

UNIVERSIDAD NACIONAL AUTÓNOMA DE NICARAGUA, MANAGUA UNAN - MANAGUA

# Facultad Regional Multidisciplinaria FAREM – Esteli

# **Course:**

# Seminario de Graduación

# Title:

INFLUENCE OF DIGITAL EDUCATIONAL GAMES IN THE DEVELOPMENT OF THE SPEAKING SKILLS IN EIGHTH-GRADE STUDENTS: A PLATFORM PROJECT.

**Undergraduate Project to opt to the Bachelor of Arts Degree in** 

Education, with Emphasis in English Language Teaching

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UNIVERSIDAD NACIONAL AUTÓNOMA DE NICARAGUA, MANAGUA UNAN-MANAGUA Facultad Regional Multidisciplinaria de esteli, FAREM – Esteli

## "2022: VAMOS POR MÁS VICTORIAS EDUCATIVAS"

## **Endorsement letter of approval**

Hereby it is stated that the students: Mileydin María Videa López, Wistor Adrián Roque Cárdenas and Hellen Marisela Martínez Sevilla in compliance with scientific, technical and methodological requirements have completed their undergraduate program in English Language. They have presented the work Influence of Digital Educational Games in The Development of The Speaking Skills in Eighth-Grade Students: A Platform Project in accordance with the stipulated guidelines for undergraduate studies at the National Autonomous University of Nicaragua, UNAN – MANAGUA; in order to qualify for the Bachelor of Arts Degree in Educational Sciences, with a major in English Language Teaching.

Therefore, the aforementioned students are authorized to make the presentation and public defense of the undergraduate research project before any examining board that is deemed appropriate.

This letter is issued in the city of Estelí, on the twentieth day of the month of January of the year two thousand and twenty-two.

Sincerely,

Dr. Marjorie N. Gómez

Advisor

FAREM -Estelí

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# ABSTRACT

This project consists in the creation of a *digital platform* that will contain educational electronic games for the purpose of developing the **speaking skill**. This research project was implemented in the school *Guardabarranco* in the Municipality of *Pueblo Nuevo* in which twenty-four eighth grade students and an English teacher of this school participated. The present study has a qualitative approach which allowed us to elicit information from the participants such as inconsistencies they presented when expressing themselves in English, learning gaps when it comes to speaking. Therefore, a digital platform with educational electronic games is crucial to enable interaction, engagement and collaboration among students into the classroom milieu and thus, producing, improving and motivating communication during the English class, alongside hands-on learning strategies well designed with specific goals consisting in developing the speaking skills.

#### RESUMEN

Este proyecto consiste en la creación de una plataforma digital que contiene juegos educativos electrónicos, con el propósito de desarrollar la habilidad de hablar. Este proyecto de investigación se llevó a cabo en la Escuela Guardabarranco, Pueblo Nuevo en el cual participaron veinticuatro estudiantes de octavo grado y una maestra de inglés de la misma escuela. Además, este estudio tiene un enfoque cualitativo, lo que nos permitió conocer información sobre los participantes y las necesidades que presentan al expresarse en inglés; Es por esto que una plataforma digital con juegos educativos electrónicos es importante porque ayuda a los estudiantes a interactuar y tener comunicación durante la clase de inglés, con una dinámica competitiva pero con un objetivo específico que consiste en desarrollar la habilidad de hablar.

## INTRODUCTION

Do you speak English? It's the question most people ask so as to probe if another person is able to understand the language. However; speaking is just one of the four skills of the language. Even though this skill has been overlooked and negated by the school syllabuses, customization of classrooms, not well-oriented instructions, and communication strategies isolated from the classrooms, it's the skill English learners have more difficulty. On this basis the current research project claims to demonstrate the influence the educational games are having on the development of the speaking skills. To this aim, a group of eighth-grade students at *Guardabarranco* School was involved in this study which is intended to gather information related to the use of educational games in which its target was to verify the influence and the benefits that these educational games contributed to the teaching learning process.

In addition, this pretends to gauge the language level the students presented previously the application of the educational games.

"An educational game is a game designed to teach children about a topic or/and give them a skill" (Plaza family). Researching and exploring the use of educational games is important for the educational fields since games have proved to be an attractive and interactive teaching-learning strategy. Furthermore, Gamification is booming all over the world as a powerful tool to teaching languages and some schools in Nicaragua are no exception. So, it comes in handy when we refer to speaking skills development because these games motivate learning in students and customize the classroom environment by providing the appropriate input and most of the activities in the games move students into action, addressing an active learning process of the speaking skill.

## **1.1 Problem Statement**

Worldwide pedagogical and didactics strategies, methods, models and resources of teaching are changing in favor towards the ultimate goal which is to have a shared and quality education for all.

Euceda Amaya (2007) states that "The teacher needs to select the type of game, according to the objectives and the role the teacher will play in the direction and instruction in the activities of the games" (p. 54). For this reason, applying games in a correct way is key for developing a welcoming and becoming learning environment in the classroom. Nonetheless, these games can represent some downsides if not wisely used in the teaching and learning process.

The following question is drafted to facilitate the description of the problem statement, so it is clear and understandable to the reader.

What is the influence that educational games have in the development of the speaking skills in English language in eighth-grade students of the *Guardabarranco* School, Los Llanos #1, Pueblo Nuevo?

Educational Games have an important role in the integral development of kids and teenagers; since these encourage active and dynamic participation, it also creates a milieu where students take part of, developing the speaking skill, since this is obtained through the participation and the production of words. It is for this reason that modern pedagogy is supporting games with educational intentions. Due to the aforementioned statement games render multiple resources that facilitate the teaching-learning process. However, teachers have to choose the appropriate game according to the topic and the skill to be taught, in this case speaking skill.

It is significant to take into consideration the application of wellselected educational games such as: descript cards, roulette, charades, which are playful games that are intended to go from the physical environment to the digital one, which will avail students in the development of the speaking skill. These games aim to help students' interaction among them, as well as with their teacher.

On the other hand, educational games can help both teachers and students on both recognizing the importance and the dynamic required to teach and learn the English language. This Gamification Approach also allows teachers to provide students with direct feedback during the game. Moreover, games can help promote motivation among the students teamwork.

### **1.2 Background of the Study**

The writing presented below contains relevant information consulted from different sources. Also, it is focused on the proposed objectives related to our research topic: "Influence of educational games in the development of speaking skills in eighth-grade students of the Guardabarranco School."

Some previous studies correlated with this proposal on the influence of educational games will be mentioned. The first study to take into consideration is "The effect of using role--play activities in speaking skill of the students of the Ruben Dario School" Soza Gonzales (2017). This study showed the positive effect that playful games done as a form of play rather than intended seriously, or wanting to have a good time and not feeling serious have on the English-speaking skill specially when using the game. Through the use of role plays, students can learn vocabulary, put into practice the new vocabulary, practice pronunciation, improve their speaking skills.

In other words, implementing playful games allowed students to be more fluent when expressing themselves, which shows that games help in the development of the speaking; therefore, students put into practice what they have learnt.

On the other hand, the thesis "Effectiveness of Educational Games in increasing students' oral participation in eleven grade students at the public school *Guasuyuca*, Pueblo Nuevo, during the second semester 2015." Carmen Leticia Rocha Salgado (2016) helped to witness the effectiveness of the games which allowed students to develop their speaking skills in collaboration with their classmates to reach a shared goal. This will help you to understand the importance of effective communication when working in a team. When putting them into practice to have an active participation in the English-speaking class. When the teacher applied games, students participated orally; they had a good communication in class.

This practice proved positive because it engaged student to participate in the class and improve their speaking skills. Also, when students spoke in class, they could understand each other. This statement means that playing games in the classroom helps to keep active participation which allows students to express themselves and improve the speaking skill.

Furthermore, "Traditional Games of Nicaragua as strategies for motivation to the learning English of seventh grade students from San Luis Gonzaga high school Matagalpa". Ruiz Quintero y Navarrete Haslam (2019). This thesis mentioned formerly, has a direct relation with our proposal. This work, already would emphasize about games to develop speaking skills on teachers as well on students, with the application of games to the speaking learning process. This study showed that the implementation of Apps for games children developed speaking skills, they could express themselves, evidencing motivation and oral participation during the class.

According to above mentioned, it can be said that this study shows that games not only help in the motivation but also are an important strategy that helps in the development of the speaking skills since students participate during the class in an oral way, students practice vocabulary and become fluent.

Other article to consider is "The effect of using games on EFL students' speaking performances". Pham vu phi ho (2020). This article shows how games can motivate students to participate in their speaking class. Also, it recommends using games because they are designed to support the acquisition of knowledge and the development of skills as an effective method to help students to encourage and improve on their speaking skills.

This study showed that when games were applied, students motivated and their speaking skills improve remarkably. To apply games, students learn to speak English better and they also showed interest in speaking topics. Furthermore, students were more confident to express themselves in English. This means that when applying games students have more participation and their speaking skills improve more through games than teaching through traditional ways because students demonstrated interest in learning and practicing the speaking skill.

Finally, the discussion article titled "The Baseball as a methodological strategy for learning, Speaking, and writing in the English language. "Dormus Salina y Cruz Zeledon (2015) showed that educational games are fun ways because they stimulate the participation of students orally and give them confidence to develop what they have learned. They will obtain effective learning; games continue to be an excellent strategy in the teaching and learning of the English speaking. The baseball game allows to facilitate the learning since the vocabulary is easy to learn and with this game students practice words and sentences in an oral way. When applying games students become more involved in the class which leads to participation; and this other prominent data of this study as well as previous studies add to the list of improvements on the speaking skill.

Important to note that schools in Nicaragua normally have not had the technological means to develop the class, however in the last 2 years the government has invested in technology through projects done by means of technological devices such as: tablets and computers.

#### **1.3 Justification**

Educational games, used by teachers in the teaching process, are a fundamental part of student learning. They are often used to accompany lessons in the classroom, as part of their development. However, there are many challenges when using them, due to not being known or mishandling. This project, meanwhile, is focused primarily on how effective educational games work; describe their characteristics, such as the advantages they have when used by teachers of the *Guardabarranco school*, and also the disadvantages and challenges when using them.

Therefore, in this research project it is intended to know the influence of using educational games in the classroom. Also present a proposal that will facilitate the implementation of educational games from a face-to-face environment to a digital approach.

Another important point is to facilitate the teacher with a training clinic of the use of educational games, through a platform capable of providing a teaching manual and a simple and effective use for them. In this way, teachers can have easy access and use them with students.

This project will be useful so that at the *Guardabarranco School* in Pueblo Nuevo, eighth-grade students will be able to easily learn Speaking skills through educational games on a digital platform.

Finally, it is intended that students be able to use the digital classrooms (ICT) *Information Communication and Technologies classrooms* delivered by the MINED (ministry of education) to *Guardabarranco School*. The project aims to create a space in which electronic devices capable of solving and improving the teaching-learning process in students are used.

# **1.4 Objectives**

## 1.4.1 Main Objective

To demonstrate the influence of the use of educational games for the development of the speaking skills, in the eighth- grade students from the Rural *Guardabarranco School*.

## 1.4.2 Specific Objectives

- To identify the types of educational games implemented by the English teacher for the development of the speaking skills, in the eighth-grade students from the Rural *Guardabarranco school*.
- To describe the influence of the use of educational games for the development of the speaking skills, in the eighth- grade students from the Rural *Guardabarranco School*.
- To create a platform with access to digital games to promote speaking skills.

## 1.5 Key Terms

*Game:* Recreational or competitive exercise subject to rules, and in which you win or lose. Real Academia Española,( 2001)

*Educational Games:* Are activities that are developed for children to acquire and reinforce learning in any area. (didacticos)

**Playful Games:** The playful games lead us to reflect on various scenarios, according to the authors who have made contributions to the concept, and its influence and relationship in the human being. Raihuanque & Mendoza (2013)

*Technological Games:* Are characterized by using technology to entertain and teach children. (Euroinnova)

*English Teaching:* English has become an essential piece in our educational training that will allow us to function successfully in multicultural environments to which we will be increasingly exposed. (Quality Leadership)

*Speaking Skills:* The importance of speaking is considered an indispensable tool, as it facilitates communication between countries. Avila Cerezo (2019)

*Digital Platform:* According to Van Dijck, Poell, & Waal (2018) a platform is a programmable digital architecture designed to organize interaction between users.

#### **1.6 Organization**

The present work is structured as follows:

Introduction: In this part, the research topic is introduced. It tells us what this research is based upon; moreover, it shows an overview of the topic. The Problem Statement is presented as well as the description of it. The Background is focused on previous studies related to our research project, which support our work. Subsequently, **Justification** is given for the project, where a rationale of its importance is elucidated. **Objectives, general** and **specifics**, are presented and lastly; **Key Terms** of the project are established, which give the reader an idea about what the project is about.

The second part is the Literature Review: It is made up of key concepts and contributions from different authors that help support our research. Besides, contextualized information about the theme is presented as well as the evidence.

The third part is: The body of the project, which includes: Methodology: This is where the approach to be followed is explained. Objectives of the project: Where it shows what is desired to achieve with current project. Context and participants: This section explains the context, that is, the setting where the project will be carried out as well as the participants involved. Data Collection: This part explains the information that was taken to develop the project as well as its description.

Finally, Analysis of data: This section explains the creation of the project as well as the elements it contains in order to provide answers to the stated objectives.

## **II. LITERATURE REVIEW**

The present research is based on articles from books and journals from different authors found on websites with useful information. It allowed us to know more about the different games that exist to improve the speaking skill, as well as key concepts that reinforce our study.

### 2.1 Definition of Game:

According to Piaget (1946), game is the "Recreational or competitive exercise subject to rules, and in which you win or lose." (p. 401). Moreover, Gómez Ramírez (2008) defines the game as "A pleasant, free and spontaneous activity, without a specific purpose, but very useful for the development of the child". (p 5)

Games are used as teaching methods within the educational approach, in which teachers integrate their students and develop activities. They are commonly present in the lesson plan, and teachers choose to complement the topics and thus achieve learning for all, since they encourage active and joint participation. For this reason, we can say that educational games are activities used within a classroom, following instructions in which all students participate in order to achieve a goal or competition within a given topic.

#### **2.2 Importance of the Educational Games.**

Educational games play an important role in the learning process. Each game can be adapted depending on the need in the process, and thus be able to create joint learning and that competencies can be achieved. In addition, it allows everyone to have an active participation and fulfill a role within the game, it encourages interaction between all participants and the group work together. The game arises within the field of pedagogy; a game is considered a valuable technique that includes three main elements: competencies, rules and enjoyment that must be established by a teaching- learning objective at the same time students can develop or improve their own skills.

According to Rodrigo & García (2013), educational games are related to the recreational part. However, if we carry out activities based on the needs of our students, we can apply the game in the learning process. The workshop is a useful technique to develop the four skills, adapted to different levels of the language. It is important to show to the students that playing a game is not just having fun following some rules; it is also learning on a different, motivational and fun way. This kind of activities help to keep a very attractive and participative environment in the classroom; which should benefit to achieve the goal planned.

Furthermore, Phillips & Popovic, (2012) in their article "Games have potential learning and assessment tools." They discuss the use of electronic educational games as motivational assessment instruments. Students can achieve the skills, focusing on the ways of the electronic games' instructions.

Nowadays, technology helps learners to learn on an easy and fast way because with the use of new technologies, online games can be accessed and created to practice information. And there exist more and more ways in which activities can be developed using educational games, with creative characteristics, using dynamic and simple tools. This means that the use of electronic educational game help students in the learning process; also, these can be used to help the development of speaking skills of the students. The rules meet the patterns and codes in which the game should be played; teachers can be responsible for making students follow the rules. In this way, the teacher can easily maintain control of the class while the students enjoy and follow the logic of the game and play it correctly, while achieving the objectives of the activity effectively

Educational Games focused on the learning process have a great importance and these can be directly in a classroom or electronically, they also, allow active participation during each class, to motivate and to help participants to achieve educational competencies. In addition, they serve as supporting materials for the teacher in the development of their lesson plans in subjects that reach a degree of complexity. It also helps to carry out dynamic classes and different from the routine.

#### **2.3 Influence of the Educational Games in Speaking Skills.**

Dewi & Kultsum, (2016) say that communicative games impact the learning process on a positive way, because students get involved in the class actively. They also believe that as an advantage, games allow students to be fluent in the speaking skills, as well as they become more participative in the class. So, this method creates an atmosphere of trust and fun. Communicative games allow students to be fluent as they practice speaking skills when communicating and expressing themselves orally.

In short words, the educational games allow that students participate during the class, having a good communication and developing the speaking skills, something that is achieved through communication.

Pérez & Jimenez (2016) say that games are used as a way of communication to improve speaking skills, when teaching teenagers since

topics such as: vocabulary, words, sentences, phrases or short dialogues. That can be used depending on the grade or level required to be taught.

According to the above statement, it can be said that educational games are an important strategy that help students to improve their skills like speaking, also the games can be used to develop different contents related to the speaking skills.

Moreover, in Nicaragua's school students assimilate the language well; since teachers teach through games and different activities. Gree (2003), states that this teaching strategy is an instrument used to help children in the learning process. It can be said that the games are an important tool that provides knowledge to students as they learn in an easier and creative way The acceptance has been very good, the students are waiting for the new topic, they are very enthusiastic about the class, said Jessica Sequeira, an English teacher at the Modesto Armijo educational center in District II in Managua.

Students learn and develop English language skills with interactive, dynamic and creative classes taught by teachers, in addition to reinforcing learning with textbooks provided by the government.

#### 2.4. Educational Games for the Development of the Speaking Skill.

The English language is universal, so if you master the language, it allows you to communicate wherever you go and it will give you many possibilities of finding a good job. Collois (1986) as today many companies seek to grow internationally, it is important that their work team master English and be able to communicate with clients and partners from other countries. This is why speaking this language has become a primary requirement when choosing a new job and it has been proven that people who master the English language earn around 8% more.

Games of individual activities for the development of speech: crosswords, word searches or riddles, television games and Word Pass). In order to explore the use of games in the classroom, we consider benefits and development for English speaking. In Nicaragua, these games have been implemented to develop English speaking.

There are many educational games to use in an active and dynamic class to develop the students' speaking skill. But this section shows some of them that can be helpful and useful in the classroom.

## 2.4.1 The First Game is Roulette

It is an educational game in which students spin a wheel, which contains questions related to a specific content, when the wheel stops, the student who spins the wheel will have to answer the question that appears on the wheel, also this game can be used in different ways, for instance: to translate a word or a sentence in English, even to assess students. On the other hand, the game playfully increases the vocabulary of each of the participants and by gaining vocabulary students will undoubtedly improve their speaking skills. Maraboli Ruz (2021)

#### 2.4.2 The Game Known like Once Upon a Time:

It is a narrative card game that encourages creativity and collaboration. For this educational game a player is the narrator, which takes a card and starts narrating a story according to the image that appears in the card. Then another player takes another card and continues the story narrating in accordance with the card he has taken and so successively until all have been participated and finished the story. This game is useful since allows the participation and interaction between the participants, the students have conversations during the game, which is necessary to narrate the story and this will help improve students speaking skills using the oral expression. Amazon.es (2021).

According to (Andrades, 2015) the following educational games help to develop the speaking skills.

#### 2.4.3 The Game Called "Post-it of Famous":

It is a typical game in which the teacher shows a picture of a famous person. Then the teacher asks some questions related with the picture showed. Then students answer the questions by using the vocabulary from the topic they have been studying. This game helps teachers assess students and know the level of understanding they have obtained related to the topic as well as the speaking level that students have, since through this game pupils develop the speaking skills when they interact in the class.

#### 2.4.4 Other Educational Game Known As: "Descript Cards":

This game is about placing a picture in front of the classroom. The types of pictures can be; landscapes, animals or people, then the students have to describe it aloud, by using the appropriate vocabulary studied in the classes before. Through this game students practice descriptions and the oral expression, because they talk about a specific content, by means of sentences or using characteristics related to the picture. That means that this educational game helps to improve the speaking skills of the students when they express themselves. Also, teacher can use this game to review content, introduce a new topic or assess students.

#### 2.4.5 The Game Called "The Bouncing Ball":

The teacher writes a question in a roll up piece of papers. Then throws one to a student who has to answer the question or the student has to talk about the topic written on the paper. After that, the teacher throws the ball to another student who will also answer a question and so on until all students have participated. This kind of game can be used to evaluate content. Moreover, through this game student can develop different skills such as: speaking, because students participate and talk about a topic during the implementation of this game, allowing the fluency.

#### 2.4.6 Finally, to Play the Game Spider Web:

For this game is necessary to use a rope. So, the students make a circle, and one of them has to take the rope and start talking about a story either known or made up. Then the first student who spoke throws the string to another classmate who has to follow the story. The rope is passed until everyone has participated and at the end a spider web is formed. With these game students put into practice the creativity and the imagination to create stories, at the same time they practice the speaking skills to participate in the game, interacting with each other.

#### 2.4.7 Pre and Posttest. The Parquet. Orality Strategy.

For the parquet game, in the orally strategy, in which boys and girls, through this game, participate and are interested in the game and simultaneously interact orally, narrating simple texts and communicating according to the vocabulary involved in the game. Duvignaud (1997), Say that Students show interest in the games used in the application of the program. Taking into account the results of the pretest, it was evident that the boys and girls had some difficulties in the development of oral and written communication skills. Application of games as a pillar of education and especially games in the pedagogical field help to develop oral and written skills, to enhance imagination, creativity and relationships games as a pillar of education and especially games in the pedagogical field help to develop oral and written skills, to enhance imagination, creativity and relationships.

#### 2.4.8 Emotions Images:

Were taken of the iconic "emojis" that are used to express emotions on social media, and the boys added new options that they would have used at some point, in English or by acting out the feeling they represented.

This game implemented in the "*Mi mundo Magico comunidad Educativa Escuela Zauberland, Mexico, Monterey*" as a strategy that was implemented to develop speaking in students. The topic was interesting about the graphic emotions of social networks, it was something familiar to students who use social networks at all-time outside the classroom, so a bond was achieved and they showed interest in being part of the activity, and added their own answers. This is a sample of what <u>*Rivers*</u> (1968) suggests using as teaching objectives, Games as a pillar of education and especially games in the pedagogical field.

Oral ability showed progress at the beginning and at the end of the activity, "The boys show much greater ease in speaking English. The aforementioned games have its function and way of applying, but the same objective, helping students to develop speaking skills, participate in the classroom, to be more fluent, since students involved in the class interact in the development of a content. Through these games students feel motivated which allows greater participation.

# 2.5 Advantages of Educational Games

- Educational games help students participate actively.
- They make it easier for students to practice the vocabulary that they are learning.
- These educational games mentioned above contributes to individual and cooperative learning.
- They keep students aware with the topic and skill to be developed.

# 2.6 Disadvantages of Educational Games

- If these games are not applied correctly or with the appropriate material they cause boredom, indiscipline and little participations in students.
- They cause low self-steam if the student makes a mistake in the pronunciation of a word.
- Some students may not develop a good speaking skill through play; however, they can have a lot of fun.

# 2.7 Secondary School in Nicaragua

Educational games as mentioned above can be implemented to encourage the speaking skill in secondary seventh grade students, in the development activities of the lesson plan. The study of the English language in Nicaragua is governed by the Ministry of Education (MINED) in basic and secondary education. For this reason, basic and secondary education serves adolescents and young people who make their journey through secondary school according to their defined ages (12 to 16 years of age). Pursuant to *MINED ( 2021)* their physical, psycho-affective and cognitive evolution is important. The schooling day is during the daytime (morning shift / afternoon shift) from Monday to Friday.

Young people and adolescents can access this education, which offers different subjects, including the teaching of a foreign language (English). The English language as a foreign language in basic and secondary education is organized within the communicative / cultural area, which is one of the  $5^{\text{th}}$  curricular areas of the Ministry of Education (*MINED*).

According to Canelo Castillo & Acevedo Urroz (2009) to the cultural communicative area, it fosters the development of communicative, linguistic, sociolinguistic and artistic capacities in girls, boys, young people and adults and develops skills for the autonomous learning of languages and positive attitudes towards linguistic diversity.

In this area, English language learners develop language skills from the first year. Study and learning are compulsory in all secondary education centers in the country. The curriculum encourages students to develop communication skills.

# **2.8 Digital Platforms**

In recent years, there has been a shift from a unique traditional literacy based on literacy to digital literacy where technological and informational skills are required in the development of different skills. Palisé (2008) According to Van Dijck, Poell, & Waal (2018) Educational Games can be used in the classroom, but also digitally. Today digital platforms serve to facilitate access to a myriad of tasks and jobs. Therefore, it can be said that a platform is a programmable digital architecture designed to organize interaction between users. Not just users, but also corporate entities in public bodies. It is geared toward the systematic collection, algorithmic processing, circulation and modernization of user data.

#### 2.9 Software:

There are two types of software; on the one hand we have the base software, which refers to the operating system. This is the main and most important, since it is the one that allows the start of the PC and the interaction between the user and the device, that is, the one that interprets the orders and executes them against the hardware. The second is known as applications and refers to all the other programs that complement the operating system. The applications cover all types of software ranging from office suite to audio and video players, even security programs.

**3.8.1** Educational Software: It is defined as applications or computer programs that facilitate the teaching-learning process. In other words, they are technological tools that are intended to improve learning and provide support that allows the development of different skills.

#### 2.9.1 Main Characteristics of the Educational Software

*Purpose:* Intended for the teaching-learning process.

*Computer use:* It is the medium used as the main support.

*Easy to use:* It applies general rules for use and easy understanding for its navigability or movement from any point of the virtual environment.

*Interactivity:* Allows the communication between teacher and students through an interactive environment. Ledo, Gomez Martinez and Ruiz Piedra. (2010).

In order to relate the digital platform with the educational games, they were linked to the contents and units presented in the foreign language 8<sup>th</sup> grade secondary education syllabus or the basic national core curriculum developed by the Ministry of Education (MINED), which determines the learning that students of the basic and secondary education subsystem should achieve. In addition, some exercises from the "Secondary English book" textbook owned by the Ministry of Education were taken into account as a tool to render evidences for the effective development of communication skills in English.

#### 2.10 Hardware:

For a digital platform to work, the database and all the information generated in the software must be output, for this to be possible it is necessary to have a physical device that receives the information and presents it to the users; these devices within the domains of computing are known as hardware. And they are essential in the functioning of technologies.

The physical electronic devices that receive information from applications or platforms that can be manipulated by users, is known as hardware.

It refers to all the devices that make up the  $PC^1$  and other technological equipment, such as Motherboard<sup>2</sup>, microprocessor<sup>3</sup>, RAM<sup>4</sup>, among others.

<sup>&</sup>lt;sup>1</sup>(Personal Computer)

<sup>&</sup>lt;sup>2</sup> Printed circuit board to which the components that make up the computer are connected.

There are two divisions, the critical hardware which is the one without which the pc cannot boot, on the other hand the non-critical hardware, made up of those devices that are necessary but dispensable for starting the computer. Cotino (2009)

<sup>3</sup> It is in charge of executing all the programs, from the operating system to the user applications.

<sup>&</sup>lt;sup>4</sup> (Random Access Memory) Memory main of the computer where programs and data reside.

## **III. BODY OF THE PROJECT**

# 3.1 Methodology- Design Approach

This research has a qualitative approach since, as quoted by Sampieri (2014) qualitative research focuses on understanding phenomena, exploring information from the perspective of the participants in a natural environment and in relation to their context. Likewise, this research is determined by a qualitative approach, since it describes a situation without numerical measurement with an advance of quality and not of quantity in the development of a research project, and it is developed based on the needs of a certain social group.

As Salkind (2008) mentions, the purpose of qualitative research is to examine the way in which individuals perceive and experience the phenomena that surround them, deepening their point of view, interpreting and finding meaning.

This study project describes the characteristics of a problem, analyzing the needs of a certain social group. It allows us to identify the reality of the impact the use of electronic educational games have on the development of foreign language speech, and how a digital platform can positively help eighth grade students from the Guardabarranco School in Pueblo Nuevo.

## **3.2 Objectives of the project**

## 3.2.1 Main Objective

To Demonstrate the influence of the use of educational games for the development of the speaking skills, in eighth- grade students from the Rural School Guardabarranco.

## 3.2.2 Specific Objectives

- To Identify the types of educational games implemented by the English teacher for the development of the speaking skills in eighth-grade students at Guardabarranco school.
- To Describe the influence of the use of educational games for the development of the speaking skills, in eighth- grade students at Guardabarranco School.
- To create a platform with access to digital games to promote speaking skills.

## **3.3 Context and participants**

#### 3.3.1 Setting

To carry out this project the Guardabarranco Rural School was chosen, which is situated 18 kilometers away from the municipality of Pueblo Nuevo. This school has 42 electronic tablets, an ITC<sup>5</sup> classroom used in the teachinglearning process. Therefore, this school is appropriate to develop our project, since it has technological resources through which platforms can be used and implemented.

<sup>&</sup>lt;sup>5</sup> ITC (Information Communication Technology)

Furthermore, for this reason we decided to develop our project in this school, and on top of all the English teacher and principal of the school agreed for the project to be carried out in this setting.

### 3.3.2 Participants

The participants to carry out this project with are: an English teacher and her students. She is 30 years old, and has 10 years of experience in her work as an English language teacher; her full name is Dania Mileydi Bustillo López. She has a bachelor degree in Education with a major in English language teaching. In 2011, she was an English teacher in a program called CEFER<sup>6</sup>. In 2019 she studied a course called Koika, it is an online course about technology and strategies used in the English Teaching.

Moreover in 2022 she will be trained on how to use technology using virtual platforms. She also uses technology to teach English to students, for instance: Duolingo, videos, songs and applications for English language teaching.

According to the above statement, the English teacher is trained to use the project about an online platform since she uses technology to teach English. She has experience teaching and she also applies educational games in the classroom.

Other Participants who will benefit from the project are eighth-grade students, which are 12 girls and 12 boys. These students commute from different villages to study in this school.

we decided to work with this group because in the eighth-grade classroom the English teacher implements more educational games than in

<sup>&</sup>lt;sup>6</sup> CEFER (Centros Familiares de Educación Rural)

other classrooms, because teenagers participate more in recreational activities and they like to use the technology, which is related with our project.

Another reason for which this group of students was chosen is because eighth-grade students use tablets and cell phones; this means that students can have access to virtual platforms. In the event that our project (virtual platform) cannot be installed on the school tablets, students can use their smartphones to access the platform.

To know if all students have cell phones, a survey was conducted through Google form in which it was confirmed that all students have smart phones, this means that the project can be carried out at this school.

#### **3.4 Ethics in the Project Design**

For the elaboration of this project ethical values were taken into account, within the scope of this research such as: honesty, respect, responsibility, among others. In order to access the facilities of the educational center, due permission was requested from the authorities of this institution by means of a letter, with the aim of verifying the technological resources available in this school and collect evidence of this through photos with their signed permission.

In the same way, the permission of the English teacher and her students was granted to apply a survey, which was carried out online, through Google forms, with the purpose of knowing the competencies that the participants have to manage the technological resources of the school, and also to know the ones they use personally. This survey was conducted anonymously, to protect the integrity of the participants. The lessons found on the platform are based on content provided by the 8th grade secondary school syllabus owned by the Ministry of Education, as well as some exercises that are presented in the textbook of the same grade.

Lastly, the digital platform project bears the name of *'LearninGame'*. To select this name, it was verified that there was no other platform with this name in order to avoid a legal process.

#### **3.5 Data Collection**

To carry out this research project, which consists in the creation of a digital platform that contains electronic educational games to develop the speaking skill, several sources were consulted. Sources consulted are presented in the literature review of this research. Additionally, other external sources were consulted as the assistance of experts in technology management.

#### **3.6 Creation of the Project**

This project was created with the purpose to implement new technologies in public schools such as: digital platforms, cellphones, computers, internet connection, among others, provided by MINED. These resources associated with educational games can develop educational competence, such as the development of speaking skills.

Subsequently, in the Guardabarranco School this project (digital platform to develop the speaking skill, using educational games) is feasible because it has all the necessary technological resources to conduct this project. Another reason is that the English teacher of that School possesses the competences to use technology correctly. In addition to the technological resources existing in the school, the students have smartphones which can be used to access the digital platform.

#### **3.7 Platform**

Currently, the internet is used as a source of information as an indispensable teaching resource, and therefore educational digital platforms are applicable in teaching and can be successfully used, being a didactic material that enriches the learning process and facilitates the active training of the student.

# 3.7.1 Advantages and Disadvantages of Using Educational Digital Platforms:

Teachers are in charge of working on the implementation of new resources that develop the learning processes. It is undeniable that the use of an educational digital platform provides countless benefits for students in a broader environment and with different ways of providing information. The use of these technological resources implies knowing how, when and where to use these devices. That is, that the individual is capable of managing the information and the most appropriate tool for each one, and if they do not know it, they must acquire and develop it to communicate and share it with others.

#### 3.7.2 Some Benefits of Educational Digital Platforms Are:

- Makes it possible to exchange information between participants.
- student-centered model.
- Tutors as pedagogical mediators.
- -Collaborative and flexible interactive learning processes.

• A self-training is developed in the student that is known by other authors as self-discipline.

### 3.7.2Disadventages

Although there are Benefits, it is Inevitable to Distinguish Some Limitations That Prevent a Good Operation:

- Passivity, is described as an easy way to learn.
- Technological competences
- Resistance of teachers to the use of new ways of teaching through new technological milieus. (Fainholc, 2005).

# **3.8 Table 1**

# Data Collection of Relevant Information About Education Games Within the Digital Platform.

Types of the games	Description	Resources
	This game can be used in	
	different ways, for	Educaplay
	instance: to translate a	Luucapiay
Roulette	word or a sentence in	Maraboli Ruz (2021)
	English, even to assess	
	students. On the other	
	hand, the game playfully	
	increases the vocabulary of	
	each of the participants.	

	It is a narrative card game	Amazon
	that encourages creativity	Amazon.es $(2021)^7$
	and collaboration. This	
Once Upon a time	game is useful since allows	
	the participation and	
	interaction between the	
	participants, the students	
	have conversations during	
	the game, which is	
	necessary to narrate the	
	story, it helps those	
	• •	
	students improve their	
	speaking skills using the	
	oral expression.	
	This game is about placing	
	a picture in front of the	10 juegos SOS
	classroom. Through this	10 Jue 200 DOD
Descriptive-Card	game students practice	Andrades (2015)
	descriptions and the oral	
	expression, because they	
	talk about a specific	
	content, by means of	
	sentences or using	

<sup>&</sup>lt;sup>7</sup> Amazon:AMAZON.es.2021.https://www.Amazon.es

characteristics related to the picture. That means that this educational game helps to improve the speaking skills of the students when they express themselves.

		The game as a didactic
		strategy to promote the
Emoji	This game helps students in	development of the speaking
	the development of the	skills. Rivers (1968)
	speaking skills since	
	students express their	
	emotions in an oral way	
	into the classroom	
	answering questions.	

Sources: The authors

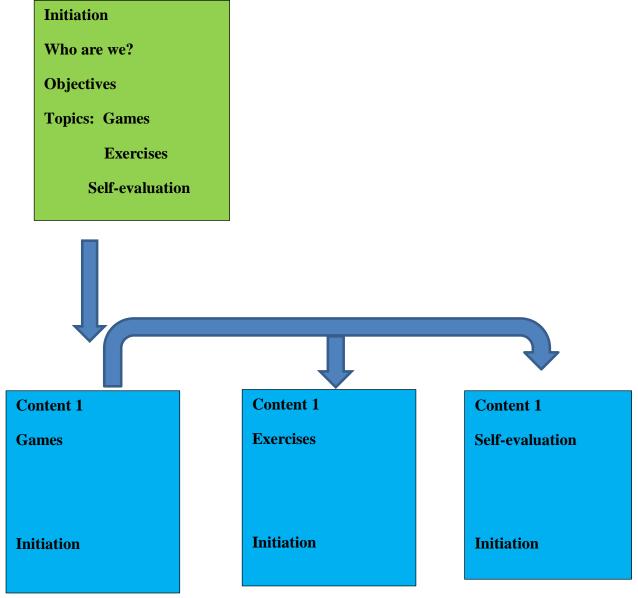
#### **IV. ANALYSIS OF DATA**

The data stored in our literature review and other external search engines such as: Google drive and Google academic were useful in the development and creation of the digital platform that houses educational games.

For this, different steps were carried out.

Step 1: In this first point, the design the platform was carried out, which includes general data, presentation of the platform, user assistance and the windows with the games was chosen.

Figure 1: Draft of platform content



#### Source: the authors

Step 2: We proceeded to use the hosting, which is the storage that is the data or the process that the computer operates.

What is needed to have a hosting?

- 5 Gb disk space.
- Data transfer 100 Gb.
- Hosted domains 1 hosted domain.
- CPU 10 vCore.
- Ram memory 16 Gb or higher.
- Migration included.
- Unlimited email accounts.

What steps are followed to buy hosting?

Step 3 Enter the web hosting provider.

Step 4. We selected the plan.

Step 5. Choose web domain

A domain name for the website must be chosen, a new domain can be registered, transfer, use by the owner and can modify the names of the server and even use a subdomain of A2 Hosting in the case of not having an owned domain at hand.

Step 6. Select time to hire hosting.

The billing cycle of the hosting plan can be monthly, yearly, for 24 and up to 36 months. Additional you must select the location of the server and other characteristics as needed in our web project.

Step 7. Add plugins:

Select some add-ons offered for the web hosting, usually everything is left disabled.

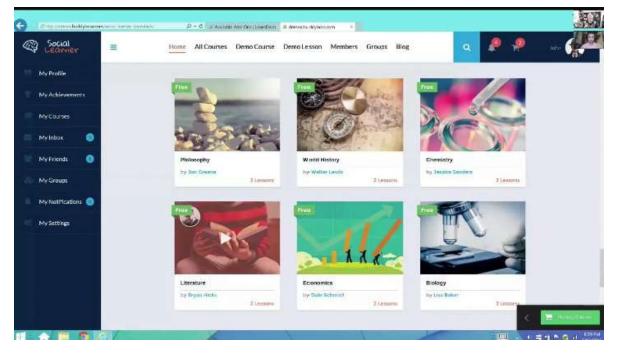


Figure 2: Plugin to enable customization of platform

Source: Piguino Digital 2020 (https://pinguinodigital.com)

Step 8: Once the plugging is activated, we entered the license key that asked us to save, and pasted it where it says "enter your license key here", as well as the email address we used to buy the plugging, and in this way, it was installed.

Step 9. Pay the Hosting bill.

Step 10: Enter Edilim

11. Create a folder for the activity, where the files used in that activity will be stored, such as images.

12. Write the name of the platform. In this step, the platform was named, which consists of 'LearninGame'. This name was chosen in the fusion of two words that consist of learning games through the platform consisting of educational games used for learning the English language. After choosing the name, we continued with the creation of an email for the platform.

13. On the right side there are other fields that we can fill in with data from the platform, with the colors of the design, and with the text that will appear if the answers are correct or not, finally the exercise was chosen.

14. The activity is created and saved.

Figure 3: Screenshot of activities that provides Edilim.

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	Parejas	Didentificar sonidos	Etiquetas
	? Preguntas	Arrastrar textos	Mover Imágenes
	E Respuesta militiple	Arrastrar imágenes	Completar
	Frasos	Clasificar textos	Palabra secreta
	Escoger	Clasificar Imágenes	Enlaces
	Panel	() Reinj	Operaciones
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	<b>Budidas</b>	tionies	1000

Source: the authors

After completing the previous steps, we proceeded to select and create the different educational games that are the basis of the platform.

On the digital platform, a series of content (topics) present were selected that were developed by the Ministry of Education in its study planification for 8<sup>th</sup> grade of secondary school. With these contents, educational games were written verbatim in order to develop speaking skills.

Units	Contents	Games
	• People: Age,	Descriptive
	Height, Hair	Card
I Descriptions	color, Eye color.	
	• Describing	Emojis
	feelings	
	Nationalities	
II National Identity		Post it Famous
	Countries	
III Food	Nutritional Food	Roulette
IV Clothes	Clothing Items	
	-	Descriptive Card
	Colors	
	Sports	Roulette
V Leisure Time	• Games	Descriptive Card
v Leisure Time	• Holidays	Once Upon a Time
VI Health	• Parts of the body	Roulette
	Medicine	Descriptive Card

Table 2. Selected Contents and Units of the MINED Secondary EnglishStudy Program.

### Sources: The authors

To develop the games and transform them face to face in a playful way to a virtual mode, platform engines were used which was: EdiLIM, the version EdiliLIM V.3.2., which is a free multimedia interactive book editor (LIM) that allows creating educational materials for the web. With this editor, games, numbers, words, information, images, sounds and different multimedia content can be created. E. T. Docente (2012). LIM is an author program created by Fran Macias, free and free. According to the author, it is an environment for the creation of educational materials, made up of an activity editor (Edilim), a viewer (LIM) and a file in XML format (book) that defines the properties of the book and each of its properties.

Therefore, the first great idea that you must have is that you are going to start creating an interactive book, with as many pages as you want and as creative as your imagination allows it. Corral Hernández (2013)

For this reason, Cusi Nina and Condori Velasquez (2018) in his work mentions the functionalities and advantages of using this software:

#### Advantages when using Edilim

- Attractive environment.
- Simple handling based on the "drag and drop" gesture.
- Includes a small image editor.
- it is a portable software, that is to say, it is not installed on your computer nor does it leave traces of its use. We can take it on our pen drive.

#### From an educational point of view:

- Pleasant environment.
- Ease of use for students and teachers.
- Attractive activities.
- Possibility of monitoring progress.
- Evaluation of the exercises.
- It is an easy resource to handle.

- Possibility of use with computers and Digital Whiteboards Interactive.
- Creation of activities in a simple way.

# **Figure 4: Book Edilim**

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Libros Interactivos Multimedia	Español
EdilIM v3.31	Fryshe Matchas www.adoscallini.com
	Creative

**Source:** Adapted from Equipo TIC del Instituto Nacional de Formación Docente (2012), Editor de libros interactivos multimedia, Especialización Docente de Nivel Superior en Educación y TIC, Buenos Aires, Ministerio de Educación de la Nación

### Graphic Description of How to Create a Game for the Digital Platform.

1 Select the images from the web site related to the content that will be used to develop the game.



Figure 5: Images selected from the web site.

**Source:** https://es.123rf.com/photo\_87326716\_cool-avatares-diferentesnaciones-retratos-de-personas-etnia-diferentes-tonos-de-piel-afili%c3%B3n-%c3%A9tnica.html.

2. Then, to enter the activities which the program calls pages, it is necessary to enter the pages menu and select the appropriate one for the game and the lesson.

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X 2 C O	Información	Actividad externa	Freses	Ortografia
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institutes	Imagenes	Arrestrer textus	Galería Imágenes	Parel
aimaciones a stas	Autoriti.	Clasificar imágenes	Galoría sonidos	Parejas
	Argen	Clasificar textos	Identificar Imágenes	Parajas-2
	0	Clasificat	Identificar imégenes-2	Pirámida
		Completar	Identificar senidos	Plantilla
		Dictado	Imagen y texto	Proguntas
		Unlaces	2 Letras	Puzle
		Enlaces-2	Medidas	Rayes X
		Escoger	Memoria	Relacionar
		Esquema	Menü	Refoj
		Etiquotas	Mover imágones	Respuesta múltiple
		Etiquetas-2	Operaciones	Beries
		Formulas	Operaciones-2	Sknotria
		Fraccianes	Ordenar Imágenes	Bapa de latres
		Fracciones-2	Ordenar	Texto

Figure 6: Page menu presented on the digital platform.

**Source:** Adapted from Equipo TIC del Instituto Nacional de Formación Docente (2012), Editor de libros interactivos multimedia", Especialización Docente de Nivbel Superior en Educvación y TIC, Buenos Aires, Ministerio de Educación de lan Nación

3. Once the activity is selected, a window opens to complete data, usually it is about completing text boxes, dragging elements from the library, activating and deactivating options. The title of the activity can be placed, the activity can be created in the spaces or the elements of the library can be dragged wherever needed.

# Table 3.

# Types of pages provided by EdiLIM

Types of pages	Subdivisions
	• Image and text: Lim displays a
	page made up of text and an image.
	The situation of different elements is
	configurable, as well as the colors
	and behavior. Supports HTML
	formatted text.
	. • Menu: A menu appears on the left
	with even six buttons (configurable
	colors), depending on whether the
Descriptive	buttons are pressed, a different text
	will be displayed.
	• Links: Menu page, but in this case
	the buttons redirect to other pages.
	.• Image gallery: Shows a gallery
	with up to six images, which when
	you click on them, they are enlarged.
	• Sound gallery: Similar to the
	previous one but with sounds.
	• Panel: Page to freely compose from
	the selected images just drag the
	images onto the stage. It also allows
	you to write and rotate the images.

#### Interactives

• **Puzzle:** It consists of solving a puzzle with the possibility of seeing the image with different levels of transparency. The pieces are dragged with the mouse and fit automatically.

• Letter soup: Aimed at searching for words mixed between a box of 10 by 10 letters. The description of the words to be searched for, directly the words or images may appear. We must click on the first letter of the word and move the mouse to the last.

• **Pairs:** The well-known game of finding pairs by uncovering the squares. Activity with adjustable time.

• Questions: Allows up to three questions for the user to enter the answers.

• Multiple Answer: One question and up to four possible answers. . you have to click with the mouse on the correct answer.

• **Phrases:** Exercises with phrases, to write, listen, translate, etc.

• Identify images / Identify sounds:

Up to six images/sounds in order to identify them, although it admits more variants.

.• **Drag texts/drag images:** Move the pieces with the mouse until they fit correctly.

• Classify texts/ classify images: Bring the pieces to the corresponding group. It only allows to classify in two groups.

• X-Rays: Shows two superimposed images, the lower one is only visible in the space defined by a circle. We can drag the circle over the image. The results can be surprising. This page can be descriptive if we don't define an answer.

• Labels: Move the labels to the correct place. This page supports many variants: descriptive only, with sounds, writing on the labels, dragging, etc.

• Move images: Drag up to six images. It allows to fit figures, complete images, establish sequences, etc.

• **Fill in:** Fill in gaps by writing the answer or moving text boxes.

• Secret word: Discover the hidden word by clicking on the letters, up to six possibilities of error. Supports images.

• **External activity:** This page allows you to include activities outside of Lim.

• **Operations:** Page to create mathematical operations: addition, subtraction, multiplication and division.

• Choose: Select between several images/texts.

• **Clock:** Page to create activities on the management of the clock.

• Links 2: To create indexes or navigation systems.

• **Texts:** Page to work with texts, you can select words, order phrases, drag fragments, etc.

• Labels 2: Placing texts on an image

**Source:** Fernandez Guillen (2017)

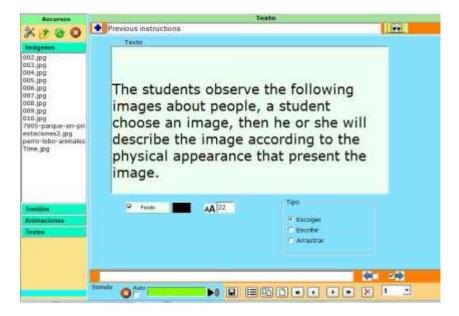
Figure 7: Screenshot of step 3 of the process of creating a game in the Edilim software for the digital platform

Recursos	Propiedades						
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Source: http://www.educalim.com

4. After the images were selected, we wrote the text. In this case, it was the instructions of the lesson and the game.

Figure 8. Screenshot of step 4 of the process of creating a game in the Edilim software for the digital platform



Source: http://www.educalim.com

5. Subsequently, an image is created to identify the destination boxes and define the opacity level (0 transparent document; 100 no transparency). In the upper part, a name for the boxes could be written.

Figure 9: Screenshot of step 5 of the process of creating a game in the Edilim software for the digital platform.



Source: http://www.educalim.com

6. The user must select several specific images which the user must check on the box.

Figure 10: Screenshot of step 6 of the process of creating a game in the Edilim software for the digital platform.



Source: http://www.educalim.com

When the game is complete it can be uploaded to the hosting and run by users. It is important to note that in order to use this game correctly, the role of the teacher as supervisor or facilitator is essential to develop the resource properly.

According to Ryan (2000), the main role of the teacher is to act as a mediator in the content and the constructivist activity that overwhelms the students to assimilate it.

The tutor asks questions and the students give their contributions expressing their ideas. It also requires skills to create an atmosphere that recreates learning, the facilitator interacts to highlight the most relevant.

Moreover, a facilitator must support the participants so that they become familiar with the software. The teacher should also know the software to know how it works and use it properly.

Learning facilitators, virtual classrooms and technological environments focus more on learning than on teaching since they are not transmitters of information but facilitators to provide resources and seek information.

It is necessary for the teacher to be trained in the use of new technologies and skills to be able to attach other resources to the platform which will serve as tools for students to develop their own learning.

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# To create digital platform, it is important to know the following terms.

# Glossary

- 1. Active Desktop: Active desktop of Windows 98 that allows having active content on the Desktop and setting a web page, a video, a sound, etc.
- 2. Address: Location of a file. Internet.
- 3. Algorithm: A set of specific and detailed instructions through which to get a certain action.
- 4. Applets: Programs developed with Java to improve the presentation of Web pages that perform animations, games and interaction with the user.
- 5. Application: Program that performs a series of functions and with which it worked in the computer.
- 6. Architecture: Term that refers to the type of hardware structure of the machine and which also applies to the classification of microprocessors or the type of slots expansion.
- 7. Backup: Backup application of files, folders or complete units that allows you to divide the information or files on several floppy disks and that also compresses.
- 8. Bit (binary digit): Basic unit of information represented by zeros and ones that are they are happening to conform the different meanings.
- 9. Bitmap: A graphic file type (made up of dots) of PC images.
- 10.Bookmark: Location or brand on a page, which we can access quickly through a link.
- 11. Mask: In drawing programs, fix an area of the image to work on it and so that its modifications do not alter the rest of the drawing.
- 12.Browser: Browser to view Web pages on the Internet.
- 13.Cache: Folder or buffer that temporarily stores files from the team.
- 14.Channel: Web site that delivers Internet content to the computer. Channels automatically copy content from the Internet to the system when we Elilim subscribe to a site.
- 15.Click: Press a mouse button.
- 16. Client: Computer that connects to another computer called server.
- 17. Cracker: The one who commits computer crimes for profit.
- 18. Cybernaut: Internet user or virtual navigator who accesses any type of information available on the World Wide Web.

- 19. Database: Very flexible data storage system that allows organize information very efficiently.
- 20. Dial-up network access: Application that allows you to use a telephone line and a mode to connect to another equipment.
- 21. Digitize: Convert to the computer language (in bits) any type of graphic, audio or video information.
   Direct Access: Special icon that represents a folder or a file and that opens or execute this in a comfortable and fast way.
- 22. Directory: Folder containing program files, documents, archives or subdirectories or subfolders to keep the information on the hard disk in order.
- 23. Document: File created with an application.
- 24.Domain: Group of computers connected in a network that share information and resources.
- 25.Download: Copy files from one computer to another using a modem or connection network.
- 26.Explorer (Navigator): Application through which we can view pages of Internet Web (in English browser). The best known are Internet Explorer and Netscape Navigator.
- 27.Extension (also called Type): We could call it the last name of a file, which appears after the name of a file, after the period and which consists of 1 to 3 letters and its task is to define which program has generated the file.
- 28. File: Document generated with an application that is stored in a unit.
- 29. Gateway: Device that allows two networks to be connected together usually a different protocol or a server to a network.
- 30.Gigabyte (GB): Measurement of 1,000 Mb (about 1,000 million characters).
- 31. Hacker: Computer scientists who use their great knowledge to penetrate any computer barrier.
- 32. Home Page: Primary or introductory page to the Internet. Also called page of beginning.
- 33.Host: Host, it is any computer that has an IP number and that can both send how to receive information over a network.
- 34. HTML (Hypertext Markup Language): Language used to create pages Web.

- 35.HTTP: Hypertext Transfer Protocol or graphical environment of the pages Web.
- 36.Icon: Image that represents a file, a unit, a folder or another element.
- 37.Import: Transfer or send files to another program different from the one that generated them.
- 38. Interface: Appearance that the programs present after their execution by means of which we exercise communication with them
- 39.Internet: Worldwide network of networks. Cobweb or IP address: Numerical string that identifies a machine on an IP network.
- 40.JPEG (Joined Graphics Expert Group): It is the most used graphic file format and disseminated on the Internet, since it is a format that reaches a high level of compression (reduces images to one-tenth or more), but at the cost of a huge loss of quality when using a destructive compression method that it spoils the details a lot, so if we modify the file two or three times is useless.
- 41. Login: Identify yourself and gain access to a computer by username and password.
- 42.Library: Set of programming modules or elements that are used to develop and design applications.
- 43.Link: Each of the links of a module with the libraries it uses. In Internet, connection of one document with another by clicking on a marked text or an icon or image.
- 44. Main page (Home Page): Primary or introductory page to the Internet. Too called home page.
- 45. Menu: List of commands that appears at the top of windows represented by a name with an underlined letter and that serves to give instructions to the programs or to communicate with them through them.
- 46.MP3: Compressed sound file that can only be listened to on a PC and through a special program.
- 47.MPEG-1: Digital video compression system by which it is possible to Store videos up to 352x288 on very little disk space.
- 48.MPEG-2: Image decompression system using DVD technology, superior in size and quality to MPEG-1.
- 49. Multimedia: Any combination of text, images, sound and video.
- 50. Network: Two or more computers connected to each other.

- 51. OCR (Optical Character Recognition): Software that allows you to recognize the characters and convert them to computer text.
- 52. Off-line: Process to be able to view Web pages without being connected to the Internet. Are loaded to the hard drive and can be accessed later.
- 53.On-line (online): Connections to the network where system responses are generated from almost immediately.
- 54. Place: Set of web pages created by a person or organization.
- 55. Portals: Pages that are used as a starting point and that are structured by contents, indexes and themes, in addition to being powerful databases or search engines information on the Internet, that is, locators of other pages of which we know their address, but we find them by typing a few words into them or key code.
- 56.Public domain: Those programs that are free to use and do not involve disbursement any for the user.
- 57.Reading offline (Off Line connection): Process to be able to view Web pages without be connected to the Internet. They are uploaded to the hard drive and can be accessed later.
- 58.Record: Action and effect of storing a file on a storage medium.
- 59. Refresh: Reload or display the content of a web page or window.
- 60.Resolution: Maximum number of points that can be displayed simultaneously in screen.
- 61.Search engine: Internet server that organizes files by thematic groups and that allows the localization of Web pages by means of keywords that the user, without having to know the addresses of the aforementioned pages.
- 62.Server: Equipment that controls users' access to a network and provides them with service and information.
- 63. System: Set formed by the hardware and software that make up the part computer essential.
- 64.USB (Universal Serial Bus): External device connector that acts as an expansion of new computers.
- 65.URL: Uniform Resource Locator, it is said of the address of a Web page of Internet.
- 66. Web page: Document made in HTML and that is part of a Web site.
- 67. Website: Group of related web pages.

- 68. Window: Rectangular shape that appears on the screen and represents a folder, an app, one item.
- 69.world network. Also called World Wide Web (WWW), a set of networks that allow communication between millions of users around the world.

Los Llanos, Pueblo Nuevo. 2021

A: Lic. Arlen Elizabeth González Videa.

Directora del Colegio Guardabarranco.

Estimada Licenciada

Reciba saludos, deseando éxitos en sus labores.

Le solicitamos apoyo institucional, mediante la autorización y aceptación de acceder a las instalaciones del colegio que usted dirige.

Somos estudiantes de V año de la carrera Licenciatura en Inglés, turno profesionalización, requiriendo recolectar evidencia de los recursos tecnológicos con que cuenta el colegio (tabletas, computadora, sistema de conexión a internet). También se solicita el permiso para llevar a cabo el proyecto "plataforma digital" que se desarrollará con estudiantes de octavo grado, del mismo colegio.

Agradecemos su especial colaboración.

Atentamente Mileydin María Videa López Wistor Adrian Roque Cárdenas Hellen Marisela Martínez Sevilla.

# Request letter for permission to collect Information from the Guardabarranco School.

25 de Noviembre de

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Fugure 11:8th grade students survey response.





Figure N°12: 8th Students answering survey about Technological resources.





Figure N°13: 8th grade students using tablets in the English Subject.



Figure 15: Book English Secondary, 8<sup>TH</sup> Grade.



Figure 16: Foreign Language Study Language