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A PROPOSAL

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TO FIFTH-GRADE STUDENTS AT UNIDAD EDUCATIVA
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UNA PROPUESTA PARA USAR DUOLINGO EN LA ENSEÑANZA DE VOCABULARIO EN INGLÉS A ESTUDIANTES DE QUINTO GRADO EN LA UNIDAD EDUCATIVA RUMIÑAHUI

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ABSTRACT

Learning English can be challenging for students in rural areas due to limited access to educational resources. Technology has emerged as a solution to this problem, providing students with easy access to English language learning tools such as Duolingo, which can be downloaded on any device. This app can help students improve their English vocabulary and overall learning process. The aim of this study is to explore how useful Duolingo is in teaching English vocabulary as a foreign language to fifth-grade students at Unidad Educativa "Rumiñahui". An explanatory mixed method design was established by using a pre-test vocabulary and a structured interview with a convenience sample of learners based on their availability. Furthermore, the results obtained from the interviews were assembled using triangulation and discourse analysis, and then combined with the data gathered through the pre-test since this instrument greatly helped to classify the most relevant information for each aspect, as noted by Sayago (2014). Indeed, the data collected has been evidently positive since learners showed how practical and beneficial would the idea to use Duolingo be when they learn English.

Keywords:

Duolingo, English vocabulary, usage, teaching.

RESUMEN

Aprender inglés puede ser un desafío para los estudiantes en áreas rurales debido al acceso limitado a los recursos educativos. La tecnología ha surgido como una solución a este problema, proporcionando a los estudiantes un fácil acceso a herramientas de aprendizaje del idioma inglés como Duolingo, que se pueden descargar en cualquier dispositivo. Esta aplicación puede ayudar a los estudiantes a mejorar su vocabulario en inglés y su proceso de aprendizaje en general. El objetivo de este estudio es explorar la utilidad de Duolingo en la enseñanza de vocabulario en inglés como lengua extranjera a estudiantes de quinto grado de la Unidad Educativa "Rumiñahui". Se estableció un diseño de método mixto explicativo mediante el uso de un vocabulario previo a la prueba y una entrevista estructurada con una muestra de conveniencia de los estudiantes en función de su disponibilidad. Además, los resultados obtenidos de las entrevistas se ensamblaron mediante triangulación y análisis del discurso, y luego se combinaron con los datos recopilados a través del pre-test, ya que este instrumento ayudó en gran medida a clasificar la información más relevante para cada aspecto, como señala Sayago (2014). De hecho, los datos recopilados han sido evidentemente positivos, ya que los estudiantes mostraron lo práctica y beneficiosa que sería la idea de usar Duolingo cuando aprenden inglés.

Palabras clave:

Duolingo, vocabulario en inglés, enseñanza.

INTRODUCTION

Over the years, technology has advanced significantly. Thanks to its evolution, everybody can now access the internet and have their own device. As Motteram (2014), claimed: *“because of technology teachers and students are able to look at the internet to seek information and learn on their own”* (p. 16). It is important to understand the role of technology in education as Ahmadi (2018) stated: *“Technology makes students study easily, so it must be used as a tool for learning”*. (p. 118)

Having this in mind, the importance of technology has been considered for this study since Duolingo is part of the resources to handle when working with it. According to Gusano (2017), when learners use an app to learn a language, they will have better results to a long-term and save money since it is possible to find one when you surf on internet. Hence, the application helps pupils improve their vocabulary through reading, listening, writing, and speaking words. Wilkins (1972), examines the importance of studying vocabulary, as learning a language without proper grammar becomes challenging, but without sufficient vocabulary, conveying information becomes nearly impossible. In fact, vocabulary plays a crucial role in the initial stages of learning English. Thus, this project aims to analyze if Duolingo is effective in improving English vocabulary, how it can help learners recognize the words studied with the app, and its importance to understand and describe how Duolingo can be useful for reading, writing, listening, and speaking words in different tasks. Hence, the beneficiaries of this study are teachers, students, and myself to comprehend the process. Teachers must handle all ways of learning since students spend so much time surfing the internet, it is important that they take advantage of some learning apps.

However, scholars believe that providing additional online activities or materials may lead to students copying from the internet instead of completing the work themselves. Consequently, to avoid these problems, professors have planned to create classes where they check how learners are practicing and reinforcing the vocabulary words at home. Additionally, this study provides teachers with the confidence to incorporate Duolingo in their classes. It is important to note that some pupils may not be aware of Duolingo's existence, but by introducing it to them, they can learn how to use it and benefit from its contribution to their learning while also enjoying themselves. Finally, to develop this research, a pre-test was used to measure vocabulary, and a structured interview was conducted to collect data and understand the perception of the participants regarding how useful the application of Duolingo can be if they take it as part of their current English learning.

Duolingo is a free language learning app and website designed to help learners pick up a new language. According to Phuvinh (2020), using Duolingo can improve the ability of how learners recognize and understand

the meaning of words, as well as in the memory retention. Moreover, Duolingo can be easily downloaded on any device, allowing learners to practice and improve their English vocabulary at any time since there are many useful activities to catch the attention from learners and make them want to keep completing the tasks.

On one hand, Phuvinh (2020) carried out a study where 12 male English-majored students and 18 female ones from HUPI University answered 10 items from a questionnaire to examine the effectiveness regarding Duolingo to learn English vocabulary. As a result, 85% of the participants strongly recommended how useful the app could be and how motivated they will feel if they put it into practice in their current learning.

On the other hand, Ajisoko (2020), conducted a study where 19 students from Borneo University participated by using Duolingo for 30 days. A pre – test and post – test was applied to verify if the learners showed a difference among both tests. The final average after the application of the app from the participants was higher than the pre – test results. In fact, the use of technology as Duolingo helped to enhance and improve how students perceive English vocabulary.

Finally, a study conducted on a group of Latin American participants over the age of 18, who spoke English, examined the effectiveness of Duolingo. The study lasted for eight weeks and showed a progress of 91.4 points out of 100 points. Vesselinov (2012) reported that many participants were able to successfully enhance their English skills.

With this in mind, it is important to establish how Duolingo assists learners in managing and improving their learning through easy access to new technologies. This strategy supports the teaching and learning process in terms of how a teacher can help with student performance and how learners can better demonstrate their English vocabulary skills since they have a daily practice at home and at the school.

Moreover, it is essential to establish some advantages when students use technology. According to Phuvinh (2020), Duolingo is a significant technological resource and a freely accessible application that allows students to complete exercises at home and feel motivated to do so. This can be particularly helpful for students who may feel uncomfortable with a teacher present because of the authority that they represent in a class, as they may experience anxiety when making mistakes. With Duolingo, students can make mistakes without pressure, as the same exercises are offered to correct any errors, so they do not have the presence of someone who make them feel ashamed of having wrong answers in the activities. As they have the opportunity to correct themselves, they are able to acquire definitions, and words in the long term as noted by Richards and Renandya (2002), since the objective is

that they learn no matter how many times learners commit errors because vocabulary acquisition is a crucial component of language learning. Without good prior knowledge of vocabulary, learners face different challenges when reading, writing, speaking, and listening in the target language.

In line with what Karakoc and Durmusoglu (2017) suggest, acquiring new English vocabulary words is not a one-time event but a gradual process that involves different aspects of word comprehension and takes time. It is mandatory to have a continuous learning practice to identify the word from any context as Nunan (1991) suggests: "It is not easy to catch the new words' information only during a class setting" (p. 13). Therefore, students should incorporate the use of various resources, such as technology since they show more interest in such a game to learn, into their daily lives outside of the classroom to practice many times at any context, not only in a class setting.

To support how students could use technology when they learn English vocabulary, it is vital to understand how to develop this research, it is imperative to know that it is based on the constructivism approach, which was first introduced by the Swiss cognitive psychologist Piaget in the 1960s. The approach provides distinctive insights into the cognitive principles of the human learning process. Throughout the 20th century, constructivist ideas were continually developed and refined through the ongoing efforts of scholars such as Piaget, Dewey, Vygotsky, and others. Similarly, to understand and combine through a mental process the new information to support and improve the prior knowledge from the students and obtain a solid understanding especially when they work on problem-solving, reasoning, and decision-making as mentioned by Ansah (2021). Thus, when pupils face new resources, they need to comprehend how to manage them correctly. Once, they understand the mechanisms they will know to work by themselves or explain when working with somebody else. Having this in mind, at the beginning students will seem to misunderstand a new application as part of the class, but once they surf in Duolingo they will develop their cognitive process to apply what they remember about any topic to improve their English vocabulary.

Furthermore, constructivism also supports how students perform when they learn English vocabulary since it aims to build blocks and construct meaningful knowledge to help learners to develop their English skills and promote them within personal experiences as mentioned by Scholnik (2006). Moreover, understanding how learners construct their perceptions regarding how effective Duolingo is in learning English goes hand in hand with constructivism, since they perform different tasks to improve their four skills while simultaneously learning vocabulary.

Additionally, pragmatism theory aligns with this approach by emphasizing the practicability and effectiveness of the Duolingo application for teaching English as a foreign

language. Ormerod (2006), defines pragmatism as an attitude of method and philosophy that uses the practical value of thoughts and beliefs as the criteria of truth, including education. Therefore, the practicality of Duolingo in the context of English education allows students to express their perceptions about how teachers may change their point of view because of the improvement that pupils will have if they use an app.

As well as the motivation and engagement theory because when students learn English language they must:

- Have aspirations to keep practicing any task.
- Have a well-structured environment where they can enjoy their learning.
- Keep their interest to finish with content.

Certainly, motivation sets how learners feel in their context within the resources, people, and methods to have a significant learning process. However, if they do not have these elements, they will lose the interest such a way they will consider that their English acquisition is not important and they will do any task because it is mandatory to develop it as mentioned by Collie & Martin (2019). In particular, students do not feel motivated when they have a traditional setting where they do not have to do anything because teachers tend to give all the information. But, if they are exposed to new strategies as the use of Duolingo, they will have different points of view and understand that learning English vocabulary can be easy and fun.

On the contrary, to reach this improvement as teachers it is necessary to understand how each individual in class is different, so professors must identify what are the strengths and weaknesses of students to help in their intelligence development as mentioned by Nolen (2003). Therefore, when having a well-structured environment, students can perform their abilities as well as the incorporation of digital resources as Duolingo since there are a lot of tasks to complete in order to maximize the potential of each learner in class according what they are good at; linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, and intrapersonal as noted by Gardner (1999), as cited in Hazaymeh (2020). Even though, each student is different when talking about this app, and because of their age, they will show interest since they use a technological device and they will find different types of exercises to get them engaged in their own learning according their necessities and learning styles.

Finally, it is possible to attach the abilities of the students since they have a well emotional condition, self-confidence, motivation, and a low level of anxiety as mentioned by Krashen (1982). If students do not feel well in their minds, it will be incredible to acquire any knowledge and promote their learning because of the connection with their emotional factors. Hence, the ideal context to learn English vocabulary will be set if learners establish a good construction with their feelings and their environment since they have

experienced new advances in their daily lives such as technology which has been useful to keep pupils motivated when they acquire the English language.

MATERIALS AND METHODS

This research study employs an explanatory sequential design that emphasizes the quantitative phase, followed by the qualitative phase (Creswell, 2011). The design is important for describing the phenomenon after data collection. Having in mind that there were instruments to identify the perceptions from students about Duolingo and to understand how useful this app could be if the learners recognize its importance to improve their English learning skills.

The first instrument used in this research study was a pre-test. It is an effective way to create questionnaires to identify the prior knowledge from the students (Hashin et al., 2022). Additionally, four questions with 20 items were applied where animals, and technology vocabulary was set to identify how is the level of students during a pre – test, and measure validity and reliability of the research (Converse and Presser, 1986).

The second instrument used in this research study is a structured interview within 5 open- ended questions to identify what the perception from learners is when they try to acquire English vocabulary and verify if they have heard about technological apps in order to improve their learning where Seidman (2006), states as an interview for evaluation to understand the life experiences, ideas, perceptions, and interests of individuals. In line with this, a structured interview was used to achieve the objectives of this research which focused on the familiarity of the students with Duolingo. Finally, 12 female learners, and 11 male ones from fifth-grade in the Unidad Educativa “Rumiñahui” which is located in the rural zone were selected as participants for this study using a convenience sampling technique, as defined by MacNealy (1999), as a method where researchers approach passersby in public locations and ask them to participate. Students from this institution were available to participate due to their lack of English vocabulary in order to know how effective Duolingo would be when improving this language function.

RESULTS AND DISCUSSION

In order to analyze how students, solve different English vocabulary activities, how learners identify, and understand diverse instructions and complete them, it was significant to apply an instrument to collect data on the English vocabulary level of the students since it is important to assess their prior knowledge to verify what their level is and recognize their strengths and weaknesses regarding the English language. Thus, a pretest was administered in which learners matched, read, colored, and circled vocabulary words related to technology and animals. Consequently, the following charts were set to understand

how they completed each item and how their English skills performed because through a mental process, the new information supports and improves the prior knowledge from the students and obtain a solid understanding especially when they work on problem-solving, reasoning, and decision-making as mentioned by Ansah (2021).

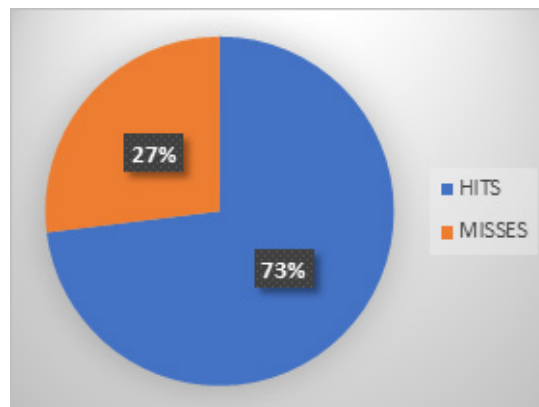


Figure 1. Technology matching vocabulary item.

English vocabulary acquisition is recognized (Figure 1) as an essential step for students to comprehend words before using them in real-life situations. According to Rafiq (2020), learners can identify, learn how to write, pronounce, and spell words. Bawa (2020) mentions that the use of images can assist learners in matching words. As a result, 73% of learners could match the words because of the use of images. This author also suggests realia can create a memorable learning experience by connecting content with objects. Therefore, having the interaction of these elements in mind it has been set how useful it is to implement pictures to get students engaged and promote their vocabulary achievement, especially with an application which covers all these requirements. Moreover, the use of realia can help students recognize English vocabulary in any exercise, whether it is a physical paper or a virtual item as mentioned by Bawa (2020). As a result, the use of different online platforms affects how students perceive the language and engage in applying their knowledge to diverse tasks. However, 27% of learners are at a great disadvantage because of the misuse of similar tasks in class and even the lack of practice in their family context.

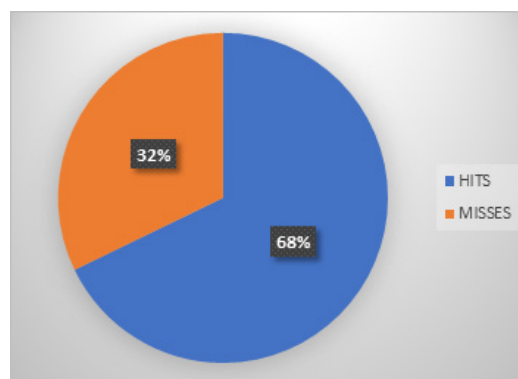


Figure 2. Zoo unscrambled vocabulary items.

When completing spelling tasks, it is widely known that students (Figure 2) must first learn the pronunciation and meaning of the word before beginning to spell, as stated by Sorádová (2018). It is important to note that 68% of learners experience present difficulties when having a word for the first time in their current activities, while 32% of them have a higher level of English word recognition since they showed how easy it was to complete the exercise. It is vital to support students when they commit mistakes, in fact, the perception of the teachers can influence students' belief that practicing at home is useless, as they may feel that they can only learn in an educational context. Therefore, educators must present and assess vocabulary words at any moment in the class to let learners know that their learning will be significant if they practice at home too. Hence, it must be mandatory to have extra preparation to practice in other contexts because students can find resources where they are adapted to specific needs, interests, and English proficiencies to improve the recognition of the meaning, pronunciation, and so on with the letters (Huda et al., 2023).

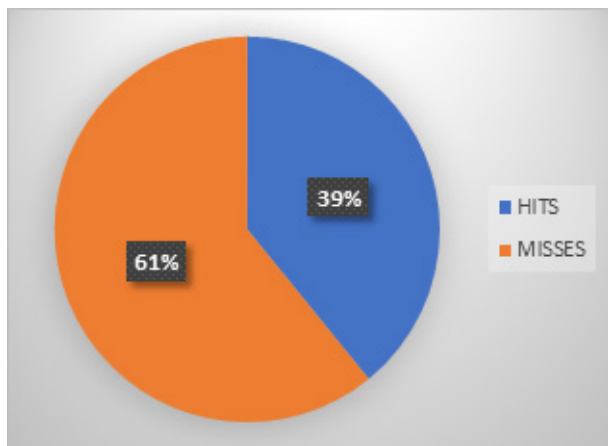


Figure 3. Zoo coloring vocabulary item.

Initially, 61% of the learners presented mistakes when reading and coloring the vocabulary words regarding the zoo content (Figure 3). This is because, from the scholars' perspective they are not accustomed to these types of exercises. However, 39% of them correctly apply and complete what they know. It is significant to establish that when teaching English vocabulary, different techniques should be employed since adults and children learn in different ways (Wulanjani, 2016). Hazaymeh (2020) mentions that Gardner and his theory of the multiple intelligences emphasizes that teachers should maximize the potential of each learner in class according what they are good at; linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, and intrapersonal. It is known that young language learners prefer to feel motivated when they are face-to-face with a new language to catch their attention and make their learning unforgettable. Coloring is a good example to keep students focused in class and have fun at the same time they learn new

vocabulary words. Similarly, nowadays technology has become ubiquitous in modern society, and incorporating it into the classroom can enhance the learning experience for students.

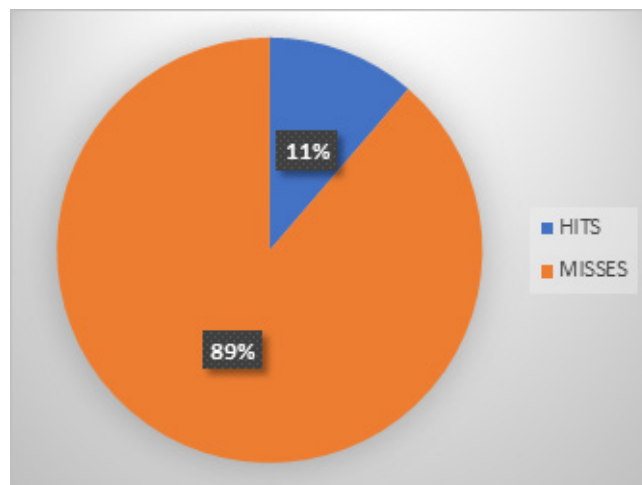


Figure 4. Technology verbs vocabulary item.

In order to develop any task when learning English (Figure 4), it is vital to possess a comprehensive vocabulary beforehand. Students with limited vocabulary often struggle to meet the four skill standards, as stated by Bawa (2020). Consequently, students tend to misunderstand what they have to do because of their inexperience when working with vocabulary items or they do not feel comfortable asking the professor because of their shyness. Consequently, it is better when they feel calm at home and they can surf the internet by themselves and learn different words by hearing, looking, matching, and circling the correct answers. Evidently, the use of technological devices may help learners to have fun, learn, and practice at any moment the vocabulary words that they need to construct solid English knowledge since in the last question learners showed how difficult it is for them to recognize simple verbs to complete an activity as a result of 89% wrong answers, and only the 11% of students whose English practice is improving every day. Thus, it has been seen the necessity to promote different strategies inside and outside of the class to let students improve their language acquisition since they seemed to have lack of experience when they tried to complete simple exercises.

To understand what perception students have about using technology to enhance vocabulary in the future, it is mandatory to know what is their point of view about the use of apps to build on and improve their English skills acquisition, where the most common and relevant answers were taken because of the same agreement for each one. In addition, the interview was conducted in Spanish to let students feel comfortable with their responses. To begin with, it was necessary to know; How important is the English language for you?

[I don't really use the language that much; I don't understand it. It is very difficult but I think it is important because when I surf on the internet there are a lot of things in English.] (IN-S-1). [It is important because when the teacher speaks, I don't understand him, I would like to be able to practice the language.] (IN-S-2). [It is important because my sister knows English and she works a lot.] (IN-S-3).

According to the first question, the perception that can be established is that even though they do not use English as much as they want to, they understand the importance and how suitable it would be to improve their skills to understand simple tasks since they did not understand the instructions, and words in the pre-test and even in their daily classes. Furthermore, English tends to follow globalization, for instance as mentioned in the interview, they find the language everywhere. So, it is important to have their interest and promote it by creating lesson where they can reinforce their prior knowledge in the future.

To continue gathering information, a second question was set to understand how pupils find the use of technology resources to have an interactive and attractive English learning as the following: Have you discovered how useful can technology be to have an interactive and attractive English learning?

[Yes, because most of the classes are boring and I prefer to talk with my friend.] (IN-S-1). [Yes, because I can use different apps and learn more English words.] (IN-S-2) [Yes, because I can practice at any moment and I find fun activities which can be considered as games.] (IN-S-3).

It has been identified that students prefer and like to use technology when they learn vocabulary because they find it more interesting and it keeps their attention when they acquire English vocabulary words, as in the pre-test they did not feel engaged because of how a traditional class is still being done, they lost the interest, and they tried to complete because of the use of images. Thus, it is required to add exercises where students feel the necessity of using apps to improve what they do not understand in a topic. Moreover, it depends on how teachers create the educational atmosphere where learners feel motivated and try to have a better participation when they work alone or in groups.

After they recognized how useful the technology is to learn English, it is necessary to identify what their opinion is about the use of an app to improve their English learning acquisition for their current daily routines; Would you like to use an app to improve the English language vocabulary?

[Yes, it would be great to learn in a fun way and understand more English words.] (IN-S-1). [Yes, when I work in an app, it does not feel like the school, the lessons are boring.] (IN-S-2). [Yes, but it depends on the app because

sometimes they are boring. But, if that app is really fun, I would give it a try.] (IN-S-3)

In the first instance, students would like to learn the vocabulary words by using an app because the majority of the time their English classes tend to be old-style ones, and they do not care about their own learning improvement. So, it is necessary to get them engaged and how useful an app can be to have progress in their vocabulary acquisition, so they do not feel lost when they have a test because they can practice the words with other fun resources, so writing in a paper would be easier. Even though they have the interest to learn English through an app, in some cases it is mandatory to give the tool and correct instructions because learners tend to look anything that can help them but, in some cases, they do not find the correct one. Therefore, educators must give a useful tool to let students have a correct cognitive process where they can solve problems, reason, and produce the English language in different tasks in a class.

It has been identified how students would prefer to learn vocabulary words when using an online app, so it was mandatory to detect what was their opinion about the benefits that they could have if they start with this resource; Have you personally experienced the benefits of using a digital app to improve your English vocabulary?

[No, I have not used it but I have seen videos about some apps that work to learn English. I downloaded one but I have no idea what it works.] (IN-S-1). [No, but I have seen my sister how she learns on internet, she says that it is easier for her to remember the words in English.] (IN-S-2). [No, but my parents tell me to take advantage of my time and learn since I have internet.] (IN-S-3).

Having these perceptions, it is clear that even though they have not used an app yet, they have seen with personal experiences how useful it will be to construct their own learning to have meaningful knowledge. Moreover, they understand how important it could be to add this kind of resource into their lives, thus learning vocabulary may help to improve their learning acquisition, and they will be able to follow simple instructions about the vocabulary words in future activities.

So, as they have seen this importance of having better results with the help of technology, it has been set the following statement: Have you ever heard of Duolingo?

[Yes, I have heard about it, some of my friends use that app to learn other language.] (IN-S-1). [I think I heard about it; I saw it in a video on social media. And it helps you to learn more words in English.] (IN-S-2). [Yes, I have seen videos on social media of people using the app anywhere and it seems to be not necessarily at school.] (IN-S-3)

Students have identified what the function from the app is to have the interest to incorporate it in their daily activities. It is vital to introduce the platform to make them practice

and tackle their weaknesses related to their lack of vocabulary acquisition. Hence, they could understand, identify, and solve any speaking, writing, listening, or reading tasks when they recognize the words since they would get familiar and involved in the English language. Having the interest of the students, educators must keep them motivated and create spaces during the class where learners can show what they are learning at home and promote it to keep them practicing at any moment in their daily routines.

CONCLUSIONS

On one hand, based on the study findings, it would be necessary to keep students motivated as in the results, learners felt interested in the Duolingo application since they have heard and seen about how helpful it could be to learn new vocabulary in English. The studies have shown that Duolingo is a good application since its use has improved language not only with good grades but motivation, as well. In addition, the union of the app will be essential to align the necessities of pupils to establish a better learning process since they have not practiced in their current contexts with this tool.

On the other hand, based on the perceptions from the students, it has been found that they recognized the usefulness of Duolingo because of what they have experienced in their surroundings with some relatives. Consequently, it can be suggested the benefit that learners will have if they start with this alignment to have a better learning process can be advantageous to keep them motivating at the same time they learn and improve their English vocabulary words.

Due to the lack of motivation and the student's interest in technology, the proposal to use Duolingo when teaching English vocabulary is the answer to take advantage of technology and motivate the students. It can improve the ability of how learners recognize and understand the meaning of words, as well as the memory retention. Finally, this project has shown the effectiveness of Duolingo in improving English vocabulary in different studies with positive results and the answers given by the students.

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