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Educational and Languages School

English Department

General Theme: The effects of the App Duolingo as a complementary resource in the development of English-speaking skills in secondary education.

Specific Theme: The effects of the app Duolingo as complementary resource in the development of English-speaking skills in students of Seventh grade in Pedro Joaquin Chamorro School- La Esquinas, San Marcos, in the second semester of 2022.

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I. RESEARCH SCOPE

1.1 Introduction

Developing speaking skills is one of the main goals of English language education. However, teachers do not often have the means to help learners meet this goal. Fortunately, with the advance in communication technologies and the Internet era English teaching has improved. One particular platform often used to improve students' speaking abilities is Duolingo, but research to prove the positive effects of this tool is lacking. Thus, this research project aimed to show evidence on the effectiveness of Duolingo in young learners.

Specifically, our study aimed to assess the effects of Duolingo on the speaking skills of 7th grade learners at Pedro Joaquin Chamorro Highschool during the second semester of 2022. Additionally, we wanted to highlight the importance of today's technology and English learning and how the former can enhance the pronunciation and the vocabulary knowledge of learners. The relevance of this study is to determine the factors that interfere with the development of pronunciation and vocabulary and how these can be improved through the exercises offered by Duolingo.

In order to be a successful and confident English learner, teachers need to encourage students with the use of TICs, and some software's or apps in the classrooms, and students need to put into practice to improve their expertise, to develop the speaking skill and to enrich their vocabulary knowledge, especially on students from 7th grade of Pedro Joaquin Chamorro's public School from the second semester, 2022.

Nowadays in Nicaragua there are many public Schools where the majority of students and Schools do not count with technology in classrooms to improve student's knowledge of the English Language. There are some difficulties when teachers are teaching the English language. They focus on the traditional way: books, pamphlets or lesson plans, just to practice reading and writing do not allow students to speak, pronounce or articulate in the correct way the words because they cannot listen to somebody and repeat. Throughout this research, you will be able to know about the Duolingo App, an application with which the teacher can innovate their class, giving assignments to students, in order for them to develop their speaking skills in the English Language.

1.2 Background

The use of ICTs has had a great impact on education. Nowadays, it is very common to find the use of technologies within the classrooms. It is important to recognize that the new generations of students are in direct contact with technology on a daily basis, and including this in their learning will motivate them, giving way to its successful development.

In the following documentary investigation, it can be observed the research developed at the University of Ambato, Ecuador by Herrera (2018), which consist in Duolingo language-learning platform and the English vocabulary acquisition in students with the aim of measuring how the Duolingo language-learning platform enhances English vocabulary acquisition in students. A total of 120 third-year high school students from Ecuador's Primer de Abril educational unit participated in this descriptive research study. The study's findings demonstrate that students' vocabulary is expanded as a result of using the Duolingo app, and speaking skills are also developed as a result.

Duolingo has been involved in many researches. Rossana Molina and Laura Flores (2019) developed research using the Duolingo app to enhance students' self-regulation through mobile learning with the purpose of determining how Duolingo app contributes to self-regulation of students and in the same way how it helps to improve English skills with the use of mobile. This study was conducted with a group of 11 to 13-year-old students in a private school in Barranquilla, Colombia, and was approved by them because it was an enjoyable, worthwhile, and unique experience. Students continued using the software in the same way because it helped them improve their English language and self-learning abilities.

ICTs are very useful and important at the moment to learn another language, and we can see it in the research carried out at the university of Hoa Sen, by Dang Hoang Tri (2014), which consisted in an exploration study of ICTs use in English language learning in order to motivate them to learn and develop English language activities. This study was developed at Hoa Sen university in Vietnam to a group of students of which 129 were female and 20 were male. With this research, it was identified that students spend more time using technology for routine activities and not for learning, in this way, the use of ICTs is being promoted in them to learn a new language, which is working well. Since the students are accepting it in a positive and successful way.

Currently, in the majority of secondary schools in our country, English classes are only taught in short periods of 45 minutes, which is very difficult for the correct learning of

the language, for this reason, as we observed in research previously, the use of the Duolingo app as well as the implementation of ICTs as a support tool to successfully learn a language is important, since in this way they will be able to interact with English for longer than is established in the classroom, thus giving way to be able to develop well the speaking skill and the skills of the language in general.

1.3 Rationale

This research describes difficulties pointed out by students of 7th grade at Pedro Joaquin Chamorro Las Esquinas San Marcos Public school, in the speaking skill of the English Language. In addition, the main focus of this research is to recognize through teacher interviews and classroom life tests, the main problems faced by students at the moment of elaborating a sentence when speaking in front of their peers and when they are in a group. In addition, ICTs will be applied as a resource for the development of oral skills in the English Teaching-Learning Process through an application called Duolingo, which will not only provide students an extensive vocabulary portfolio, but also intensive practice in pronunciation, sentence structure, enunciation and proper use of punctuation marks, adding that Duolingo also offers instant feedback to its users after each task. As Garcia (2013, p. 21) express in his review of the app, the feedback goes beyond the basic multiple choices. As a result, the learner will listen and repeat through the exercises with the ability to reproduce the words as many times as necessary until they are clear on how to say them and this will encourage the learner to speak without fear as they will have the confidence to replicate what they heard.

This work aims to provide Teachers a vast understanding on how to use the App Duolingo, the advantages of its usage, the variety of game examples, context and strategies that the app implements to provide students a funny learning experience. Teachers need to be prepared and up to date with revolutionary learning methods, bring something different into the classroom, bring something that will take the most out of the short time available to the teachers. Developing speaking skills is a top priority, being able to communicate clearly and effectively should be our main goal.

This research will also contribute in great and substantial data that can be used by MINED and subsequently, transfer findings across all schools that are interested in providing students with the opportunity to terminate their studies confident enough that they will include in their resume that they can speak English as a second language. Real time monitoring and follow up on the English language has been neglected in secondary schools and it is only worked at surface level without going any further on making sure that students can actually speak the language due to the fact that little time is giving to practice, really necessary activities, real time feedback, real time example, and full-time pronunciation practice Since you log into the App, all of this together can be found in the incredible App

Duolingo. Therefore, it is a must that we start implementing this feature for the future of the students and to ensure that they can speak English fluently.

2.1 Problem Statement:

The general issue faced in this current study is that teachers are lacking to implement ICTs not realizing that doing so, is having a major impact in students to develop their English-speaking skills. Additionally, students refrain themselves from speaking in the classroom due to being afraid to make pronunciation mistakes, and not having enough vocabulary to elaborate their thoughts; therefore, we will try to apply the usage of an application called *Duolingo* in high school classrooms and find out if they feel more comfortable and if the fear to speak will go away as they learn a vast vocabulary displayed in the practices of the exercises in the application. The root issue that is aimed in this study is that teachers who are not well trained in the implementation of ICTs get the opportunity to discover all the benefits housed in this method.

2.2 Themes:**➤ General Theme:**

The effects of the App Duolingo a complementary resource in the development of English-speaking skills in the Teaching-Learning Process of the English Language in secondary education.

➤ Specific Theme:

The effects of the app Duolingo a complementary resource in the development of English-speaking skills in the teaching-Learning Process of the English Language in students of seventh grade in Pedro Joaquin Chamorro School- La Esquinas, San Marcos, in the second semester of 2022.

2.3 Objectives:**1. General Objective:**

- To recognize the effects of the App Duolingo as a complementary resource in the development of English-speaking skills in the Teaching-Learning Process of the English Language on high-school Education.

2. Specific Objectives:

- To identify the challenges that seven grader students from Pedro Joaquin Chamorro school face to speak in English and the most common speaking skills that they have to develop or improve to overcome the difficulties.
- To distinguish the specific skills that could be improved or development by using the Duolingo App.
- To design a guide for teachers and students on how the Duolingo App should be used as a complementary teaching resource in the development of the speaking skills of the seven-grade students from Pedro Joaquin Chamorro.
- To test the students 'speaking skill after having used the App as a complementary resource in the development of specific speaking skills.

2.4 Research Questions

- Why is it important to recognize the App Duolingo as a resource to improve English Speaking skill in students of seventh grade in Pedro Joaquin Chamorro in the second semester 2022?
- How to Identify the weaknesses that students have in their English-speaking skill of the seventh grade in Pedro Joaquin Chamorro School in the Second semester 2022?
- How could the app be used to support the development of speaking skills in Pedro Joaquin Chamorro School in the second semester 2022?
- What is the effectiveness of the App Duolingo and the improvements students will have in the second semester 2022?

II. THEORETICAL FRAMEWORK

2.1 ICTs Concept

The use of technology has been common in humans' daily teaching. According to an article by Bidya (2021) "In education, ICT stands for Information and Communication Technologies and this information and communication technologies are a set of scientific, technological and engineering disciplines and management techniques that are used to handle information, it's also integration with social, economic and cultural concerns." Technology and its integration into the life of the human being is something really important that has come to give way to the improvement of interpersonal and professional relationships between people, in the same way, it is an easier way in which procedures can be carried out, either work or educational, and it is done in an easier, faster and safer way.

Education around the world is being adapted to the use of ICTs for students learning. Learn in new ways (Linkways Team, 2017) stated that ICTs "Is the mode of education that use information and communications technology to support, enhance, and optimize the delivery of information. Worldwide research has shown that ICT can lead to an improved student learning and better teaching methods." Society has progressed enormously and students as such have more interaction or relationship with technology than previous generations, technology in this case facilitates students learning, since it is possible to reach them through a technological platform to which they are used to, the use of technology in education will be highly successful for student learning in general.

2.5 Types of ICTs in the classroom

2.1.1 Smart Board

Traditional methods have been avoided in teaching- learning process. Janelle Cox (2019) affirmed that "This amazing technology not only enhances the way teachers teach, but it also enhances the way students learn. It can provide students with an enriched learning experience by projecting visual elements" Leaving the traditional way of teaching, for an innovative one is the best way for students to learn. The use of Smart Boards will provide students with a valuable experience as it will facilitate the acquisition of knowledge. If we start to think about how students will learn more, if through observation only or through interaction, it is clear that through interaction is the best way they form a meaningful learning.

2.1.2 Tablets

Technology is greatly invading what is the area of education. Although for many, the use of tablets could be a great distraction for students, others argue that it is a powerful tool that has come to completely change their teaching. To support the second idea, according to an article by Ross (2020) presents that “In terms of education, the tablet is a fairly priced, mighty computer that enriches training through the use of an intuitive touchscreen and simple controls.” In other words, with the use of the tablet during the class to practice the subject that is being taught is better, since it captures the attention of students and concentrates more on the activities that are being carried out using this device, thus giving way to an excellent development in them.

2.1.3 The Multimedia:

Are videos and audios going to catch students’ attention and motivate them to learn? Lamar University (2016) express that “Using multimedia in the classroom helps the teacher engage the students and helps the student be more involved and retain more information from the lesson.” Most students spend several hours on technology-soaked websites, and using it to our advantage will be very helpful. The use of videos will lead students to experience things that they never considered knowing. The implementation of eye-catching videos to give some class lessons will help the student to have more interaction with the topic they are learning, which will make their learning completely meaningful and successful.

2.1.4 Software and Apps

Nowadays, most of students are accustomed to smartphones and software that helps them to open their minds. In an article posted by Matthew Hastings (2019) stated that “Using applications on Smart Devices in the classroom are becoming a much more common site in today’s classroom (...) and will surely become more important as future generations of students move towards more technology in the classroom.” The use of apps within the classroom can bring many benefits for both, the teacher and the students, and it is that they allow complete integration of the student, helping the teacher-speaker relationship. Today, it is more common to see technologies in the classroom and applications are not an exception. Already designed software has allowed students to put into practice all the knowledge they

have acquired, in this way, both, the teacher and the student, can verify the performance they have had during the class.

2.6 Advantages:

2.1.5 Improving engagement in the classroom

Nowadays, to engage students is one of the most difficult parts at the moment to teach a new language, because commonly teachers do not, at what time do it. To help us with that, Sara Banasik (2020), affirmed that “Engaging students can be done at any time in the lesson to test their knowledge and to gauge their understanding.” The activities that the teacher can carry out with his students can be at different times, at the beginning, during or at the end of the class, all with the aim of making an analysis of their progress. Helps students to get fully involved since with the use of ICTs and specific softwares, students will be able to see their results instantly and see how they can make improvements, in the same way the teacher will be able to see in which aspects they need to reinforce the learning.

2.1.6 Teaches useful life skills through technology.

According to Michael Tucano (2005) “ICTs can empower teachers and learners, promote change and foster the development of ‘21st century skills” the number of new programs and new activities that can be fostered in every classroom with the help of ICTs is immense. Thanks to technological advances and the ability that the human being is having in the 21st century to handle technology as such, it is facilitating both, the teacher and the student, to learn in an innovative way and not in a traditional way as it had been used in former times. Without a doubt, education has benefited from the existence of technology.

2.7 Disadvantages:

2.1.7 The presence of technology can be distracting to students.

Regarding technology, getting students to concentrate on their academic obligations is one of the most complicated parts of the job that teachers face, as they are usually easily distracted and skip their assignments. Keith Miller stated (2021) “When kids play video games, they can find themselves reacting with addiction-like behaviors. Their focus is on the

entertainment they receive more than anything else.” At the time the teacher is choosing an activity or an application to use during class, it is important to choose well, since in some cases, if he or she chooses a program where the student is rewarded, this could put more interest in what that you will receive that in learning vocabulary, in the same way the teacher must be aware that they use the technological device properly, because they could easily be distracted by programs that are not being used.

2.1.8 Technology can make it easier to cheat.

Technology and today’s youth, which is so closely related to it, have come to create that cheating is easier. According to Lynch, M. (2017) he affirmed that “Academic dishonesty is nothing new. As long as there have been homework assignments and tests, there have been cheaters.” Nowadays, many of the students have felt so much refugee by the technology that they fall for the cheating. Unfortunately, the student population no longer feels that this will affect their academic performance, because they can acquire good grades, but actually the knowledge they will obtain is practically nil, and the learning will not be fully achieved.

2.8 Teaching concept.

Teaching is an activity with four phases, a curriculum planning phases, an instructing phase, and an evaluating phase (Duncan & Hough, 2020). Preparing a successful class is not something that is done lightly, it is something that we must prepare correctly, follow the order that indicates how to do it, create the lesson plan, but put ourselves in the students’ shoes, look for methods and techniques to capture their attention, in a few words, prepare a lesson plan with which we can be part of the students’ learning.

Innovative methods of teaching improve students’ learning. According to Mark k Smith (Smith, 2018) “Teaching is the process of attending to people's needs, experiences and feelings, and intervening so that they learn particular things, and go beyond the given”. Nowadays, the art of teaching is not found in the routine, going to the classroom, providing information to students and doing it in a dull, boring, unwilling way; the art of teaching is found in communication, in connection with students, show them how beautiful learning is and make them feel safe in the process of learning.

2.9 Learning Concept.

Writer Audre Lorde (2016) notes that “The learning process is something you can incite, literally incite, like a riot”. Implementing learning in students is something very hard to achieve today, because the environment has been strengthened by many forms of distraction that affect students when concentrating, and it is for this reason that they have poor learning. As teachers, it is our responsibility to find the correct strategy to be able to make them fall in love with learning, to inquire about alternative information to serve as facilitators of knowledge for them and thus, increase their skills.

To understand easily, Learning is the process by which the human being acquires or modifies abilities, skills, knowledges or behaviors, having as result direct experiences, study, observation, reasoning or instruction (Raffin M, 2019). Learning is a very important part of human life, we can observe it on a daily basis, both in students’ life, and in everyday life, and it is that we must recognize that the brain never rests and is always learning new things, thus demonstrating that throughout life, the human being always acquires new knowledge.

2.10 Teaching-learning process ‘concept.

The teaching-learning process is composed of a group of methods, techniques and strategies in which the knowledge that the teacher possesses is transmitted to the student. This process can be developed in many ways in which the teacher seeks to develop the abilities and weaknesses that students possess. It is important to mention that it can be given both in the traditional method (where the teacher is the main character) and in an active class (where the student is the main character)

pedagogue Jean Piaget (Piaget, 2015) stated that:

“The main objective of education in schools should be the creation of men and women who are capable of doing new things, not simply repeating what other generations have done; men and women who are creative, inventive and discoverer, who can be critical, verify and not accept everything that is offered to them”

The traditional way of teaching will not allow students to successfully develop the teaching-learning process, since they will be focused on repeating what the teacher does and

what generations before them have done. To obtain successful learning in students, as teachers, we must analyze them, and according to the observation, look for the best activities or strategies to attract their attention, and in this way see more pleasant and more interest in the subject that is being taught.

The best way to create a meaningful learning in students is not just by knowledges, but also by being a better person. According to Hendrick, (Hendrick, 2019) "The teaching that leaves a mark is not one that is done from head to head, but from heart to heart "the best way to teach is not something tired and routine, such as coming to the classroom, copying on the board or dictating information; a good teacher must be innovative, create new forms of teaching in which the student id very involved, promote camaraderie and especially the enthusiasm throughout the classroom to be able to give way to meaningful learning in each of the students.

2.11 Types of Teaching:

According to the context

- **Formal (regulated) education:** Students learn by process, with a teacher inside of an institution. According to passion in education (2019) "Formal education or formal learning usually takes place in the premises of the school, where a person may learn basic, academics, or trade skills" This form of teaching is the most common to observe in the life of the human being, because it is in which the student learns new knowledge, since they go through stages, first the kindergarten, then they advance to the Elementary school, then to the high school and finally University.
- **Non-formal education:** This kind of teaching correspond to those places who are not formal institutions. Ecole Globule (2020) affirm that "is one that is framed according to the requirement of a particular job. This type of training is not considered a necessity but rather a skill". This is related to formal education, since in this, the teacher also has participation, although not in a direct way as in Elementary school, high school or university, since it is given through courses or similar, which do not follow a specific program, in this case, they follow their own teaching path.

- **Informal education:** Students experience is the principal character here. Jeffs & Smith (2013) stated that “Informal education is the wise, respectful and spontaneous process of cultivating learning. It Works through conversations, and the exploration and enlargement of experience.” Although it is called informal education, it is not less important than the others, because it is in this way in which students learn in a more practical way, they manage to observe their environment and assimilate their knowledge and learn new, through observation and experimentation.

According to age and educational level

- **Childhood education:** It is easily recognized as kindergarten and it travels in children from 3 to 6 years old, here children are taught integration with classmates, and to put their minds into practice.
- **Primary education:** It is also recognized as Elementary school. This type of education covers children from 6 to 11 years old and in almost all countries it is free, except for some books or some support materials in the class and is mandatory for everyone,
- **Secondary education (high school):** This stage ranges from 11 to 16 years old and consists of five courses or grades (seventh, eighth, ninth, tenth, and eleventh) and in the same way, it is mandatory for all.
- **Higher education:** This stage ranges from 16 years old, and does not have a completion limit for people, everyone from this age is eligible to receive university studies, and professionalize. This education is not compulsory, but it is recommended that students take it.
- **Post-university education:** This education appears after finishing university and obtaining their first degree, it does not have an age limit for acceptance and is reflected as postgraduate, master and doctorates.

2.12 Types of Learning:

- **Visual:** According to Bright Hub Education (2015) “Students understand and learn best when information is presented visually. Viewing information helps these students to visualize the concepts taught” With this type of learning, students have a

great advantage and that is observation. Throughout the class the student will be able to observe on the whiteboard the topics taught, in the case of using books, magazines or newspapers, they will be able to read them and have interaction with them, improve their reading, and their retention. No doubt a successful learning would take place.

- **Auditory:** An article by Half R. (2016) defines that “Auditory learners pick up information by listening and speaking. To fully understand certain details, these students prefer to listen to instructions and, sometimes, repeat them verbally” The teacher's job is to observe their students and identify if they have this type of learning, and if so, investigate the correct method that will facilitate their students to develop during class. Some resources for this type of learning can be audio, movies, or carry out more practical activities in the class where they talk and interact among others.
- **Kinesthetic:** Clarck D.(2014) in an article affirm that “Kinesthetic learners do better when they touch and move” In this kind of learning, the most important activity is practice, and it is that stimulations must be developed in the students, so that they are not distracted during the class(the whole body is used) for that reason, the teacher must use strategies related to this, such as outdoor activities, within the classroom, or create simulations of situations with which it is possible to obtain a lot of participation from them to obtain significative learning.

2.13 Speaking Concept:

Since we were born, we are taught by our first teachers, our parents to say some important words to communicate, in which its main purpose is that people could understand what we want to say or to explain. According to Mary Ann Cunningham (1999) “Speaking, is an interactive process of constructing meaning that involves producing and receiving and processing information”. Additionally, students learn new learning methods or strategies to communicate as they grow up such as reasonably and intelligibly by using the correct grammar, pronunciation and a good vocabulary to make a cohesive conversation. The majority of students are afraid of making mistakes when speaking, but the real fact is they will learn by making them, they can express their ideas and thoughts; convey their feelings and emotions; and communicate their message mostly through speech. Speech is therefore called communicative or oral skill or simply speaking skill.

2.14 The importance of Speaking and Vocabulary

In this regard Parupalli Srinivrras Rao, (Rao, 2018) point out, “In some ways speaking can be considered the most difficult skill to acquire as it requires command of speech production sub-skills like vocabulary retrieval, choice of grammatical patterns, and sociocultural competence”. Speaking is considered a difficult skill since learning the words, memorizing and to pronounce them; learners need to acquire the knowledge of both grammar and pronunciation which are the important components in language. However, teachers implement a variety of techniques to make students encourage and talk by themselves with enough confidence no matter how many mistakes they make. The purpose of learning to speak is for students to be confident to make ideas without thinking about word structures, as they sound natural.

- **Why is learning vocabulary important?**

According to Sophia Auld (2021) “By exposing students to new words, reading can expand vocabulary. This has been shown in research, such as this [2015 study](#) which found that reading-related activities were the primary cause of vocabulary growth from grades four to ten.” Reading has been one of the successful strategies to get new vocabulary and to put it into practice in daily life. Students now can take advantage of this strategy using different tools like books, magazines, articles, newspapers even better using downloaded apps where they can find all the things mentioned before in one only site. It will increase the curiosity of students to research more about what they are reading and investigate unknown words in a dictionary to comprehend the text and to memorize new phrases to share with people.

Research has shown that kids need to understand 98% of the words they read to understand what they are reading. Improving vocabulary skills will improve their understanding of novels and textbooks.

- **It's Important to Language Development.**

To learn a new language implies to learn grammar, pronunciation and vocabulary, but the human being has his native language as the way he can structure a sentence and use technology. It is important to incorporate students' native languages and don't being afraid of technology, having bilingualism as goal, of course, not replacement. (Kaplan E. 2019) Nowadays students can take advantage of the use of technology like computers, tablets, phones and so on, and start learning new vocabulary while they are being taught in the classroom about grammar and pronunciation skills.

Teachers have to motivate the students to talk to each other no matter if they speak their native language as the way the students would get more confidence to talk in public and to correct them step by step. Children who develop a rich vocabulary tend to be deeper thinkers, express themselves better and read more. Improving language and literacy skills early in life will help them be more successful academically and communicatively.

- **Communicating Ideas.**

The journalist and editor Emily Kaplan, (2019) express that “Social and emotional learning is often spoken of as the “missing piece” in education, but integrating SEL into academics is essential to a healthy, harmonious classroom. Checking in emotionally with students is a simple, effective way for teachers to connect with students and begin to equip them with lifelong tools to communicate their feelings and needs.” The English language plays an essential role in our lives as it helps in communication and it is the main language that is taught and learned all over the world. English is important for students as it enhances their minds, to develop their emotional skills and to express ideas. So, teachers have to know each student regarding their strengths and weaknesses and try to interact or to be in touch with students to help them speak with no fear as they can show confidence.

Teachers have to use the right words when talking with the students, making them start a good conversation. To have a successful communication or “saying what you mean” depends upon a good vocabulary.

- **Expressing Yourself in Writing.**

According to the speech-language pathologist Deena Seifert, 2016 (Seifert, 2016) “Having a good vocabulary to draw from can help you write more effectively. Students need to use a more formal tone when writing – not conversational language – and to do that, they need a richer vocabulary to tap into those words we don’t use when we speak.” It is important to figure out how to translate and transmit your emotions, unedited state, into something productive that won’t hurt you or others around you, even your feelings to others. For example, if the person is sad or annoyed, she or he has to control his mind and to organize the ideas before expressing them with words and behavior, so the better way to express all kinds of feelings is using correct words that won't destroy a friendship or relationship as the way could keep a good communication.

2.15 Difficulties on speaking during acquiring new vocabulary

There are difficulties in speaking and vocabulary acquisition for students from Pedro Joaquin Chamorro’s School. Students in their natural growing up acquire different strategies and skills to express ideas in a fluent way to people due to their first native language. An article by Magdalena Alexandrzak (2018) mentioned “Problems in speaking may be additionally aggravated by excessive use of self-monitoring processes and a tendency to formulate utterances into native language first”. In the other hand, for students is more difficult to speak in a natural way than a second language. In this case talking about the English language, the most common mistakes are: students structure sentences as in their native language, it is hard for them to conjugate verbs into the correct form depending on the context. Most of the students omit prepositions, correct pronunciation, and pause in the sentences.

2.16 Duolingo Concept:

It's A learning application where you can find language tips, explanations of grammar, pronunciation, useful phrases and vocabulary, and it is designed for all people who want to learn a language.

Students improve their formal speech when teachers provide them with the necessary materials or apps that they can learn how to organize ideas for a good presentation or conversation with others without fear of speaking in public, achieving that the listener gets the correct information and at the same time they create a vision of what the classmate is

talking about. Today's students develop their speaking skills through instructive, documentary and electronic methods but not in all schools. The majority of students have no available internet connection, mobile data or electronic tools for the development of it in Pedro Joaquin Chamorro's School.

2.17 Origen

There are many apps which has been developed for English education, and Duolingo is one of the most important. According to Louis Von Ahn (Ahn, 2019) "This application was created and launched to the virtual market to use it on mobiles, computers and so on; which its mean purpose is to give the opportunities which often lost because of not become a bilingual, these opportunities are to all people who wants to learn a language and to take advantage of it both cognitive and economic way". On May 2013, Duolingo released their Android app, which was downloaded about a million time in the first three weeks and quickly became the #1 education app in the Google Play store. Nowadays, the majority of students from high-schools have a phone or tablet, and Duolingo is a free app for students and teachers to use during the class as a learning development resource. students can learn word by word and learn how to pronounce them and to practice doing some exercises on the app, making it an easy and fun way to learn a new language.

Furthermore, English is the second spoken language all over the world, and not all the persons have the opportunity to pay a private academy or school to learn English, also the majority of students have no the chance to pay an academy to get more knowledge, so this app was coming to help people in a free way without a previous English language knowledge.

2.18 Advantages

Duolingo is an application which show students many activities that will help them to improve the skills. Based on Jule Kirchner definition (Specialist Language Courses SLC, 2020)

This game-like app teaches languages in a very playful and challenging way and is based on many visual as well as audio effects which are helpful to remember what you have learned. Another plus is that **Duolingo** varies the types of tasks and builds up every lesson in other ways which means more variety for the student.

Using this application on your phone will help you to enrich your knowledge of vocabulary and their pronunciation. Apart from what your teacher taught during the class, students will be able to practice doing exercises on the platform in an easy, fast and fun way.

When you use the Duolingo app on your phone you can do many things: You can buy costumes for your Duo, you can finish the lesson faster because this app asks you the time you will devote to learn. Another advantage is it has flash cards and images for the learners memorizing their meaning and pronunciation, it has multiple choice questions and you will have the ability to learn by maintaining full hearts throughout a lesson.

There are some advantages of using Duolingo App

- **Visualization:** There are many types of learnings and one of them is the visual, which students learn through tangible and visual materials that facilitates them the learning. According to Frank Zinghini, (Appliedvisions, 2019)” Data visualization is about more than just the visual presentation of data—it is about presenting data in a meaningful way. Data visualization allows users to quickly digest information and identify patterns and trends”. **Duolingo** doesn't work with pictures but with a lot of images and symbols which actually have the same effect and help to remember what you have learned. To most students it is easier to memorize the word meaning by a colored image and cause a better effect on them to feel confident and to participate during a class.
- **Clarity:** The material design is important at the moment of teaching, because it catches students’ attention. According to the article Walkingtree website, 2020 (Walkingtree, 2020) “Visual clarity is practically a measure of how well the information is being conveyed through an image or any form of design. Clarity gives meaningful and unobstructed interaction with the user. User Experience designers should aim at creating a seamless experience and reduce the load users”. A quality that the Duolingo app has is to have both clear information and charts. The operation of **Duolingo** is very easy and you have a clear overview about the content and different options.

- **Audio:** One of the best ways to improve vocabulary and pronunciation is through audios, because students are in interaction with the target language. According to Cindy Blanco, 2020 (Duolingo, 2020) “Listening relies on being able to quickly access words and meanings from memory (a lot like reading!), and strong listening skills also require being sensitive to a lot of different sounds and rhythms in the new language”. Phrases or vocabulary you learn are always spoken out loudly. There are also recording exercises to improve your speaking skills. Audio is important for people who wants to learn the pronunciation of each word, and there are apps which count with audio and for the students is easier to repeat and pronounce correctly. Years before students had a few opportunities to practice their pronunciation during the class with teachers. So, for students it was harder to memorize the correct pronunciation and to put in practice they had to use other strategies to not forget how the word is pronounced.

This app helps to the students to put into practice what they listen to and to write into different kinds of exercises in the same app. It will help to the students to be focused on exercises requested from Duolingo in a period of time.

Learning: If you are unsure about a word in a translation task you can retrieve their meaning/translation. Grammar rules are explained in mostly every task.

2.19 Strategy to use Duolingo:

Technology has advanced a lot and Duolingo is not lagging behind, it continues to evolve enormously. Today, this app has a tool called Duolingo for schools with which it allows interaction between teacher-students through a virtual space commonly known as a virtual room.

The first thing that the teacher must do is create a virtual room and add the account of his or her students t this room. Secondly, he or she should include the topic or unit to be studied, and students will be able to connect for the class. This strategy will make it easier for the teacher to review the progress since it will not be necessary for him to check this account by account, because the same app will show the progress that each student is taking.

In the next example you will observe a lesson plan which include some tips that helps to create a class or to put into practice an activity using the app Duolingo:

Lesson plan information.**School:** -----**Unit 4:** “The red jacket”**Topic:** Describing people, things, animals and places (Grammar: Adjectives)**Time:** (45 minutes)**Topic:** tag questions in simple present, vocabulary.**Objectives**

- Students Will be able to know the instructions about the use of Duolingo app as a resource to develop English speaking skill in the Learning Process of the English Language in secondary education.
- Students will be able to produce their knowledge by typing sentences and speaking with classmates using the Duolingo app.

Anticipatory set


The purpose of this course is that students are capable to communicate with the foreign language (English) using a new learning strategy practicing with Duolingo app. Moreover, students are able to pronounce correctly the words on the exercises given by the app and to speak with classmates creating short conversations, but now, this class we will study both at the same time and we ‘ll combine everything using listening, speaking and reading.


Before start the class, students will practice grammar structure, vocabulary. However, it will be much more exciting to review with a short activity in which every student will have on their hands a flashcard with a word and in 5 minutes they will structure the correct sentence and finally they will pronounce word by word correctly, this activity will be in two groups A and B.

Direct instruction

Listen carefully to the conversation of Lily and Zari. Discuss with your partner what is the conversation about. Look for vocabulary on the text.

The red jacket.

 **Lily is in a store with her friend Zari.**


 **Zari:** This store is expensive.

 **Zari:** Yes!


 **Zari:** Wow!

 **Zari:** This red jacket is perfect.

 **Lily:** Umm. Zari.


 **Zari:** I like this color a lot!


 **Lily:** Zari.

 **Zari:** I want to buy this jacket!


 **Lily:** Zariiii


 **Zari:** What?!

 **Lily:** This jacket is one hundred dollars.


 **Lily:** It is very expensive!

 **Zari:** What?!


 **Lily:** Zari, you do not need a new jacket.


 **Zari:** But Lily, today is my birthday...!

 **Lily:** Yes, it is.

 **Zari:** And you are my best friend!

 **Lily:** Yes, I am.

 **Zari:** And you can buy-

 **Lily:** A cheap jacket for you.

Required materials and equipment

It is very important each student have on their tablet or phone the application Duolingo downloaded. This app will help students to enrich their vocabulary and to improve their pronunciation. They will keep their mind focused on exercise given and it will provide extra points on your speaking development.

Guided practice

-Students will identify and select the vocabulary they need to know and by the context they will to explain the word's meaning.

-Students will join in small groups of 5. The following activity is to create a conversation using adjectives and Yes/No questions or Tag questions. Practice with your partner before participating, please be creative. (15 minutes).

Independent Practice

Do the following exercise on Duolingo app "Lily's clothes" and "The perfect girlfriend". Practice with a partner and take notes on your notebooks the vocabulary given by the app.

Exercise 1

Listen carefully to the conversation of Lily and Zari. Discuss with your partner what is the conversation about. Look for vocabulary on the text.

Exercise 2

Make a list of vocabulary from the conversation below, then make sentences using the words you listed and use adjectives.

Closure activities.

In pair, students will be able to practice reading and pronunciation by using the Duolingo app on exercise given. "The red jacket" and "A new coat".

-Complete the exercise on the app.

2.20

III. METHODOLOGICAL DESIGN**3.1 Type of Research**

According to the analysis and the scope of the results, the present work is qualitative research since it seeks to analyze the problem that students have through observation and data collection. Depending on the type of occurrence it is prospective, since the information is recorded as the events occur. We are focused on the speaking skill, and what is proposed to achieve is to identify the qualities that students have in the oral aspect, the qualities they possess to improve their pronunciation, fluency and speaking in general.

Human beings can be identified through observation, how they act, learn and develop. According to an article posted by DR. Saul McLeod (McLeod, 2019) stated that "Qualitative

research is the process of collecting, analyzing, and interpreting non-numerical data, such as language. Qualitative research can be used to understand how an individual subjectively perceives and gives meaning to their social reality.” At the time of being in the research field, through observation, it is possible to identify how the society for the population is developing, and allows the power to analyze its reality, which will facilitate the power to provide a solution or alternative to the issue of the research.

3.2 Population:

There was a finite population of 27 students (of which 14 were women and 13 men) of 7th “B” grade from high school and a teacher in charge of the 7th “B” grade students teaching.

To identify problem and to provide a possible solution, it is need to select a group of population that allows the development of a research. According to Ben Davis (Davis, 2021) “In research terminology the Population can be explain as a comprehensive group of individuals, institutions, objects and so forth with have a common characteristic that are the interest of a researcher.” It is a type of terms that must be choose according to the elements, sampling units, scope and time. All this must be selected from the beginning of the investigation since it is what will facilitate the researcher to identify what is the common problem that is occurring within a certain society, and in this way, to provide a solution.

3.3 Sampling:

For the development of this research and due to their particular characteristics, the sample was taken randomly from 27 students to 12 students from the 7th “B” grade of Pedro Joaquin Chamorro School, located in Las Esquinas, San Marcos.

At the moment of fulfill researches, it can be taken a specific quantity of people for data collection. In an article published by (Bhandari, 2020) is recognized that “A sample is the specific group that you will collect data from. The size of the sample is always less than the total size of the population.” At the time that an investigation is being carried out and information is to be determined, it is not necessary to use the entire study population, it is enough to select a specific amount to that of the general population in which it must be balanced between men and women and apply the Necessary instrument according to the type of information to be collected.

3.4 Methodological proposal “Duolingo for school”

Duolingo for schools is a dashboard that appears within a teacher’s Duolingo account and allows them to create classrooms and activities, all while keeping track of their students’ activity. The idea behind the integration of the Duolingo for school tool is to help students learn more vocabulary and improve their English speaking. Here you can see the step by step of the use of this strategy.



The first step that must be done is to enter the “Duolingo for school” website, which will show the log in tab with your email, and create a new classroom where the name you want will be placed.



The second step is to select the language you want to learn and in the same way the native language of the students in which they will be notified through the

Duolingo App. Once accepted, the main page will be displayed in which it can be seen the options to add students, view assignments and report.



When adding students the site shows two options, the first is to share the class code and the students connect, and the second option is for the teacher to add to the students directly, which is the one that is recommended to be used in this proposal, since it will assure the teacher that all students are included in the class. Once the teacher has included all students, the website brings a Pdf format with the usernames and passwords for each student.



In the principal page, it can be observed the assignments section. In this one, you can find part of the vocabulary and grammar that students will learn in each lesson or assignments that the teacher includes, which will make easier to keep track of the learning that each student has.



Similarly, in the assignments section, the option to create new assignments is provided with which a specific time can be manipulated, that is, the teacher has the option of selecting the number of minutes and score that students must achieve for each virtual class they connect, in the same way, the specific dates and times, selecting the day they want the students to connect and the period in which they must connect.



Finally, the platform shows the teacher the ranking that each student is reaching, including the score they have achieved, the number of hours they have connected and the number of lessons they have completed according to what the teacher has assigned; this helps the teacher keep track of the progress that students are making.

Once the teacher has created the class and the assignments, he or she is going to decide how is going to use the platform. Currently, most of students have cellphones and the majority of schools possess ICT classrooms or NICATABLETS with internet access which facilitates the use of the website during the class. The teacher can design a small practice of five minutes which students interact with the vocabulary that is presented in the platform; when the assignment has done, the teacher is able to create a dynamic or activity in which students can put into practice in an oral way the vocabulary they have interacted previously, in order to double check, they have gotten new vocabulary and to practice the speaking skill.

Besides, this strategy can be used at home. Teacher can design an assignment which allows to students more time to connect themselves to the website, this can be taken as homework. The idea of leaving as homework and giving students more time is to help them to acquire the vocabulary and practice a little bit more. Something important to emphasize is that it is seek to help student to improve the speaking skill, teacher can assign to students and activity (it could be to create a short dialogue, write a paragraph or prepare any kind of easy presentation with flashcards in which the vocabulary they have learned is putting into practice) this is with the main purpose of checking the progress they are acquiring in the English language through the use of this App.

This methodological proposal does not seek to replace 100% of the teacher's lesson plan. The idea of this strategy is that it works as a support tool for the teacher and students, giving way to a good development of the teaching-learning process. This strategy can be used by each teacher according to their needs and their reality, taking into account the characteristics of the group.

3.5 Data Collection techniques:

The technique used for data collection was an observation guide, a questionnaire for the teacher, and a questionnaire for 7th "B" grade students. All this was applied in the Pedro Joaquin Chamorro School, Las Esquinas, San Marcos, in the second semester 2022 with the aim of obtaining truthful information from the teacher and from the students.

3.5.1 Class observation guide:

This is being realized with the objective of collecting information about the learning process that students have, the interaction that they have with the contents, the educational material that is being used and the way in which the teacher is in relationship with them and their learning.

3.5.2 Questionnaire for the teacher:

The purpose of conducting a questionnaire is to obtain an information about the scope and impact that the contents are having in the teaching-learning process, in the same way, to observe what are the weaknesses that exist and the strategies that are being taken into account to correct said weaknesses.

3.5.3 Questionnaire for students:

The main reason why this is carried out is to identify the level of education and school performance of the students, as well as to know if the activities or strategies that are frequently carried out are according of the level of development that they possess.

3.5.4 Students' speaking test:

This is going to be applied to students to get fact information which describe the strengths that students present in the English language, in the same way, the weaknesses they have to improve.

3.6 Result and analysis:

3.6.1 Class observation guides.

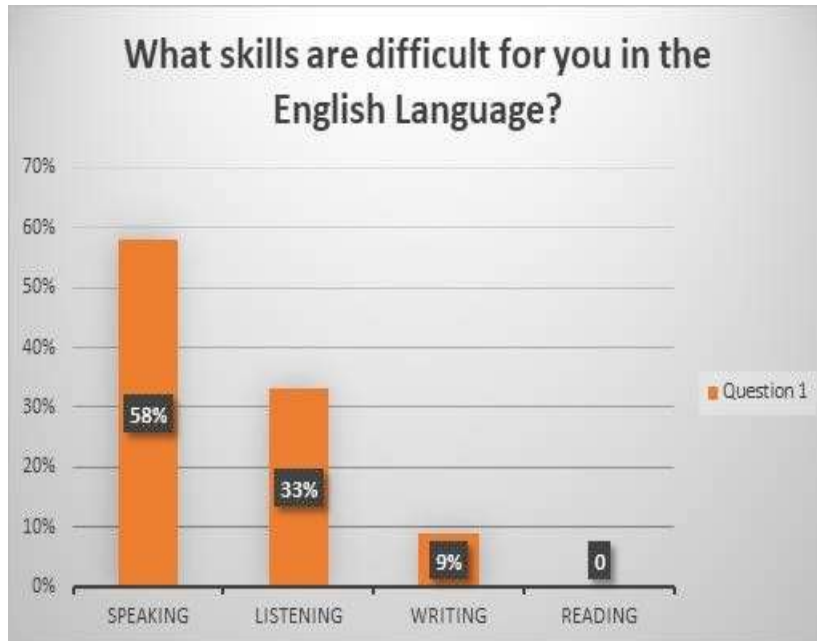
This is a summary of the data collected during the observation. The class was developed with enthusiasm, the teacher welcomed in the classroom of 7th grade “B” which has an enrollment of 27 students of which 14 are female and 13 males. The class was developed successfully and the whiteboard and markers were used as resources since the teacher applied a test related to the topic that has been taught previously. The behavior shown by the students was quite good, approximately 89% of students were concentrated in the class, the other 11% were distracted with their classmates or the use of cellphones. The level of English observed in the students can be affirmed that it is good, since during the class period, they were heard practicing the language, both to talk to the teacher and their classmates. The infrastructure observed was quite good, the seats were in good condition, the windows also were in good condition, there was a lot of decoration around it, which motivates and draws the attention of the students, the whiteboard was also in good condition, and the environment in general was pretty good. In a Nutshell, during the observation period it was possible to identify that the students show considerable interest in the acquisition of the English Language.

3.6.2 Questionnaire for the teacher:

The questionnaire that was presented to the 7th grade “B” teacher had as objective to collect additional information about the achievement and challenges using the Duolingo app on students from Pedro Joaquin Chamorro School, Las Esquinas, San Marcos. The results obtained from this were that the teacher already had previous knowledge of the Duolingo App, in the same way he had already used this app. In the teacher's personal opinion, this App has become a very useful tool when teaching a new language, since Duolingo is a very fun and interactive App. According to the analysis obtained by the teacher in relation to the students, the speaking skill has been more affected in them, and it is that they have a little vocabulary in relation to specific topics, which means that they account communicate in the English language during class in 100%, the use of the Duolingo App it will be of great help for students since it has a simpler vocabulary which will be easier for students to acquire.

3.6.3 Students 'Questionnaire:

The analysis of the result was developed as follows: the following points related to the

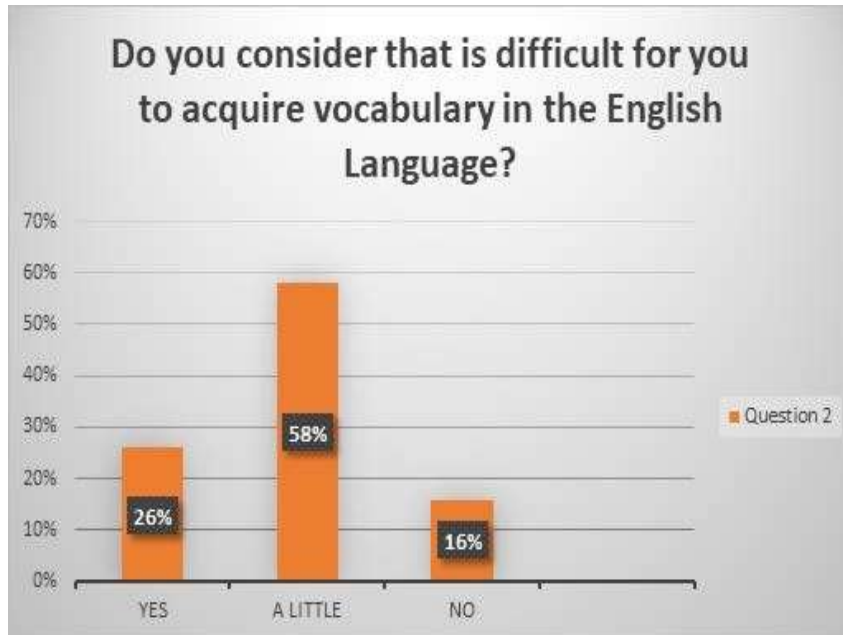


students 'survey was analyzed individually, with a variation from two to three possible answers for each item, all in order to collect information about the skills and weaknesses that students have, in the same way, knowing their opinion in the implementation of technology within classes.

Based on the application of the survey to 12 students through a written survey, it was possible to identify some factors that are impeding the success of the 7th grade of the Pedro Joaquin Chamorro School, Las Esquinas.

According to the results obtained in question number one of the surveys, (what skills are difficult for you in the English Language?) It was possible to identify those 7 students consider that the skill that most hinders them is Speaking, 4 students believe that the Skill of the English language for them is listening, and 1 student responded that he considers the greatest difficulty he encounters is in writing, in the survey conducted none of the students responded that they consider reading to be one of the most difficult skills in the English language.

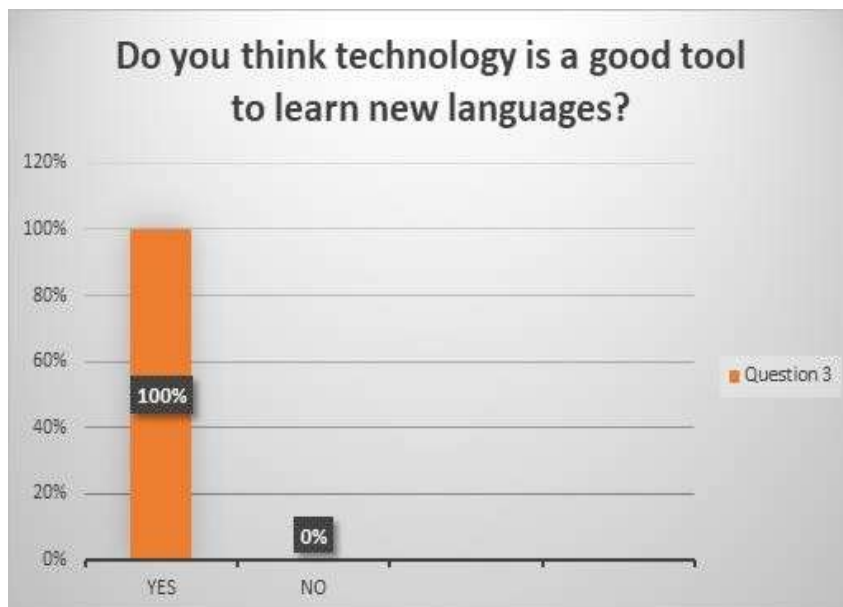
Based on question number 2 (Do you consider that it is difficult for you to acquire vocabulary in the English Language?) It was obtained that 3 students consider that is too



difficult to learn vocabulary in the English Language; on the other hand, 7 of them affirmed that acquiring new vocabulary is not so difficult, but they consider they have to put more dedication when studying, and finally, 2 of them

confirmed that it is by no means difficult for them to acquire new vocabulary in English, since they are related to the language very frequently.

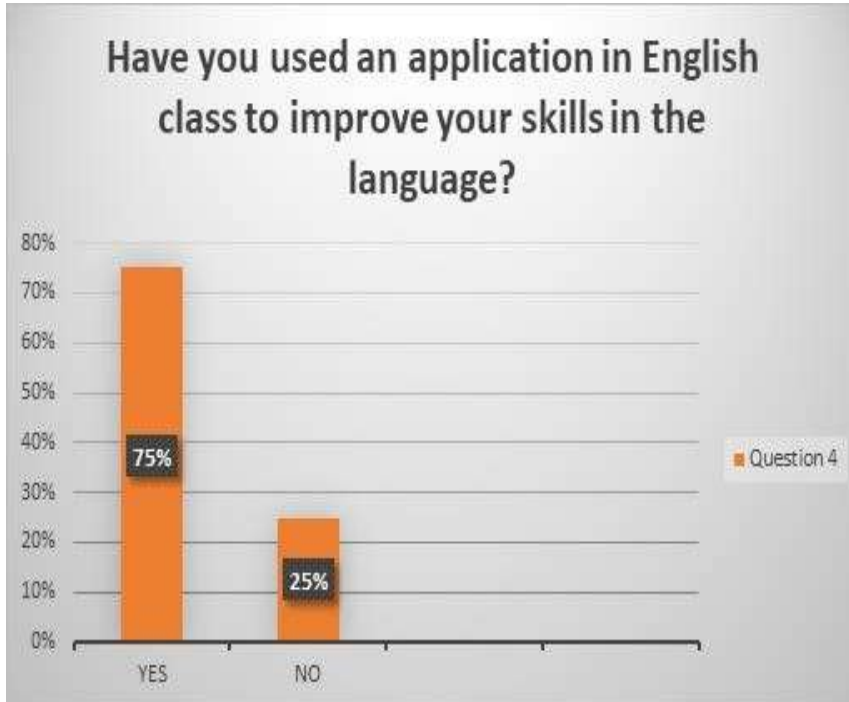
In question number three, the students were asked if they considered technology to



be a good tool for learning a new language and all the participants confirmed that it is a successful tool for learning, adding that as young people they feel more motivated at the time to learn using technology since it is something they are

related to on a daily basis and it will be very useful, since technology is developing more, and it will allow them to develop themselves in the language in an easier but safe way.

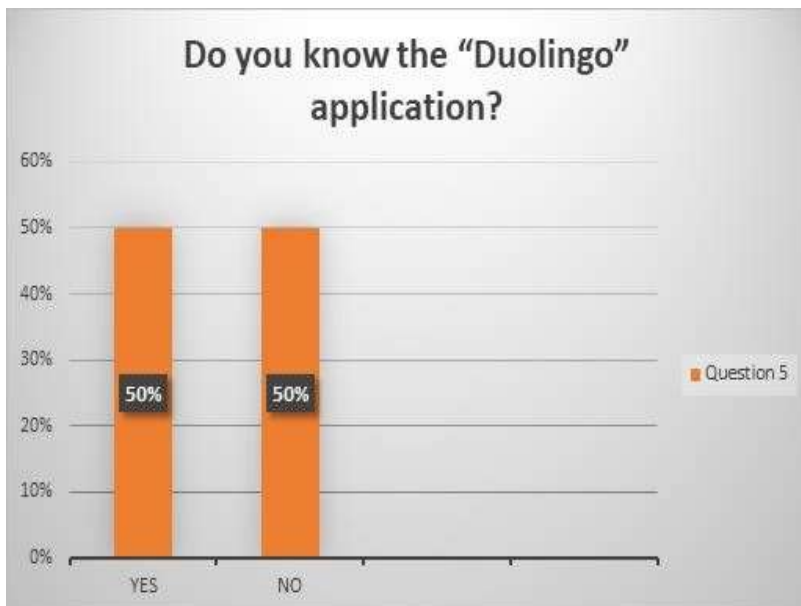
Regarding question number 4 (Have you used an application in English class to improve your skills in the language?)



the results highlight that 9 of the 12 students previously have already used applications to improve the English language, and it is that they consider being able to speak this language of utmost importance, since it will help the not only in the academic

way, if not in everyday life, on the other hand, 3 of the students confirmed that they have not used apps to develop, claiming that they have not had enough time to be able to work through an application.

Making mention of question 5 (Do you know the “Duolingo” application?) which is

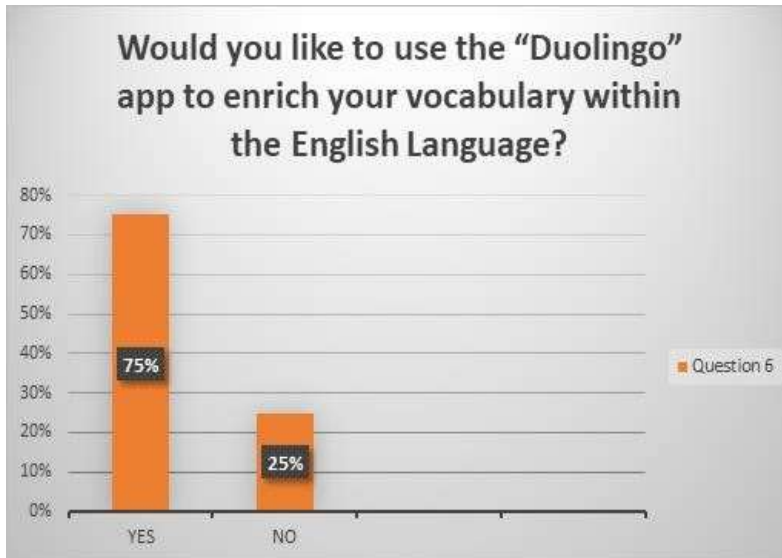


related to our research topic, it was found that from the sample, there is 50% that is, 6 students who already know about the Duolingo App, know how it works and have even experimented with it, mentioning good aspect of the app, however, there is 50% of this sample, which

has not heard about Duolingo, nor do they understand what this type of this software is like,

they affirm that this type of software's should be discussed inside of the classroom so that those who do not know of their existence, can inquire and use them.

Finally, according to the last question made in the survey (Would you like to use the "Duolingo" app to enrich your vocabulary within the English Language?) 9 students are



willing to use the Duolingo app to learn the English language, since they assure that using technology in their favor will be of great benefit and more so now that technology is advancing enormously. With the creation of Duolingo they will be able to practice skills such as Speaking, Listening,

Reading, and Writing, and their level of English will improve greatly; on the other hand, 3 of the 12 students stated that they would not use the app, since they prefer to work with more traditional methods such as the use of authentic books and handouts.

IV. Conclusion

Throughout this research, we want to highlight positive aspects that will facilitate the successful development of Speaking skills in students from 7th grade “B” in Pedro Joaquin Chamorro School, las Esquinas, San Marcos. These aspects were acquired through instruments such as observation guides and surveys aimed at both the teacher and the students.

During this research we found that students are really motivated by learning the English Language. Although it should be mentioned that there is a great problem of shyness, for many of the protagonists, which disables them to communicate 100%, they are willing to fight to improve that aspect in their learning.

It is important to highlight that it is not only the disposition in the students; the teacher is willing to develop strategies which Duolingo is going to be include as the main character, thus allowing the students to interact more with the software, and become familiar with it, to be able to include it in daily activities that students perform.

Another positive aspect that we were able to find is that the school as such, has technological resources, such as ICT ‘classrooms and even tablets, which already have the Duolingo program, which will facilitate the teacher to the integration of this methodological proposal successfully.

Finally, we want to re-frame that the Duolingo app is an effective way to learn a language, an app that is recognized as one of the best worldwide, and the integration of it with the students it will give way to having successful classes, since in previous time it has been helping its users and we strongly believe that it will help students to improve their level of English in general.

V. Recommendation

From the information collected from this investigation and surveys requested and answered by the teacher and students from 7th grade “B” in Pedro Joaquin Chamorro School, las Esquinas, San Marcos, we could observe a little difficulty of speaking development in students and the lack of vocabulary. It is for that reason; we want to give some recommendations at the moment of using the app Duolingo:

1. Pedro Joaquin Chamorro Director ‘School suggested for the teachers a new teaching method as the use of the Duolingo’s App on students at least thirty minutes during the class, it could be applied before the beginning or thirty minutes before the end of the class, as the way they can learn new vocabulary and practice their pronunciations.
2. It is recommended for the school to provide teachers with enough tablets, so the students can work in group activities using Duolingo’s App.
3. Pedro Joaquin Chamorro Director ‘School oriented to the teachers creating a new didactic plan for their students, implementing doing quickly quizzes on Duolingo’s App, as a result students can familiar with technology and the App given (Duolingo)
4. It is important that students feel motivated during the whole class practicing with them doing different activities from the topic given.

VI. References

- Ahn, L. V. (2019, Agosto 26). *The history of Duolingo*. Retrieved from forum.duolingo.com: en.wikipedia.org/wiki/Duolingo
- Alexandrzak, M. (2018, April 13). *CORE*. Retrieved from Problems and challenges in teaching and learning speaking at advanced level: <https://core.ac.uk/download/pdf/154439026.pdf>
- Appliedvisions. (2019, January 18). *Appliedvisions*. Retrieved from Data as the "new oil": how data visualization increases the value of your app: <https://www.avi.com/blog/data-as-the-new-oil-how-data-visualization-increases-the-value-of-your-app/>
- Auld, S. (2021). Astralian Christian College. Retrieved from Reading daily improves comprehension and students performace: acc.edu.au
- Bhandari, P. (2020, May 14th). *scribbr.com*. Retrieved from scribbr.com/methodology/population-vs-sample/#:~:text=A%20sample%20is%20the%20specific%20group%20that%20you,research%2C%20a%20population%20doesn't%20always%20refer%20to%20people.
- Bidya. (2021, october 25). Retrieved from Bidyapatibedstudy.: <https://bidyapatibedstudy.wordpress.com/category/role-of-ict-in-education/>
- Cunningham Flores, M. A. (1999, June). *ERIC*. Retrieved from Improving Adult English Language Learners's Speaking Skills: <https://eric.ed.gov/?id=ED435204>
- Davis, B. (2021, June 01). *MVOrganizing* . Retrieved from https://www.mvorganizing.org/what-is-definition-of-population-in-research/#What_is_definition_of_population_in_research
- Duncan, J. k., & Hough, J. (2020, - -). Retrieved from physic Catalyst: <http://physicscatalyst.com/graduaction/teaching-definition/>
- Duolingo. (2020, October 15). *Duolingoblog*. Retrieved from Covering all the bases: Duolngo's approach to listening skills.: <https://blog.duolingo.com/covering-all-the-bases-duolingos-approach-to-listening-skills/>
- Hastings, M. (2019, January 03). *The Importance of Apps in the Classroom*. Retrieved from AVer Experts: <https://www.aver.com/AVerExpert/the-importance-of-apps-in-the-classroom/#:~:text=Another%20important%20part%20of%20apps%20in%20the%20classroom,instantly%20explore%20new%20subjects%20and%20communicate%20their%20ideas.>
- Hendrick, H. G. (2019, - -). Retrieved from proverbial.net: <http://proverbial.net/cita/1754-teaching-that-leaves-a-mark-is-not-oone-thet-is-done-from-head-to-head-but-from-heart-to-heart/>
- Icte Studios Australia. (2021). *Icte Solutions Australia*. Retrieved from Why schools should invest in ICT: <https://www.ictesolutions.com.au/blog/why-schools-should-invest-in-ict/>

- Kaplan, E. (2019, April 12). *edutopia*. Retrieved from 6 Essential Strategies for Teaching English Language Learners: <https://www.edutopia.org/article/6-essential-strategies-teaching-english-language-learners>
- Lamar University. (2016, May 11). *Tips on Using Multimedia in the Classroom*. Retrieved from Lamar University: <https://degree.lamar.edu/articles/education/tips-on-using-multimedia-in-the-classroom/>
- Linways Team. (2017, January 19). *ITC enabled education*. Retrieved from linway (learn in new ways): <https://stories.linways.in/ict-enabled-education-d190bcc91bf0>
- Lynch, M. (2017, March 05). *CHEATING AND TECHNOLOGY – UNETHICAL INDIFFERENCE*. Retrieved from <https://www.thetechedvocate.org/>: <https://www.thetechedvocate.org/cheating-and-technology-unethical-indifference/>
- McLeod, S. A. (2019, July 30). *What's the difference between qualitative and quantitative research?* Retrieved from Simply Psychology: <https://www.simplypsychology.org/qualitative-quantitative.html>
- Miller, K. (2021, - -). *22 Advantages and Disadvantages of Technology in Education*. Retrieved from Future of working.com: <https://futureofworking.com/10-advantages-and-disadvantages-of-technology-in-education/#:~:text=Teachers%20have%20more%20credibility%20when%20they%20use%20technology,at%20home%20would%20be%20a%20waste%20of%20time.>
- Piaget, J. (2015, - -). *Revista Pedagogica UNIMINUTO SUR IB*.
- Rao, P. S. (2018, April). *Developing Speaking skills in ESL or EFL setting*. Retrieved from ResearchGate: www.ijelr.in
- Ross, E. (2020, April 05). *10 Benefits of Tablets in the Classroom*. Retrieved from My Tech Classroom: <https://mytechclassroom.com/benefits-of-tablets-in-the-classroom/>
- Seifert, D. (2016, September 29). *IC InferCabulary*. Retrieved from Top 5 Reasons Why Vocabulary Matters: <https://infercabulary.com/top-5-reasons-why-vocabulary-matters/>
- Specialist Language Courses SLC. (2020). *SLC Specialist Language Courses*. Retrieved from Review of the Language Learning App Duolingo: <https://specialistlanguagecourses.com/review-language-learning-app-duolingo/>
- Trucano, M. (2005, - -). *Impact of ICTs on Learning & Achievement*. Retrieved from Infodev.org: <https://www.infodev.org/articles/impact-icts-learning-achievement#:~:text=There%20appears%20to%20be%20a%20general%20consensus%20that,confidence%20than%20pupils%20who%20have%20no%20home%20access.>
- Walkingtree. (2020, June 17). *Walkingtree*. Retrieved from The importance of clarity in ux.: <https://walkingtree.tech/importance-clarity-ux/#:~:text=Clarity%20gives%20meaningful%20and%20unobstructed,of%20detail%20in%20an%20image.>

Wanasek, S. (2020, March 30). *5 Ways Technology Is Improving Student Engagement*. Retrieved from Class Point: <https://www.classpoint.io/5-ways-technology-is-improving-student-engagement/>

VII. Annexes

7.1 Annexes 1

Universidad Nacional Autónoma de Nicaragua

UNAN-Managua.

STUDENTS 'SPEAKING TEST

Objective: To collect information about the strengths and weaknesses that students present in the English Language.

Instructions:

- Students listen and answer the following question.
- Teacher will evaluate the answers on a rubric.

1. What is your full name?	Excellent (Student uses good pronunciation and vocabulary) 4	Regular (Student present challenges at the moment to speak) 2	Low (Student was not able to answer) 1
2. How old are you?	Excellent (Student uses good pronunciation and vocabulary) 4	Regular (Student present challenges at the moment to speak) 2	Low (Student was not able to answer) 1
3. Where do you live?	Excellent (Student uses good pronunciation and vocabulary) 4	Regular (Student present challenges at the moment to speak) 2	Low (Student was not able to answer) 1
4. What is she doing? (Image 1)	Excellent (Student uses good pronunciation and vocabulary) 4	Regular (Student present challenges at the moment to speak) 2	Low (Student was not able to answer) 1
5. Can you select and pronounce 4 months of the year?	Excellent (Student uses good pronunciation and vocabulary) 4	Regular (Student present challenges at the moment to speak) 2	Low (Student was not able to answer) 1

Question 4.

Image 1

Question 5.

“Can you select and pronounce 4 months of the year?”

Instruction:

- ✓ Teacher is going to present in a box the 12 months of the year.
- ✓ Students are going to select 4 months randomly and have to pronounce them in English.

7.2 Annexes 1**Universidad Nacional Autónoma de Nicaragua****UNAN-Managua.****Survey protocol pre-tested on teacher.**

Objective: To collect additional information from English teachers about the achievement and challenges using the Duolingo application on students from Pedro Joaquin Chamorro's School.

Instructions: We request you to respond to all the questions below objectively. Put an "x" if it's necessary.

Thank you in advance for your participation.

1. Have you heard about the Duolingo application?

Yes

No

2. Have you ever used the Duolingo application?

Yes

No

3. What do you know about the Duolingo application?

4. What Teaching-Learning methods do you implement on your students for their speaking development?

5. Do you consider it necessary to implement TICs in classrooms?

Yes

No

6. When the students try to start a conversation in English, what difficulties do you find in them?

7. Do you think the Duolingo application will help the students to develop their speaking skills without fear?

Yes

No

7.3 Anexe 2

Universidad Nacional Autónoma de Nicaragua.

UNAN-Managua.

Student Survey Protocol.

Objective: To gather information about the abilities and weaknesses that students have in the English language and in the implementation of technology.

Instructions: Read the following questions carefully and answer them as appropriate.

1. What skills are difficult for you in the English Language?
 - Speaking Skill
 - Listening Skill
 - Writing Skill
 - Reading Skill
2. Do you consider that it is difficult for you to acquire vocabulary in the English Language?
 - Yes
 - A little
 - No
3. Do you think technology is a good tool to learn new languages?
4. Have you used an application in English class to improve your skills in the language?
5. Do you know the “Duolingo” application?
 - Yes
 - No
6. Would you like to use the “Duolingo” app to enrich your vocabulary within the English Language?

7.4 Annexes' 3**Observation Guide.****School: Pedro Joaquín Chamorro.****Date:**

Items to take into account	Well	Ned to improve	Bad
The teacher makes a review about the previous class			
The teacher comes motivated to the classroom			
The teacher uses apps and technology to introduce the topic.			
Students reacts toward to the introduction of the topic.			
Students interact with tablets to practice the vocabulary			
The topic is according to the speaking level of students			
Teacher performs assignment to students to reinforce the speaking level of students.			

Students participates in teacher´s oral activities			
The teacher clarifies the doubt of students and answer them properly.			
Teacher uses the app Duolingo in the class.			
The teacher performs the assignment to student to reinforce or double check their knowledge.			
The chairs are in good condition.			
The environment of the class is clean			
Students had a good behavior during the class			
Teacher ends the class with motivation.			

7.5 Annexes 5
Students survey graphs.

