and the level of potential development, determined by solving a problem under adult guidance or in collaboration with a more capable partner. Thus, according to Sanchez (2017), language acquisition is a constant and integrating process between an innate predisposition to handle language data and the data that the learner encounters in everyday experience; that is, through social interaction.

As it was mentioned above, language is acquired through social interaction which means that when students learn words, those words do not appear in isolation, they always need the company of a context, the interrelation between the lexical unit and the context is not circumstantial since they make possible to combine words through a simple statement, generating a more complex one. Thus, we can

say that the interrelation between the meaning of the lexical unit and the context is presented in two different and complementary ways. On the one hand, the lexical meaning -possibilities of meaning of the lexical unit of a word and; on the other hand, the textual meaning very concrete potential meaning of the lexical unit, which favors the understanding of the language. This means that textual meaning is activated if a lexical unit appears in a specific context, while lexical meaning is activated when it is interrelated with other units. Pacheco (2017) considered that the importance of the relationships between lexical units and context is that their meaning depends on them and, to a large extent, the use assigned to them in different discursive situations.

### **Communicative approach**

Vocabulary learning and acquisition are materialized through interaction. Indeed, by being in contact with the language, the learner develops and enhances his lexicon - mental storage of a group of lexical words or phrases. This allows the learner to recognize and use it productively in different acts of communication. Thus, it can be said that a foreign language learner is continually expanding his or her mental lexicon by inserting new words into his or her already stored list of words as well as constructing meanings from partially known words or phrases. Under this perspective, Singleton (2017) stated that learning words in isolation, without combining them in contexts and linguistic contexts, does not contribute to the learner's communicative competence because according to this approach, English language learning is relevant when the student faces real life situations that need communication. Consequently, its teaching and learning are based on communicative uses and functions. This is what can be done with the language. Therefore, Nickel (2019) stated that communication is based more on the lexicon than on grammatical elements. Consequently, the English language teacher must emphasize the learning of lexicon and vocabulary for communicative purposes.

As a result, English language teachers should pay attention to teaching vocabulary, considering strategies that allow the learner to communicate meanings according to the context, Rivers (2020). Likewise, Widdowson (2019)

stated that a native speaker/listener of the language understands better ungrammatical expressions with adequate vocabulary than those expressions with precise grammar and inappropriate vocabulary. Therefore, the association of similar sounds in L1 words has been empirically proven that they do not favor the comprehension of meanings since they differ from one language to another. Thus, in a study on vocabulary recognition, it was found that low-level learners, in particular, selected acoustically associated distractors more than semantic distractors or distractors that are not associated with the word (Giron and Vallejo, 2018).

In this context, the communicative approach plays a relevant role in the acquisition and learning of a foreign language, since activities with a communicative purpose facilitate mental access to the word through classroom didactic interventions that promote fluency. With the richness of lexical knowledge combining pre-established lexical units, the learner is in contact with the language and therefore increases the quality of exposure, comprehension, and production of the language he/she is learning. In this perspective, when doing paired activities, language learners unconsciously use the communicative approach when transmitting utterances. In other words, communicative competence is developed through practice.

### **Communicative competence**

Communicative competence refers to the use of language in certain communicative situations, which may be particular, concrete, and social. That is, it accounts for the pragmatics of language, where sociocultural aspects are decisive in the acts of communication. Consequently, Girón and Vallejo (2018) stated that communicative competence comprises skills and knowledge that an individual must have to be able to use linguistic and translinguistic systems that are available to him/her to communicate as a member of a given sociocultural community.

From this perspective, it can be said that every language user possesses the ability to interpret and associate utterances with appropriate contexts. This ability is acquired and developed from childhood. Thus, a linguistic community member,

provided with specific social roles, uses it to establish effective communication in culturally significant situations that allow him/her to deliver congruent verbal messages. In this context, Chomsky (1965) coined the term "competence" and differentiated between grammatical competence and performance. The former refers to the excellent linguistic knowledge of the native speaker's language, and the latter to the practical use of that language in concrete situations. However, the anthropologist and ethnologist Hymes (1974) pointed out that Chomsky's linguistic competence lacks considering the most critical linguistic skill which include the ability to produce and understand utterances that are appropriate within a given context; that is, knowing what to say, where to say it and how to say it (Rosales et al., 2013).

In this sense, communicative language competence comprises linguistic, sociolinguistic, and pragmatic components. Therefore, linguistic competence is a set of knowledge that allows the speaker of a language to understand and produce an infinite number of grammatical utterances with a finite number of elements (Rosales, 2013). Sociolinguistic competence, on the other hand, refers to a person's ability to produce and understand linguistic expressions in different contexts adequately. Pragmatic competence is the ability to perform a communicative act, considering the relationships between the language system and the context of communication. Undoubtedly, we can affirm that one of the competencies to develop and enhance oral and written discourse is lexical competence which is understood as the knowledge of vocabulary, composed of several words that are used and learned as a whole.

#### **1.4. Vocabulary acquisition**

Many mistakenly believe that vocabulary acquisition comprises only the acquisition of words. It also includes lexical chunks, phrases of two or more words, such as Good morning and Nice to meet you, which, although include more than one word, comprise individual lexical units. Vocabulary, then, can be defined as the words of a language, including individual items and phrases or chunks of several words that group meaning together, just as individual words do. Vocabulary acquisition has

become a focus of study for English language scholars and researchers (McPherron & Randolph, 2020). As a result, the central goal of many teachers is to make their students acquire the new vocabulary correctly, taking into account the different contexts where they need to use the language.

Therefore, learning a foreign language should be carried out through progressive construction involving exposure, reiteration, exercise, expansion, and enrichment of linguistic, oral, and written experiences of the language (Pacheco 2018). In other words, through this process, the learner is able to communicate with his or her interlocutors using a lexicon relevant to his or her area of knowledge. Therefore, foreign language teachers should consider the high or low-frequency words to teach. While high-frequency words require a lot of time exposure, reiteration, drill, and expansion to ensure their learning. In fact, memorizing words without combining them is as useless for effective communication as pretending to construct grammatical statements without knowing the words necessary to express oneself adequately in diverse linguistic contexts (Tovar, 2021).

The development of language skills in listening, reading, writing, and speaking have been and continues to be the main focus of the second or foreign language learning process. However, it should not be forgotten that lexis and vocabulary play a very relevant and significant role when acquiring and producing the target language orally or in writing form. Hence, no matter how well the learner learns the grammar, or how successful he or she masters the sounds of the language, without the words to express a wide range of meanings, communication in an L2 simply cannot happen in a meaningful way (McCarthy, 2020). Therefore, lexical teaching and learning must be carried out meaningfully during the acquisition and learning of a second or foreign language.

### **Vocabulary stages**

Vocabulary is considered to develop in consecutive stages; researchers have tried to discover some systematicity in how vocabulary is acquired, trying to isolate predictable stages of its acquisition. In this sense, Gleitman and Landau (1996)

claim that vocabulary learning is not only the result of an assignment procedure but of a systematic process comparable to the highly structured innate principles that guide syntactic acquisition. Then, from this approach, vocabulary acquisition is analyzed from the following perspective as listed below.

1. The order of acquisition of different types of knowledge, such as morphological, syntactic, parameter, and semantic for each lexical item.
2. The order of acquisition of content word classes, noun, verb, adverb, adjective.
3. The order of acquisition of lexical items; and
4. Through the developmental stages of lexical processing.

Regarding the first dimension (1), single-word, diachronic word acquisition were studied by Schmitt (2018). His research measured the developmental acquisition of four types of word knowledge: written form, associations, grammar, and meaning. The objective was to determine whether there is any hierarchical relationship between these four aspects of word knowledge. The results showed that none of the measures employed yielded positive evidence of a developmental hierarchy of the components of lexical competence. However, the existence of some regular patterns of vocabulary development is recognized.

In a study of word class acquisition, verb production increases as the learner masters the language. It was conducted by Marsden and David (2020). Parallel to this increase in verb production, there is a decrease in noun production, produced by learners who show a low incidence of language proficiency; however, verbs are virtually nonexistent in such productions. Marsden and David found that the most significant cognitive and linguistic demand is that verbs appear after nouns. The same argument applies to adjectives and adverbs, which also appear after nouns in the linguistic productions of the research subjects.

Among the factors that affect the acquisition of individual words, we distinguish pronounceability, length, morphological complexity, abstractness, polysemy, semantic opacity, synonymy, word frequency, and prominence (Ellis, 2017). Apart

from these phonological, orthographic, and semantic characteristics of the words of a language, the degree of occurrence to which the words of a second language (L2) and mother tongue (L1) correspond determines their learning, that is, the degree of ease of learning an L2. The more difficult it is to learn a word; the more lexical errors can affect its learning.

Vocabulary acquisition proceeds in three phases. First, learners focus on the formal specifications of a particular lexical item and try to relate the structures to translate it into their native language. This is called the formal stage of lexical development. Second, their learning as experience or exposure to language increases their lexicon; thus, learners add to the lexical entries of an L2 equivalent semantic and syntactic features to those of their mother tongue (L1). This stage of vocabulary learning involves matching a new word (L2) with the pre-existing form (L1) of its meaning. Finally, when the learner acquires considerable experience or use of the phrase or lexical unit, be it syntactic, semantic, or morphological information, the word is incorporated into the corresponding lexical entry. It was established by Jiang (2020). A mediation movement with the L1 takes place, that is, the stage of integration of the lexical unit of a second language with the mother tongue.

### **Importance of English vocabulary**

English vocabulary is fundamental to English language learning and teaching because people cannot understand others or express their ideas without sufficient vocabulary knowledge. Wilkins (2017) stated that while without grammar one can express very little, without vocabulary nothing can be conveyed. In different languages, even without grammar, with a few valid words and expressions, one is able to communicate. As students develop fluency and expression in English, it is essential to acquire productive vocabulary to develop their communication skills further.

Students often instinctively recognize the importance of English vocabulary in learning English. Schmitt (2018) noted that learners carry dictionaries, not

grammar books, to communicate. Learning English vocabulary helps learners understand and communicate with others. While we could not say that learning vocabulary leads to communicating properly, learning it is vital to mastering and reaching fluency in English is complex. Learning and teaching it is not just about words but involves lexical phrases. Vocabulary acquisition is an integral part of learning a second language. Students must create the habit of seeking to expand their vocabulary, and always learn it in context to retain words and use them more often.

### **Guidelines for the teaching-learning vocabulary process**

The researcher could find several characteristics that a method should meet in order to improve vocabulary learning in a foreign language, and they are detailed below Mona (2020).

- Vocabulary learning should be personalized in terms of learners' needs.
- To achieve with the acquisition of the vocabulary a certain autonomy it is necessary to make students become responsible of their own learning.
- Teachers need to start using effective methods and strategies when teaching vocabulary to make students achieve autonomy when learning.
- Students should be aware of their progress.
- Teachers should provide students the necessary words in order to make them communicate in different context and of course make them notice that learning vocabulary is not a simple matter.
- Combine different activities when teaching vocabulary in order to get students interest in learning.

The acquisition of vocabulary is an aid for the rest of the linguistic activities in learning a new language, such as writing, pronunciation, reading. When learners say that they have acquired a new term in their vocabulary, they also must know how to pronounce it correctly in any target language. Spelling is essential since, at some point, learners will have to put it in writing throughout their lives. They will not have conversations in which they speak only with those vocabulary words they

know. Therefore, they must know how to contextualize each one correctly Pérez (2019).

There are two new terms, acquisition and learning. With acquisition, students learn spontaneously without making an effort in their day-to-day life. On the other hand, learning involves effort, so the learner is aware of this new acquisition. In order to learn a foreign language, learners must start from the word and reach all levels of the language. For the students to make new knowledge their own, a series of stages is necessary on their part. They have to find the need or desire to learn this new word, identify the word and understand its meaning, process the meaning, employ the best personal strategy for memorizing the word, reuse the word either in the same context or in a different one, and use the word whenever possible (Perez, 2019).

The most important and, at the same time, complicated to achieve is to retain this new term, and for this, there are also a series of techniques such as repetition, image association, sensory, mnemonic, and mechanical strategies. Teachers have to differentiate between the types of vocabulary that are known. Learners use active vocabulary since it refers to the colloquial register. Passive vocabulary refers to the vocabulary they do not use but which they know, usually corresponding to the more cultured or specific linguistic register. Finally, potential vocabulary refers to the vocabulary of the voices they do not know (Perez, 2019). Therefore, the potential vocabulary must become passive and quantitatively active in the acquisition process.

### **Methodological guidelines for vocabulary learning**

Specific methodological guidelines for learning vocabulary in a foreign language. These guidelines follow a flexible and open methodology that can be adapted to the needs of the moment and each student Pérez (2020).

- **Conventional activities:** consists of mechanical exercises that are done automatically and do not learn contextualized words but do so in isolation.

In the classroom, it is carried out with a brief explanation by the teacher, followed by some exercises performed individually and finally corrected. These activities may consist, for example, of matching words with images, words with definitions, synonyms, and antonyms as well as grouping vocabulary into semantic fields.

- **Playful activities:** they consist on mechanical activities and do not contextualize the word but allow working in pairs or small groups, making it more dynamic and representative. Playful activities include crossword puzzles and word searches, matching words with simulated actions, discovering words that rhyme, the hangman game, or the chain word game.
- **Contextual activities:** activities integrate words into a context or a text. This is how students will be able to understand the meaning more efficiently, and if contextual activities offer students texts on topics, they are curious about and interested in, they will make it more appealing to them. Learners can work with oral or written texts, for example, the press.
- **Realistic activities:** this methodology motivates students because they will be working with authentic material, i.e., the material they will get from their advertising, information brochures of places they have visited, videos, audios (songs, for example), and even objects. They can carry out activities by inviting someone and analyzing the vocabulary based on what they have explained.
- **Constellation activity:** this is a cooperative, inductive, and dynamic way of learning new vocabulary, the idea is that they learn the vocabulary by creating connections from a word. This methodology follows a sequence, starting with the word generator, the linguistic network's trigger word. A constellation is done in small groups or large groups on the blackboard with the teacher as a guide. There will be five words for each topic to be addressed, and from these will appear and point to others that reminds us of each word.
- **Dramatization activities:** refers to the word beyond being pronounced, to non-verbal language as a globalizing character of the language. Through this technique, students can go beyond simply learning the vocabulary and acquiring linguistic skills. To carry it out, teachers must put aside the chairs and tables,

leaving the center of the classroom empty, and then begins implementing this method following an order such as warm-up, dramatization, and evaluation. The warm-up consists of exercises that prepare us for dramatization, such as warming up the voice.

In conclusion, Duolingo platform is an English teaching learning media, which is able to assist the students in learning English vocabulary which is more enjoyable, because it is such as the game based free learning platform, that can be used as educational technology in school.

## **CHAPTER II. METHODOLOGY**

This section explains the methodology that was applied for the diagnosis, application, and analysis in students from 8 to 9 years of age from the Unidad Educativa Unión Nacional de Periodistas together with Duolingo as an interactive application for learning a foreign language. For this study textbooks are not used, since books present an advanced level for the level of the students. Learners feel complete “frustration” when trying to discover its content since they do not understand, do not read it, and do not know how to interpret it. It is important to mention that for the hypothesis testing the researcher used the SPSS software program to analyze the data statistically.

### **2.1. Research method and research approach**

This research project belongs to Field Research, according to the framework in which the research is carried out. Concerning its purpose, it is applied, and according to its temporal scope, it is of the longitudinal type. Allowing to its depth, it is of the Explanatory type due to its experimental characteristics. The nature of its measurement is quantitative, oriented to verify the effectiveness of a variable. Based on the results, the aim is to explain to what extent the independent variable (Duolingo Platform) influences the dependent variable (English Vocabulary). Taking into account the objectives, it is experimental research, with a quasi-experimental design using pre-test and post-test with two groups, one experimental and one control. Its process is given in the following way. First, we apply the pre-test in both groups. Then the students of the experimental group will use the “Duolingo platform”. Next, both groups will solve the post-test, and at the end, the researcher compares the results.

#### **Research method**

This research study aims to determine the effectiveness of using the Duolingo online platform to increase vocabulary learning in 8-to-9-year-old students at “Unión Nacional de Periodistas” school. A quasi-experimental design is applied for

this research project where two groups participate (control and experimental group). The experimental group uses the Duolingo online platform, while the control group uses a traditional method. A standardized Cambridge exam (Flyers) is used as a pre-test and post-test to evaluate students' achievement during the process. It is necessary to mention that the researcher is going to focus on nouns and verbs within the vocabulary. For the treatment, the researcher creates an account in the Duolingo platform (<https://schools.duolingo.com/>) where only the experimental group is enrolled. Four units will be assigned; each unit contains 4 activities that students have to develop. At the end of the treatment, students are evaluated with a post-test to measure their vocabulary achievement.

### **Research instrument and techniques**

The data collection technique as the procedure or particular way of obtaining data was defined by Falcón and Herrera (2005). In addition, the technique indicates how to achieve a proposed end or facts, which has a practical and operative character. At the same time, a data collection instrument the researcher uses to approach the phenomena and extract the information for his research from them (Terán, 2020) The data collection technique used in this research process was the knowledge test; this test assesses the general or specific subject knowledge, and skills which students must master.

For the application of this research technique, two instruments were used, the pre-test and post-test in the diagnostic and evaluation stage. Both tests allowed obtaining quantitative data on the knowledge, skills, and abilities of each of the students of the educational institution. Tests are one of the most widely used standardized measurement instruments in the social and health sciences, especially in psychology and education. (Teran, 2020). It should not be forgotten that a test is administered for a specific purpose, usually to make decisions that, in most cases, are relevant to the life of the recipient individual (Gómez, 2018). The design of these knowledge tests was elaborated in a virtual application called Google form, where the student could enter through an access link, thus generating the evaluated results quickly.

## 2.2. Process of data collection

The process of data collection that the researcher had to follow was important. First, the researcher had to identify the group of students that were part of this study. Then it was necessary to diagnose the level of vocabulary that students had in order to have a clear idea of the knowledge that these participants started. Next, it was important to identify the instrument to be applied; that is why the researcher decided to use a standardized Cambridge exam (Flyers) as a pre-test and post-test to evaluate students' achievement during the process. This test was first given to both groups, which means the control and experimental group. Second, after getting the first results, the researcher started with the experiment, which was the application of the Duolingo platform. This treatment was applied only to the experimental group. At the end of the treatment, the investigator gave the post-test to both groups. Additionally, it was necessary to check the results in order to start with the tabulation part from both groups. Analysis and interpretation of the results was the last part of this study. This step helped the researcher to determine the effectiveness of the Duolingo platform in the development of English vocabulary.

## 2.3. Research proposal

Duolingo Activities to enhance English Vocabulary through the use of the Duolingo platform

**Informative Data:**

**Institution:** Unión Nacional de Periodistas School

**Province:** Tungurahua

**City:** Píllaro

**Beneficiaries:** 8 to 9 year-old students.

### Proposal Background

According to Piaget's theories of learning, learning must be innovative, which, for the case study, is oriented to the application of the Duolingo platform as a pedagogical strategy to strengthen the learning of English vocabulary in students

from 8 to 9 years of age. Using tools such as Duolingo helps to improve English performance in an easy, flexible, pleasant, and cost-free way, supported by autonomous learning and strengthening, of course, reading and writing skills in the second foreign language. From Calero (2018) stated that the student will be able to benefit from ICT inside and outside the classroom and will be able to work autonomously without the limits imposed by space and time. From this perspective, it is believed that learning can be enriched and achieve the general objective established at the beginning of this research study.

### **Justification**

An important thing about learning English is learning and mastering vocabulary. If learners cannot master their vocabulary, they often have some difficulty to understand the language and use it. Many researchers found that between vocabulary and grammar, vocabulary is more important. Gomez (2018) stated that a person who masters vocabulary is a person who can use words and understand the meaning of them. Vocabulary is an important part of English. It is the basis for the development of four skills in English: Listening, Reading, Speaking, and Writing (Terán, 2020). In learning English, learners need to know about vocabulary if they want to use it or express their own ideas. Learners who lack of vocabulary often have difficult to learn English and understand the meaning of words. Therefore, learners need to find a way to improve their vocabulary. Hence, it is thought that the Duolingo platform can work within a foreign language teaching environment, since the student will feel more comfortable and self-confident.

Based on the information above, this proposal is considered novel because it permits teachers focus on another form of teaching English vocabulary through the use of the Duolingo Platform. The game that this platform contains would be of significant impact on students because while they play, they learn. It is not only recreation but also learning. Finally, this proposal is ambitious since it bets on improving vocabulary acquisition in the English language more interactively and dynamically.

## **Objectives**

### **General objective**

To determine the effectiveness of the Duolingo application in the vocabulary acquisition process.

### **Specific objectives**

- To identify topics in the Duolingo Platform to be implemented in the teaching-learning process.
- To apply Duolingo activities for students to practice English vocabulary.
- To evaluate the Duolingo platform to improve the students' learning vocabulary in the English language.

### **Proposal feasibility**

This proposal is feasible because the researcher has the support of the authorities and students from the institution.

### **Theoretical basis**

Duolingo is the world's largest online language learning platform. It uses science and adaptive learning techniques to make the learning experience more fun, effective, and accessible. This platform is currently developing specific tools for language teachers. Duolingo for Schools continues to evolve thanks to multiple tests and teacher feedback, administrators, teaching experts, professors, parents, and students (Duolingo, 2016).

Duolingo transforms language learning into a game to make it more fun and effective. Learners can learn for free while earning points for answering correctly, practicing against the clock, and leveling up. Duolingo (2016) stated that their personalized and short lessons help learners retain the content learned. An

independent study showed that using Duolingo for 34 hours is comparable to a semester-long college-level language class (Benzon, 2018).

Personalized lessons greatly benefit students' learning because they adapt to the student's pace while reinforcing the knowledge already acquired. Duolingo has 19 languages to learn, each language is structured in units, and each unit has lessons that are put into practice daily. Among the units that Duolingo has are the following: Greetings, travel, family, clothes, studies, occupations, routines, emotions, food, weather, relatives, shopping, restaurant, people, animals, school. There are many more units that are worked on little by little to be able to unlock the following units. The dynamics of this platform are that the units are unlocked, and the level of difficulty of each one of them increases. This means that students start from small concepts or words to then be able to answer questions and form sentences.

### **Proposal development**

The following proposal will allow teachers to incorporate the Duolingo Platform in their English classes, facilitating the teaching-learning process. Each student will have the opportunity to learn more vocabulary in the English language in a dynamic and interactive way. To apply the Duolingo Platform, it is essential to train teachers in its use so that they will feel more confident to create English classes in order to make students reinforce their learning while playing. This proposal contains three units with four different activities within each one. Students will be able to complete each unit without the need to have the teacher next to them.

# Duolingo Activities to enhance English Vocabulary Through an interactive platform

*“If You are planning for a year, sow rice; if  
you are planning for a decade, plant trees; if  
you are planning for a lifetime, educate  
people” –  
Chinese Proverb.*

DUOLINGO CONTENT	
Duolingo Unit 1	<ol style="list-style-type: none"><li>1. Greeting</li><li>2. Trips</li><li>3. Menu</li><li>4. Family</li></ol>
Duolingo Unit 2	<ol style="list-style-type: none"><li>1. Social Manners</li><li>2. Family and Close Social Circle</li><li>3. Clothing</li><li>4. Describing a Typical Day</li></ol>
Duolingo Unit 3	<ol style="list-style-type: none"><li>1. Expressing Preferences</li><li>2. Saying Hello and Goodbye</li><li>3. Talking About Studies</li><li>4. Describing your Family</li></ol>

## DUOINTRODUCTION

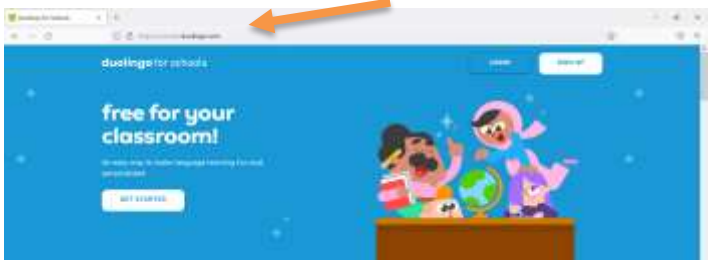
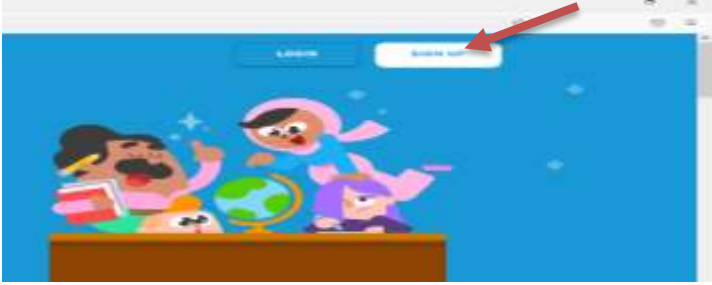
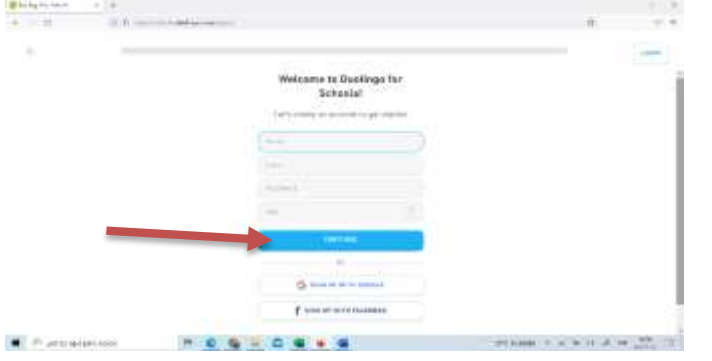
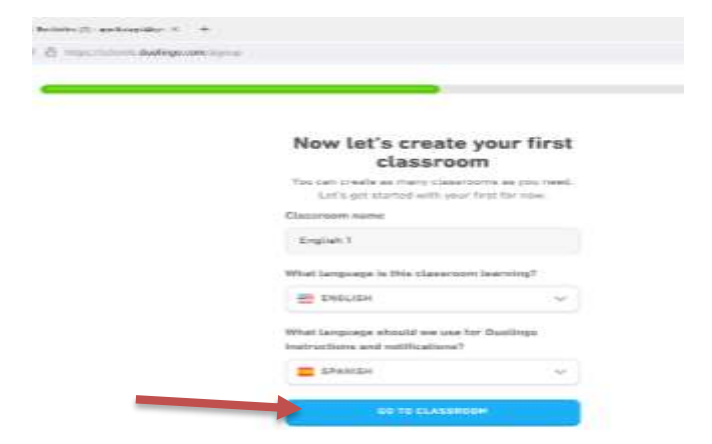


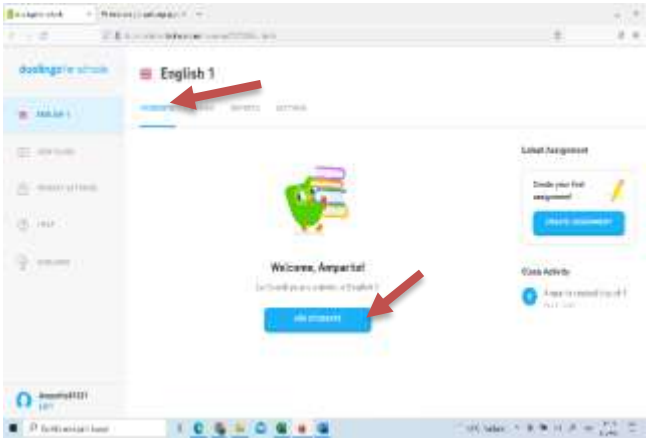
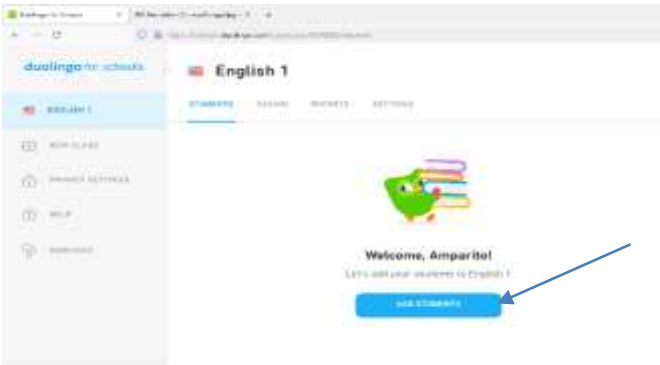
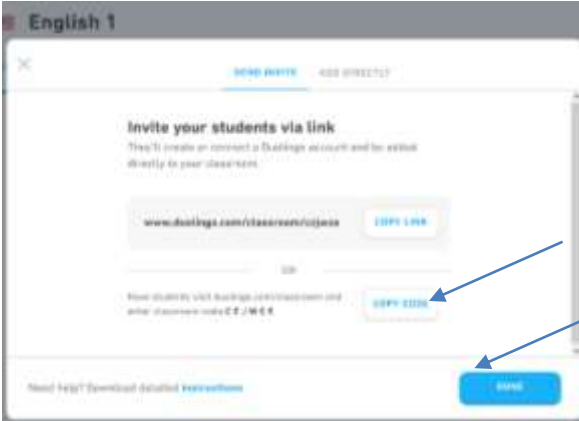

*for a* ***“Give a man a fish, and you feed him  
day; teach a man to fish, and you feed him for  
a lifetime.” Maimonides.***

This proposal aims to facilitate the learning of English language vocabulary in a more motivating and interactive way through the Duolingo Platform. This platform will serve as a technological teaching assistant for the student as it will act as a replacement for the English teacher during the students' free hours, reinforcing what has been learned. This platform has many activities that will allow students to learn while playing and having fun. I hope you enjoy it very much.

## STEPS TO FOLLOW TO BE SIGN UP THE DUOLINGO PLATFORM

The following steps will guide teachers and students to enroll and be part of the Duolingo Platform.

<p><b>Step 1.</b> Type the following link in your browser. <a href="https://schools.duolingo.com/">https://schools.duolingo.com/</a></p>	
<p><b>Step 2.</b> Click on SIGN UP to enroll in the platform.</p>	
<p><b>Step 3.</b> Fill in the blanks with your personal information and then click on CONTINUE.</p>	
<p><b>Step 4.</b> When you have completed the information, now it is time to start creating your first English class. Then click on GO TO THE CLASSROOM.</p>	

<p><b>Step 5.</b></p> <p>You are in! You can explore the platform and start assigning activities to your students, but first, you need to enroll your students in your English class.</p>	
<p><b>Step 6. Enrolling students</b></p> <p>Now, it is time to enroll your students in your class. To do this, you must click on ADD STUDENTS.</p>	
<p><b>Step 7.</b></p> <p>After clicking ADD STUDENTS, you will visualize a window where a link and a code will be generated. You can send your students the link or the code to sign into your class.</p>	
<p><b>Step 8.</b></p> <p>Have fun teaching and learning English by using this incredible platform!</p>	

## DUOLINGO UNIT 1

**Subject:** English I

**Length of lesson:** 20 minutes a day

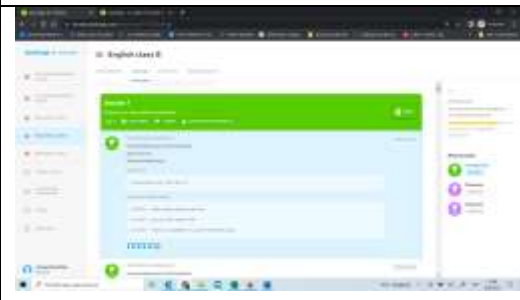
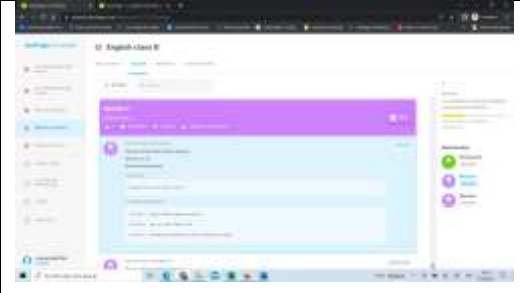
**Total hours per week:** 1 hour 20 minutes

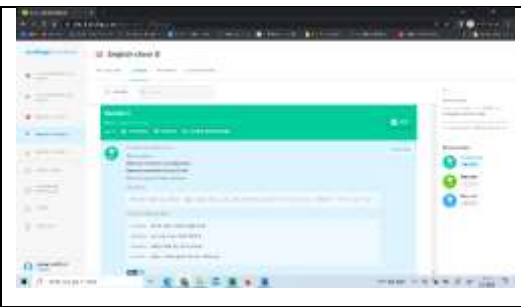

**Duolingo Unit's Topics:** trips, menus, family, and likes

**Duolingo Unit 1 Objective:** Students will be able to accurately write small texts using vocabulary related to trips, menus, family, and likes.

### Description:

In unit 1, students will find four activities to reinforce what they learned during the day. These activities will be developed for twenty minutes daily (from Monday to Thursday). Each day, students will find different topics where they will enjoy doing the different activities. On Friday, students will work with the teacher to review all the activities developed during the previous days.

Topic	Activities	Links
Greetings 20'		<a href="https://www.duolingo.com/guidebook/preview/es/en/1">https://www.duolingo.com/guidebook/preview/es/en/1</a>
Trips 20'		<a href="https://www.duolingo.com/guidebook/preview/es/en/2">https://www.duolingo.com/guidebook/preview/es/en/2</a>

Menu 20'	 A screenshot of the Duolingo English class 0 interface. The page has a light blue header with the text 'English class 0'. Below the header, there is a large text area with a light blue background and a green border. The text area contains several lines of text, including 'Hello, my name is...' and 'I am from...'. To the right of the text area, there are several icons and buttons, including a green 'Next' button. The overall layout is clean and modern.	<a href="https://www.duolingo.com/guidebook/preview/es/en/3">https://www.duolingo.com/guidebook/preview/es/en/3</a>
Family 20'	 A screenshot of the Duolingo English class 0 interface, similar to the one above. The page has a light blue header with the text 'English class 0'. Below the header, there is a large text area with a light blue background and a green border. The text area contains several lines of text, including 'Hello, my name is...' and 'I am from...'. To the right of the text area, there are several icons and buttons, including a green 'Next' button. The overall layout is clean and modern.	<a href="https://www.duolingo.com/guidebook/preview/es/en/4">https://www.duolingo.com/guidebook/preview/es/en/4</a>

## DUOLINGO UNIT 2

**Subject:** English I




**Length of lesson:** 20 minutes a day


**Total Hours Per Week:** 1 hour 20 minutes

**Duolingo Unit's Topics:** Social manners, family and close social circle, clothing, Describing a typical day

**Duolingo Unit 2 Objective:** Students will be able to effectively describe a typical day using vocabulary related to manner, family, clothing.

**Description:**

Topic	activities	Links
Social Manners 20'		<a href="https://www.duolingo.com/guidebook/preview/es/en/5">https://www.duolingo.com/guidebook/preview/es/en/5</a>
Family and Close Social Circle 20'		<a href="https://www.duolingo.com/guidebook/preview/es/en/6">https://www.duolingo.com/guidebook/preview/es/en/6</a>
Clothing 20'		<a href="https://www.duolingo.com/guidebook/preview/es/en/7">https://www.duolingo.com/guidebook/preview/es/en/7</a>

Describing a Typical Day 20'	 A screenshot of a Duolingo lesson interface. The browser address bar shows 'https://www.duolingo.com/guidebook/preview/es/en/8'. The page title is 'English class 8'. The main content area features a large orange header with a yellow star icon and a blue box containing text in Spanish. A sidebar on the right shows various icons for navigation and settings.	<a href="https://www.duolingo.com/guidebook/preview/es/en/8">https://www.duolingo.com/guidebook/preview/es/en/8</a>
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In unit 2, students will find four activities to reinforce what they learned during the day. These activities will be developed for twenty minutes daily (from Monday to Thursday). Each day, students will find different topics where they will enjoy doing the different activities. On Friday, students will work with the teacher to review all the activities developed during the previous days.

## DUOLINGO UNIT 3

**Subject:** English I

**Length of lesson:** 20 minutes a day

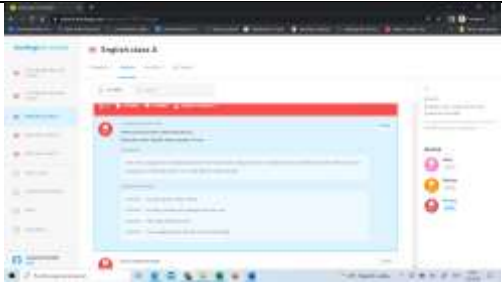

**Total Hours per Week:** 1 hour 20 minutes



**Duolingo Unit's Topics:** Expressing preferences, saying hello and goodbye, talking about studies, and describing your family.

**Duolingo Unit 3 Objective:** Students will be able to effectively express preferences, say hello and goodbye, talk about studies, and describe their family.

### Description:

In unit 3, students will find four activities to reinforce what they learned during the day. These activities will be developed for twenty minutes daily (from Monday to Thursday). Each day, students will find different topics where they will enjoy doing the different activities. On Friday, students will work with the teacher to review all the activities developed during the previous days.

Topic	Activities	Links
Expressing preferences 20'		<a href="https://www.duolingo.com/guidebook/preview/es/en/9">https://www.duolingo.com/guidebook/preview/es/en/9</a>
Saying Hello and Goodbye 20'		<a href="https://www.duolingo.com/guidebook/preview/es/en/10">https://www.duolingo.com/guidebook/preview/es/en/10</a>

Talking about Studies 20'	 A screenshot of the Duolingo English class 8 interface. The page title is "English class 8". The main content area is light blue and contains a list of items. On the right side, there are several circular icons in blue, green, and purple.	<a href="https://www.duolingo.com/guidebook/preview/es/en/11">https://www.duolingo.com/guidebook/preview/es/en/11</a>
Describing your Family 20'	 A screenshot of the Duolingo English class 8 interface, similar to the one above. It shows the "English class 8" title and a list of items. A pink banner is visible at the top of the main content area. The right sidebar has different colored icons.	<a href="https://www.duolingo.com/guidebook/preview/es/en/12">https://www.duolingo.com/guidebook/preview/es/en/12</a>

## **CHAPTER III. ANALYSIS OF THE RESULTS**

In this process, it is evident that most students in the experimental group increased their vocabulary level satisfactorily, which can be seen in the results obtained in the post-test, unlike the control group, which do not increase their level of vocabulary due to they maintained the same traditional methodology. It is essential to indicate that the results of the pre-test were fundamental to know how the students of the two participating groups started before the intervention with the Duolingo Platform.

It was determined that the platform allows students to strengthen, not only their English vocabulary, but also their reading and writing skills. This has contributed to improving learning, integration, and interactivity in the teaching-learning process, in a participatory, autonomous, collaborative and motivating environment, with the contribution of ICT.

Comparing the results of the pre-test with the post-test, it can be seen that, without a doubt an overall process, going from 1.92 to 2.8 out of 3 points in the experimental group in the categories of nouns and verbs. This means that the Duolingo platform is effective in increasing vocabulary in the English language. The learning process becomes an adaptive process to involve and excite the students in learning English. Here, it is observed that, with the harmonious and dynamic participation of the students, Duolingo contributes to transforming learning into a game to make it more fun, effective, and motivating for students.

### **3.1. Analysis and interpretation of results**

In this section, the researcher explains the results obtained from the pre-test and post-test from the experimental and control group respectively.

Table 1. Control group pre-test results

<b>Pre-test results</b>			
<b># Participants</b>	<b>Nouns</b>	<b>Verbs</b>	<b>Scores</b>
1	2	5	7
2	9	7	16
3	8	3	11
4	10	6	16
5	6	8	14
6	5	7	12
7	11	4	15
8	4	7	11
9	7	4	11
10	9	7	16
11	6	8	14
12	6	2	8
13	9	6	15
14	10	9	19
15	6	8	14
16	9	10	19
17	8	4	12
18	11	8	19
19	8	10	18
20	5	9	14
21	7	6	13
<b>Total score</b>	156,0	138,0	294,00
<b>Total mean score</b>	1,11	0,89	2,00

**Source:** Direct research

This TABLE 1 shows the results obtained in the pre-test for the control group. It is necessary to point out that 30 questions were taken into account for the pre-test application, distributed in 15 for the category of nouns and the other 15 points for verbs. With this background, the results shown in the table can be observed. Most of the students have a limited vocabulary of the English language. The results allowed a deeper analysis of how many words the students knew. The average of this pre-test is 2 points out of 3.

Table 2. Control group post-test results

<b>Post-test results</b>			
<b># Participants</b>	<b>Nouns</b>	<b>Verbs</b>	<b>Score</b>
1	4	7	11
2	9	6	15
3	10	7	17
4	6	8	14
5	6	9	15
6	7	6	13
7	11	5	16
8	4	6	10
9	8	7	15
10	10	11	21
11	11	9	20
12	7	5	12
13	9	8	17
14	12	10	22
15	8	5	13
16	7	9	16
17	10	7	17
18	11	6	17
19	5	10	15
20	8	10	18
21	11	9	20
<b>Total Score</b>	174	160	334
<b>Total mean score</b>	1,13	1,01	2,14

**Source:** Direct research

This TABLE 2 shows the results obtained in the post-test for the control group. The results show that this group of students did not improve at all. The mean obtained in the post-test was 2,14. The highest grade in nouns was obtained by participant 14, and the lowest grade was obtained by participant 1. It is essential to mention that a traditional methodology was applied in this group.

Table 3. Experimental group pre-test results

<b>Pre-test results</b>			
<b># Participants</b>	<b>Nouns</b>	<b>Verbs</b>	<b>Scores</b>
1	10	8	18
2	5	6	11
3	6	2	8
4	9	4	13
5	8	3	11
6	6	9	15
7	8	10	18
8	2	6	8
9	8	4	12
10	6	8	14
11	2	5	7
12	9	3	12
13	6	1	7
14	10	12	22
15	4	9	13
16	6	11	17
17	7	6	13
18	10	6	16
19	4	6	10
20	7	3	10
21	9	4	13
22	5	8	13
<b>Total score</b>	147,0	134,0	281,00
<b>Total mean score</b>	1,00	0,91	1,92

**Source:** Direct research

This TABLE 3 shows the results obtained in the pre-test for the experimental group. The results show that this group of students obtained a low score before starting the treatment. The mean obtained in the pre-test was 1,92.

Table 4. Experimental group post-test results

<b>Post-test results</b>			
<b># Participants</b>	<b>Nouns</b>	<b>Verbs</b>	<b>Score</b>
1	11	13	12
2	11	12	23
3	12	14	26
4	10	9	19
5	14	11	25
6	11	8	19
7	12	14	26
8	12	10	22
9	10	14	24
10	13	10	23
11	12	12	24
12	13	15	28
13	13	12	25
14	12	14	26
15	10	12	22
16	12	14	26
17	9	12	21
18	14	10	24
19	10	12	22
20	13	10	23
21	10	13	23
22	9	12	21
<b>Total score</b>	253	263	504
<b>Total mean score</b>	1,4	1,3	2,8

**Source:** Direct research

This TABLE 4 shows the results obtained in the post-test for the experimental group. The results show that after the intervention with the Duolingo platform, this group of students improved their vocabulary in the English Language. The mean obtained in the pre-test was 2,8.

## **Discussion**

This research entitled Duolingo to enhance English Vocabulary Acquisition in EFL Young Learners at the "Unión Nacional de Periodistas" Educational Unit is a quasi-experimental field research with two variables of analysis. The independent variable (Duolingo platform) was manipulated with the

development of learning sessions, and the dependent variable (English Vocabulary), was related to the learning of vocabulary in English. At the end of the study, favorable results have been evidenced as a consequence of using this online platform.

The use of Duolingo as a supporting tool in the acquisition of vocabulary in the English language is considered positive since this tool allowed students in the experimental group to improve vocabulary in a fun and competitive environment. The satisfactory results obtained with the use of Duolingo show that this tool has many positive characteristics. For example, it created a healthy competition in the students and motivated them to use this application even more to gain better scores and language experiences. This was very important because the more points or experiences they earned, the more time they had practicing English. Students repeated the activities until they passed to the next level. This repetition was positive in expanding the vocabulary of the students. Students found Duolingo to be an easy-to-use tool that was very helpful, and they enjoyed learning English differently. It can also be said that Duolingo assignments were more fun than regular assignments since students could practice and do their homework directly from their cell phones (which was the most used device when practicing English in Duolingo) or computers. The students do recommend using Duolingo to friends and classmates, and they plan to use Duolingo after finishing the course because it is a tool in which they can practice all English language skills. For the researcher, the use of the Duolingo platform was a practical tool, which allowed them to easily keep track of the activities assigned to the students. Duolingo allowed to generate a report of the grades students obtained by the students, the number of lessons completed, as well as the score earned. Therefore, the Duolingo Platform is effective in acquiring English vocabulary.

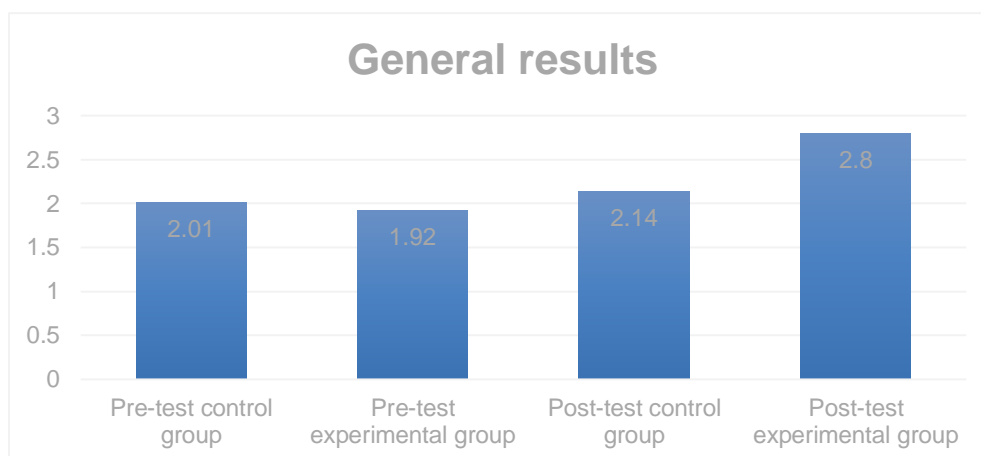
## Comparison of pre-test and post-test results

Table 5. General results

General results from the pre-test and post-test	
Pre-test control group	2,01
Pre-test experimental group	1,92
Post-test control group	2,14
Post-test experimental group	2,80

Source: Direct research

Graphic 1. General results



Source: Direct research

The following graph represents the general results obtained in the research. It can be observed that in the pre-test applied at the beginning of the research, both participant groups had a percentage lower than 3. The control group obtained 2.01, while the experimental group obtained 1.92. This background information was necessary before starting with the application of the Duolingo platform to the experimental group. In the results obtained in the post-test, it can be verified that the experimental group improved vocabulary acquisition as opposed to the control group with whom we worked with a traditional methodology. These results answer the hypothesis posed at the beginning of this research, stating the effectiveness of Duolingo in the acquisition of English language vocabulary.

### 3.2. Hypothesis testing

It is necessary to state that when processing statistical data to determine the degree of correlation that the independent variable has with the dependent variable, normality studies are required to establish a parametric and non-parametric statistical test. For this reason, the following analysis are proposed.

- H0: The research variables have Normal distribution.
- H1: The research variables are not normally distributed.

#### Hypothesis verification

Hypothesis formulation: Null hypothesis (H0): The language learning platform (Duolingo) does not enhance the acquisition of English vocabulary. The alternate hypothesis (H1): The language learning platform (Duolingo) enhances English vocabulary acquisition.

#### Level of significance

The level of Significance is  $\alpha = 0.05$ . Moreover, the researcher selected Shapiro-Wilk, for samples smaller than 50 study units. The researcher calculated the p-value according to the table after processing it in SPSS statistical software.

#### Result

Table 6. Normality test

Normality test							
	GROUPS	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	Gl	Sig.	Statistic	gl	Sig. Bil.
Pre-test	experimental	0,23	22	0,002	0,933	22	0,115
	control	0,158	21	0,164	0,913	21	0,054
Post-test	experimental	0,188	22	0,028	0,927	22	0,082
	control	0,169	21	0,104	0,936	21	0,16

Source: Statistical data taken from (SPSS program)

**Statistical decision:** If the p-value is  $< 0.05$ , the null hypothesis is rejected. If the p-value is  $\geq 0.05$ , then the null hypothesis is accepted.

The significance value of the final grade point averages in the input evaluation for each input is for each row: 0.115, 0.054, 0.082, and 0.160.

All values are more significant than the statistical value of 0.05, so the alternative hypothesis that the grade point averages in the population follow a normal distribution is accepted. After having checked the normality of the grade data, both in the pre-test and post-test, it was decided to opt for a parametric type of statistic. This forces the researcher to apply the student's t-test analysis to contrast the result samples between the before and after experimental group and the control group.

### **The contrast of statistical hypothesis independent groups.**

#### **Control and experimental group pre-test.**

Table 7. T-test condition

<b>Statistical groups</b>					
	Groups:	N	Media	Standard Deviation	Error Media Standard
Pre-test	experimental	22	<b>1,92</b>	1,801	0,368
	Control	21	<b>2.00</b>	1,471	0,314

**Source:** Direct Research

Ho: There are no significant differences in the pre-test of the language learning platform (Duolingo) and the acquisition of English vocabulary between the students of the control and experimental groups.

H1: There are significant differences in the pre-test of the language learning platform (Duolingo) and the acquisition of English vocabulary between the students of the control and experimental groups.

Table 8. Independent samples test

		Independent sample test									
		Levene's test for quality of variances		t-test for equality of means							
		F	Sig.	T	gl	Sig. bilateral	Means differences	Error standard differences	95% confidence interval of the difference		
										Inferior	Superior
Pre-test	Equal variances are assumed.	0,36	0,552	-0,676	43	<b>0,503</b>	-0,33	0,488	-1,312	0,653	
	Equal variances are not assumed			-0,682	43,453	<b>0,499</b>	-0,33	0,483	-1,304	0,645	

**Source:** Statistical data taken from (SPSS program)

If the significance Value is  $< 0.05$ , the research hypothesis is approved, and the null hypothesis is rejected. If the sig. Value is  $> 0.05$ , the null hypothesis is approved, and the research hypothesis is rejected. The result of the resulting p-value data is 0,503 which is greater than the significance level (0.05). Therefore, the null hypothesis is accepted, and we reject the alternative research hypothesis.

It can be affirmed that there are no significant differences in the results achieved in the pre-test scores in the two groups: control and experimental, as seen by the parametric calculation of the student's t-test. This means that the use of a traditional teaching methodology in both groups has yielded a similar level of achievement in the entry evaluation with a difference of only 0.32 tenths of a point on the vigesimal scale in favor of the control group. This shows that the two groups are on equal footing regarding their level of achievement in English vocabulary.

## Control group and experimental group post-test

Table 9. Difference between means – post-test

Statistics group					
	Groups	N	Mean	Standard Deviation	Error media standard
Post Test	experimental	22	<b>2,1</b>	2,187	0,446
	control	21	<b>2,8</b>	1,563	0,333

Source: Statistical data obtained from (SPSS program)

Table 10. Independent mean test.

Independent mean test										
		Levene's test for quality of variances		t-test for equality of means						
		F	Sig.	T	gl	Sig. bilateral	Means differences	Error standard differences	95% confidence interval of the difference	
Post-Test	Equal variances are assumed	1,329	0,255	2,091	44	<b>0,042</b>	1,182	0,565	0,043	2,321
	Equal variances are not assumed			2,122	41,615	<b>0,04</b>	1,182	0,557	0,057	2,306

Source: Statistical data taken from (SPSS program)

## Decision

The result of the resulting significance Data is 0,042 which is less than the significance level of (0.05). Therefore, the alternative research hypothesis is accepted, and we reject the null hypothesis.

It can be accurately stated that there are significant differences in the results achieved in the scores of the exit test between the two groups: control and experimental, as shown by the calculation of the student t-test. This was due to the influence of the teaching methodology used in the educational platform Duolingo to improve vocabulary in the English language significantly. A difference of 0,7 points in the vigesimal scale was observed in the groups in favor of the experimental group concerning the control group.

## CONCLUSIONS

- This investigation realized the conceptual foundations of English vocabulary acquisition, using Duolingo as a support tool for vocabulary acquisition in the English language process because it promotes individual student learning since they can do it anytime and anywhere from their cell phones. Duolingo promotes individual learning because it creates healthy competition among students, reflected on the scores and the number of days the application has been used.
- The diagnosis of students' perception of vocabulary learning strategies used in class showed that the Duolingo language-learning platform improves the English vocabulary acquisition; this was evident in the students' advance because the majority of them went from a basic level to an intermediate, so that, the use of Duolingo improves the English acquisition process. For this reason, educators can use it as part of daily homework, as it motivates student-driven work along with communication and collaboration.
- The post-test results determined the effectiveness of the Duolingo application in vocabulary acquisition. It indicates that the scores obtained in the Duolingo test at the end of the course are higher than those obtained in the pre-test. Therefore, we conclude that Duolingo is a tool that motivates students to learn and practice in a more fun way. This is reflected in the results of the post-test, where students acquire new vocabulary in the English language.
- Duolingo is not only an application but also a platform that uses gamification as a learning technique, and for this reason, students spend a lot of time using it to practice their English. All students mentioned that they would continue using Duolingo after the course is over and that they

would even recommend it to other people since they consider it a very useful, easy to use and very interactive tool for learning English.

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## RECOMMENDATIONS

- It is suggested that teachers seek and apply new didactic strategies supported by ICTs, such as Duolingo Platform because this resource contributes to the modern teaching process and represents the education of the future. For this reason, it is recommended to adapt the topics of the institution's curriculum to the topics of Duolingo to enhance vocabulary.
  
- It is advised to recognize the advantages of a learning platform to identify the need for its implementation and be able to determine the contribution to the teaching-learning process, because this type of platforms use adaptive learning technologies, which are able to tailor the tasks to the level of each student.
  
- It is recommended that the use of Duolingo platform reinforce in the process in face-to-face class and must focus on the most important contents to be able to establish the knowledge. The effectiveness of Duolingo will be much greater if the topics are also reinforced in the classroom. This will also contribute to the motivation for students to complete the lessons every day considering that the effectiveness of Duolingo is related to the time students dedicate to the platform.

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## ANNEXES

## Annexe 1. Pre-Test



## ENGLISH PRE-TEST

This English VOCABULARY test consists of 20 multiple-choice questions focused on nouns, which were taken and adapted from the Cambridge Movers examination (<https://www.cambridgeenglish.org/exams-and-tests/movers/>)

anpqrn.pwFp0p0vlg9n0kL000n (No competitors)  
Cambiar de cuenta

\*Obligatorio\*

Nombre y Apellido

La respuesta

Nombre y Apellido

La respuesta

Choose the correct option \*

1. I ..... my teeth everyday.



- a. Brush
- b. Sweep
- c. Eat
- d. Take

2. I ..... on my bed. \*



- a. Bath
- b. Play
- c. Swim
- d. Sleep

3. A ..... lays an egg. \*



- a. Sheep
- b. Dog
- c. Duck
- d. Tiger

4. I keep my pencil in the ..... \*



- a. Book
  - b. Pencil case
  - c. Bag
  - d. Glue
- 

5. It is a..... \*



- a. Watermelon
- b. Guava
- c. Mango
- d. Coconut

6. Daniel likes to eat ..... \*



- a. Jelly
- b. Cake
- c. Bread
- d. Milk

7. I am sick and I go to ..... \*



- a. School
- b. Hospital
- c. Temple
- d. Market

8. A ..... produces milk for us. \*



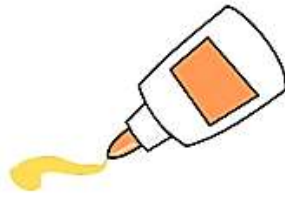
- a. Cow
- b. Lion
- c. Cat
- d. Fish

9. Kherrin wears a ..... \*



- a. Dress
- b. T-shirt
- c. Shorts
- d. Pyjamas

10. Steven rubs ..... on the paper. \*



- a. Pen
- b. Ink
- c. Glue
- d. Eraser

11. Astry loves ..... and ..... \*



- a. Father,mother
- b. Father, sister
- c. Sister , mother
- d. Mother

12. The shape of ball is ..... \*



- a. Triangle
- b. Circle
- c. Square
- d. Oval

13. The weather today is ..... \*



- a. Rainy
- b. Sunny
- c. Smoky
- d. Stormy

14. Bryan holds ..... \*



- a. Bags
- b. Books
- c. Papers
- d. Chairs

15. .... can swim standing up. \*



- a. Crab
- b. Donkey
- c. Dog
- d. Seahorse

16. This is a..... \*



- a. Frog
- b. Worm
- c. Rhino
- d. Swan

17. My brother ..... his breakfast. \*



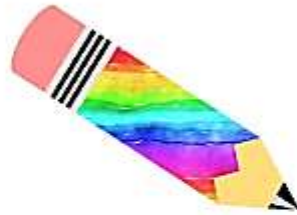
- a. Brings
- b. Eats
- c. Throw
- d. Borrow

18. We live in the ..... \*



- a. House
- b. Church
- c. Market
- d. Pool

19. There is a..... in my pencilcase. \*



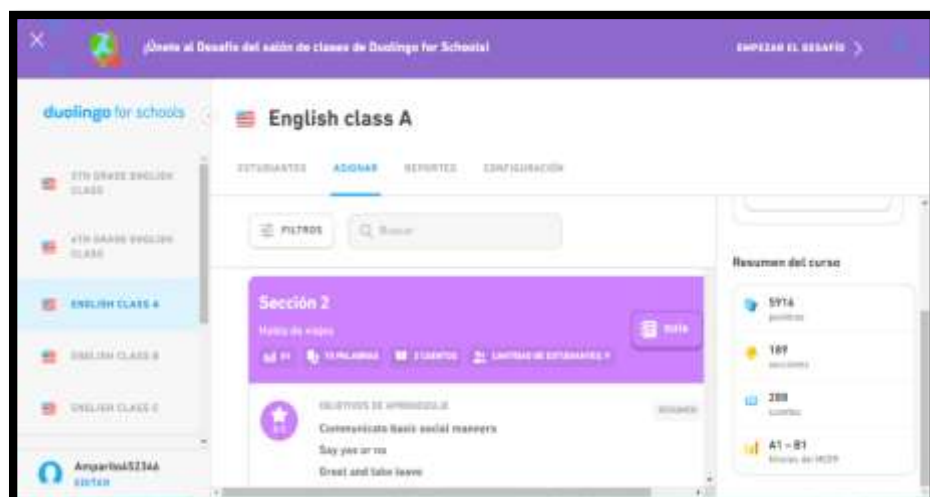
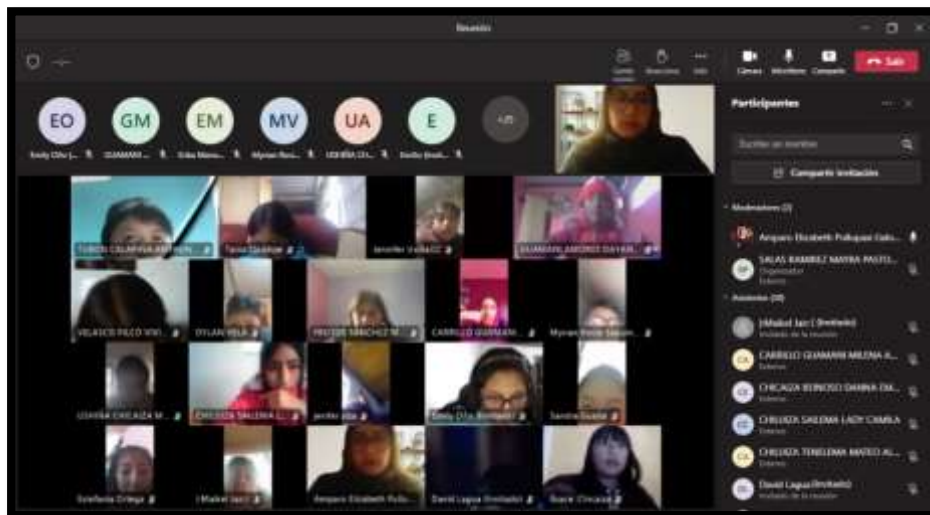
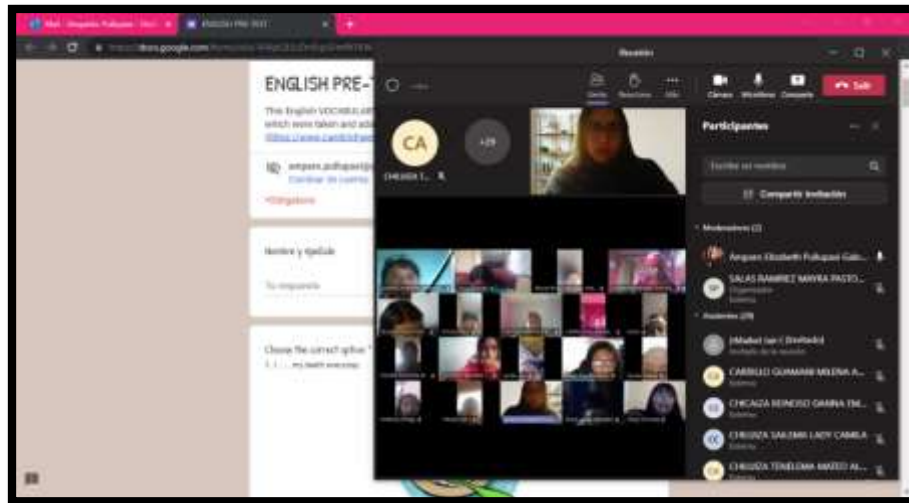
- a. Book
- b. Pencil
- c. Eraser
- d. Sharpener

20. Lucy does her ..... \*



- a. Drawing
- b. Singing
- c. Homework
- d. Cooking

## Annexe 2. Application



¡Únete al Desafío del salón de clases de Duolingo for Schools!

duolingo for schools English class A

ESTUDIANTES ASIGNAR REPORTES CONFIGURACIÓN

ESTA SEMANA DEPORTE ACTIVIDAD ADMINISTRAR ESTUDIANTES

MEMBRO	EXP. AVANZADO	PROGRESO DESEARADO	ÚLTIMA TAREA
Aidy Herrera	0 EXP	0 exp	---
AlexanderPere	0 EXP	0 exp	---
AlisonCastro	0 EXP	0 exp	---
BrittanyMason	0 EXP	0 exp	---

SCARLETTERRANDA  
Completa una lección de la sección 3, unidad 2

JositaCastroell completó una lección de la sección 2, unidad 1

¡Únete al Desafío del salón de clases de Duolingo for Schools!

duolingo for schools English class A

ESTUDIANTES ASIGNAR REPORTES CONFIGURACIÓN

FILTROS Buscar

**Sección 3**  
Ordina en un restaurante

11 PALABRAS 1 GRUPO CONTINUAR DE DESARROLLO 3

OBJETIVOS DE APRENDIZAJE  
Order and pay for food and drink  
Name and describe the everyday items  
Distinguish prices  
Name and describe food and drink

Resumen del curso

- 5916 palabras
- 189 unidades
- 288 palabras
- A1 - B1 Nivel de A2 CEFR

¡Únete al Desafío del salón de clases de Duolingo for Schools!

duolingo for schools English class A

ESTUDIANTES ASIGNAR REPORTES CONFIGURACIÓN

FILTROS Buscar

**Sección 1**  
Ordina en un café, saluda y preséntate

11 PALABRAS 1 GRUPO CONTINUAR DE DESARROLLO 11

OBJETIVOS DE APRENDIZAJE  
Communicate basic social manners  
Say yes or no  
Greet and take leave

Resumen del curso

- 5916 palabras
- 189 unidades
- 288 palabras
- A1 - B1 Nivel de A2 CEFR

Annexe 3. Post - Test



