

TOPIC:

TECHNOLOGICAL LEARNING RESOURCES TO DEVELOP A1 STUDENTS' ENGLISH READING SKILLS

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

Line of research:

ADVANCED METHODOLOGICAL AND TECHNOLOGICAL PROPOSAL

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Advanced methodological and technological proposal

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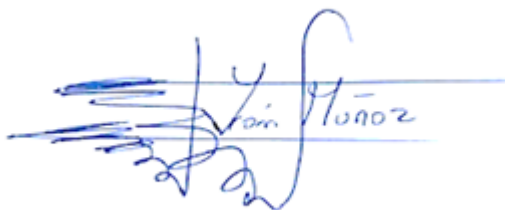
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Iván Muñoz

Dedication

To God for being my guide, the only one who has been with me at all times and who has never let me down. To "Virgen del Cisne and Virgen de Agua Santa," who have granted me everything that I always wanted in my life. To the two most influential people in my life: my wife, Paola Katerine Rivas Ch. and my son Iván Andrés Muñoz R, who gave me all their love, understanding, and unconditional support. To my Parents Hugo Muñoz and Luzmila Tiglla, for always believing in me; all my effort and sacrifice will always be for you.

Iván Muñoz

Resumen

El presente trabajo investigativo busca determinar la incidencia de los recursos tecnológicos de aprendizaje en el desarrollo de las destrezas lectoras de los estudiantes del nivel A1 del Instituto Superior Tecnológico Cotopaxi. La implementación de los recursos tecnológicos en la web, se fundamentó bajo tres pilares, el primero mediante la metodología de diseño “Design Thinking”, con la que se recopilaron las necesidades de los expertos que apoyaron la presente investigación. El segundo fue el modelo de enseñanza de lengua extranjera “Presentation Practice and Production” (PPP), con el cual se orientó el desarrollo de las destrezas lectoras, priorizando las necesidades de comunicación real del aprendiz en su vida cotidiana y el tercero que estuvo presente de forma transversal en todas las etapas de la investigación y la implementación de la propuesta según los lineamientos del Marco Común Europeo de Referencia de Lenguas. A la finalización de la presente investigación se comprobó la hipótesis utilizando la prueba estadística “t-Student”, con un nivel de significancia de 5% mediante la comparación del rendimiento académico de dos grupos de estudio, validando que el uso de recursos tecnológicos de aprendizaje, incide favorablemente en el desarrollo de las destrezas de lectura del idioma inglés en estudiantes del nivel A1, lo que en definitiva refleja el aprendizaje del idioma Inglés como lengua extranjera.

Palabras clave: Recursos tecnológicos, “design thinking”, destrezas de lectura, estudiantes del nivel A1.

Abstract

The aim of this study is to determine the impact of technological learning resources the development of reading skills of A1 level students at Cotopaxi Institute of Technology and Higher Learning. The implementation of technological resources on the web was based on three pillars; the first was through design thinking methodology, with was used to collect the information that was needed to support this study from the experts, the second was the foreign language teaching model of Presentation, Practice and Production (PPP), with provided a guide for developing reading skills while prioritizing the real communication needs of the learner in their daily life, and the third, which was present in a transversal way in all stages of the investigation and implementation of the proposal according to the guidelines of the Common European Framework of Reference for Languages. At the end of the present investigation, the hypothesis was tested statistically using the Student's t-test revealing a significance level of 5% by comparing the academic performance of two study groups. This verified the belief that the use of technological learning resources has a favorable impact on the development of English reading skills in A1 level students, which ultimately reflects the learning of English as a foreign language.

Keywords: Technological resources, design thinking, reading skills, A1 students' level.

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INTRODUCTION

Technological tools are programs and applications that are free of charge and also paid. These tools help people interaction and are also designed to facilitate work and study; furthermore, they allow resources to be used efficiently by exchanging information and knowledge inside and outside an institution. In education, technological tools are essential because the teacher interacts faster and more efficiently with students, allowing the teacher to choose updated technology that offers quality education in the teaching-learning process (Biancarosa & Griffiths, 2012).

Technological resources knowledge and strategies to develop language skills are substantial because it leads to a natural learning process in which students differentiate between getting to know a language and how to produce it to communicate and express what they want and feel. Having a deficiency of knowledge of these particular aspects stops the learning process, the students learning desire, and their willingness to study. Moreover, language input to learn something begins by reading as humans perceive their surroundings through their eyes (Khotimah & Wahyu, 2019).

Regarding English language teaching, for students to achieve better development and performance in English, skills should follow the other advice given by experts. It is necessary to mention that the reading skill, due to its complexity, should be given greater importance in its teaching. Knowing the English language allows access to various opportunities for success and entrepreneurship; for this reason, it is necessary to tend to the learning of the foreign language through the application of technological tools, which allow to improve and deepen the knowledge that leads the student to develop the skill of writing (writing). The teacher must motivate the student to use this medium, emphasizing the importance of learning from it (Lama, 2018).

Limited visual resources that have outdated teaching models added to the lack of information, communication technologies knowledge, and strategies to develop language skills adapted to the generational era accompanied by traditional content impedes the development of reading skills and the comprehensible input acquirement. Meaningful reading pieces are essential when

a teacher supplies exciting reading material to students; it draws their attention and gives them a learning purpose.

English is the world's Lingua Franca which is considered a must learning complementary subject for those who want a better life and better opportunities at work or professional careers. After some research carried out worldwide by Educational First, the countries that lead the charts regarding English language use are the Netherlands in Europe with a score of 652 points, followed by Singapore in Asia with 611, Argentina in South America with 566, South Africa in Africa 607, and Iran in the Middle East with 483. All those countries have something in common, they have increased their financial budget to help the population to be successful in their English language proficiency (English Education First, 2020)

In South America, the English language level in the population varies from country to country. Argentina is placed as the number 1 country regarding the population's English proficiency level, followed by Chile, Paraguay, Bolivia, and Uruguay. Colombia is set just above Ecuador that is situated in the last position named as the last country with an English proficiency level with 411 points. These results reflect different realities in both countries despite being located on the same continent and having Spanish as their mother tongue to communicate.

In Ecuador, learning a foreign language had been very complicated. However, various problems have arisen since the last decade, barring the improvement of the four skills of the population. They are the following: Poor teacher preparation concerning the development of their language skills, lack of improvement of the supporting material to teach classes, few hours of English in all schools of primary and intermediate level, lack of interest of students to learn English, and limited use of technological tools to improve classes. Technology is an essential instrument in most of the basic activities people do. Unfortunately, up to now, some teachers do not know how to use the available technological tools, neither develop different types of tasks to motivate reading and improve the rest of the language skills.

Considering the higher educational level in the country, students still have problems learning the foreign language that is a prerequisite to get their educational major. Students at this point should have at least an A2 level according to the Common European Framework after finishing

their high school but up to now even though the government has changed with experts the curriculum.

The problem found at "Instituto Superior Tecnológico Cotopaxi" is the lack of dynamic material to practice and reinforce the language process. As in Ecuador, the education system is free of charge in every aspect; laws impede students to get material that could be beneficial to develop the four skills of the language. This aspect forces teachers to use any other material from old books and the internet that are not very beneficial and, in most cases, does not have a sequence like specialized books have.

Regarding the formulation of the hypothesis of this research, its approach is presented below: The use of technological learning resources affects the development of the English A1 students reading skills.

Regarding to the objectives of the present research, the general objective is:

To implement a technological tool for the development of English language reading skills in students from the A1 level of the "Instituto Superior Tecnológico Cotopaxi" according to the Common European Framework (CEFR).

The specific objectives are the following:

- To develop the theoretical framework to support the conceptual and scientific technical bases that define reading skills according to the CEFR at the A1 level and the technological resources.
- To determine the guidelines of the methodological design that allows data processing and analysis.
- To design a technological tool for the development of the English skills in students.

Regarding the methodological design of this research project, a mixed research approach was applied, from the qualitative to the quantitative context, concerning the research design; a quasi-experimental method was applied, since two groups were compared that were not assigned randomly. Regarding the level of depth, it is applicable because a product was generated with web tools, which was applied to a group of students at level A1. In the research modality, the socio-educational modality was chosen because it allowed validating the educational hypothesis

based on the achieved learning process of the students. In addition, the types of documentary and comparative research were applied to validate the theoretical conceptions and to be able to contrast the study of two research groups, one control and the other experimental. Then, on the research method, the hypothetical-deductive method was used to deduce conclusions from the hypothesis raised using a t-Student test. Finally, the collection information instrument applied was the survey, directed to the experts who collaborated with the research. An interview directed to each of the students, applied through an evaluation rubric, to know the reading skills of the English language they acquired during the research development.

Then, to establish the proposal of this research, the design methodology "Design Thinking" was used, to match the needs of experts, technological resources and the development of reading skills of the English language proposed by the European Common Framework of Reference. Finally, as a methodology for teaching foreign languages, the Presentation Practice and Production (PPP) instruction model was used, through which it was sought to enhance the learning levels of the students.

The present investigative work is of absolute importance. It is justified because the limited application of technological tools prevents students from getting involved when improving their knowledge. Regarding the students reading skills, they need activities to be able to read and understand a text, for which it could be argued that the lack of use of technological tools and reading strategies makes teachers use traditional methods that they still maintain in their teaching-learning schemes.

The use of technological resources aims to cause a tremendous impact on the student; since its use aims to help improve their knowledge through the use of innovative teaching methods with the help of the Internet and based on the use of technological tools and resources, which allow the development of the student's abilities, skills and knowledge, and from this way to improve reading skills, student's grammar, vocabulary, and spelling.

The present research has a high degree of originality because it is based directly on the theory of expert researchers in order to generate more significant impact among the educational community. It is sought that with the use of technological resources, students' knowledge will

improve opening the door to new teaching methods to arise the students' commitment and practice in the English language.

In addition, there is a personal interest in knowing the reasons why the teacher-students do not use technological resources in the institution, for this reason; this research will serve to solve this problem and, in turn, to use new teaching models, which in the future will allow the institution to be characterized by providing quality education, especially in the teaching of the English language.

The project is feasible for its realization because it has the unconditional support of the authorities, coordinators, and students who belong to this institution. In addition, there is enough bibliographic material for the development of this investigative work and, above all, the predisposition of teachers in the English area who are knowledgeable on the subject and who provided me advice and unconditional support.

In the proposed topic, the beneficiaries of this research will be directly the students since they will improve their reading level through technological resources, allowing them to be immersed in technology, the same as today is vitally important. It is worth mentioning that teachers will also benefit from it because applying new teaching methods and support material to teach their classes will allow the generation of different activities and thus eliminate the traditionalist pedagogical paradigm.

CHAPTER I. STATE OF ART AND PRACTICE

1.1 Technological resources

TICs

According to UNESCO (2015), ICTs (Information and Communication Technologies) can complement, enrich, and transform education through various ways in which technology contribute to universal access to education, reduce learning differences, improve quality and belonging to learning management and administration of education.

Education through technology must be, as UNESCO mentioned, a fundamental tool and a citizen right on which education can rely; therefore, technology in English language teaching is the most influential tool for teaching because it helps students be more aware of the language. Having an instrument to practice even more when they are not in their class is essential because meaningful learning happens. After all, students remember even more.

As mentioned by Olmedo et al. (2017), on the use of TICs in education, referring that these tools influence current society, representing new challenges in teaching-learning through the influence on the acquisition and strengthening of clear knowledge, this depends on the impact it has on both the teacher, the student and the factors that influence the accessibility of these tools that mediate the updating and training processes

TICs have a significant impact on education, even more when there is accessibility to it. Regarding Ecuador, there are thousands of people that cannot afford to buy technological tools to have access to information on the net and if they can buy it. There are technological resources that are not free, and just those programs have trials that limit the student's learning process. That is why there is the necessity to have newly available tools that could help students learn more interactive.

Belloch (2017), mentions that Information and Communication Technologies (ICT) have been progressively integrated into educational centers, emphasizing the teaching process in which the student receives information from the teacher, which will guide their education by promoting interaction and collaborative learning using technological tools such as the internet, information and resources provided by the teacher becomes a good ally in these media if they are used in

accordance with the postulates of socio-constructive learning and under the principles of meaningful learning.

Interaction and collaborative learning can happen when there are means that contribute to the process; furthermore, when a person learns a foreign language, one aspect that accelerates the learning process is getting information from their peers, students also learn from their mistakes, but they assimilate information better when they interact with others. In addition, any activities or information that teachers have to consider to teach must be meaningful, relevant, and according to their level; if students receive information that is not relevant, demotivation will occur, and the learning process will stop.

Regarding English and the ICTs, the new model in education should be based on what students need to learn, the relevance of the content and more importantly the way how students are going to learn; in this sense, technology in most developed countries is vital for learning engagement especially referring the study of languages thus the different productive and receptive skills need specific content according to the level of the student. Finally, teachers' knowledge in these topics should be extensive so they will not complicate their lives trying to succeed in a class where students might be competent in technology use.

Online Platforms

Online platforms also called digital platforms, according to Sánchez (2017) are spaces on the internet which allow the execution of programs and applications on the same website in order to satisfy different needs. Each online platform has different functions that help users solve any type of problem that may arise. The objective of every platform might vary according to the user's need.

Ladrón (2019) proposes that the types of online platforms are generated according to the problem to be solved; the most common and currently used are Educational Platforms which are focused on distance education and complement face-to-face education, .The most used are Blackboard, and - College and Moodle; Social platforms also known as social networks currently used in social interaction such as Facebook, Instagram, and Twitter; E-commerce platforms which can be used in the purchase and sale of products regarding those are Magento,

Tendianube, specialized platforms created to meet the needs of a targeted group of users, for example creating platforms to help with digital marketing related tasks.

Online platforms in the educational area have had a great reception, Sánchez (2018) mentions that the use of virtual platforms by users (students) is more common today, and this allows the contribution of multiple benefits and advantages such as: encourage cooperation and collaboration, facilitate access to information, encourage debate and discussion, contribute to the development of skills and competences, motivate the learning and participation of young people.

Web Applications

Lerma-Blasco et al. (2016), mention that the architecture of web applications consists of the interaction of machines connected to a network that can be through the Internet or a corporate intranet, following the client-server scheme, the most current web applications, and with more tools and functionality are created from of the XXI century, in the stage of Web 2.0, with the emergence of fixed access technologies (ADSL, Cable Modem) or mobile (UMTS / 3G, LTE / 4G), which expand the bandwidth, giving connections more powerful and accessible to the Internet.

Web 2.0 as a virtual platform has positioned the user as a mediator of their information, where services are the primary key to the core, in which data, non-packaged software has not been limited to just one device and the use of intelligence collective. The evolution of Web 2.0 led a step forward to the new Web 4.0, in which most platforms work now. This interaction helped system evolution and the development of new resources to work.

As mentioned by Berzal et al. (2017), web applications are applications whose interface is built from web pages and if the web pages are text files with a standard format called HTM (Hypertext Markup Language), and these are stored on a web server using the protocol by which HTML (Hypertext Transfer Protocol) communicate. The web application is accessible to the user as long as a web browser is installed without installing it previously.

Web applications have helped education have more access to resources and information; also, more storage on the web serves helped to insert more multimedia resources to make web pages

and applications more interactive and also helped to have more resources that students can use to increase their knowledge. Consequently, teacher's creativity arose, and information sharing occurred when web pages received it.

Luján-Mora (2016) distinguishes web applications into three levels: an upper level which interacts with the user, the lower level provides the data or better known as the database, and finally, the intermediate level referred to the webserver which processes the data. These three levels allow the functionality of a web application (web-based application), a client/server interface where the client, the server, and the protocol are standardized and do not have to be created by the programmer.

The three levels of web applications that are mentioned on the paragraph from above, cannot be managed by language teachers, the upper level is the one that they can get access to because is the superficial part from the app and the only one that can be seen by people who is on the web. The two other levels people can have access who have management knowledge level that can create, design or incorporate things that can work with multimedia resources.

Web applications interface permit that all the content are placed into the database that after can be shared with the different users to promote its use, Regarding the English language and the applications must have a sequence on the content that is going to be related with what students are going to learn. Therefore, the information placed on the app must be significant and also need to very visual to engage students learning.

Virtual Learning Objects

According to Cabrera et al (2016), the OVA (Virtual Learning Objects) do not have a unified concept given that there is no consensus on the definition of learning objects, however, the definitions provided and more accepted refer that the OVA are virtual objects and pedagogical mediator designed in order to generate learning in the various educational modalities, this can be consulted through the internet.

Many people have used OVAs in their lifetime, but they do not know what they are. Furthermore, many people have created them and have them on their daily educational basis. These elements have had a significant impact on the learning process because they give students

learning support to deepen their knowledge. In addition, a new OVA can be modified or created from an existing OVA, improving its content or using it in other contexts.

Veytia et al. (2018), consider that Virtual Learning Objects (OVAs) have their own entity and are reusable; they become digital entities shared and distributed through the internet with simultaneous access possibilities which are created by specialists to build pieces of educational components and reusable in different contexts, these teaching tools allow generating a more detailed and in-depth knowledge when interacting with technological tools.

Regarding language teaching and the use of virtual learning objects, it makes teachers do their job easier because instead of having pieces of paper to give to students, they can use them and reuse them, modify them any time they want. Moreover, because referring to standard classes, nowadays, the impact of COVID-19 has made students stay at home to receive classes virtually, so OVAs are part of the virtual life of students and teachers.

Feria & Zúñiga (2016), mention that an OVA can be created in different formats such as; HTML, XML, JPEG, PDF, etc., and it must have characteristics that allow it to be a didactic and interactive resource, it must be reliable, structured, compatible with devices, have multimedia aspects, authentic and with an attractive design, all these characteristics allow the user to have a positive interaction with the interface improving their learning.

According to the authors, OVAs need to have characteristics that can be compatible with any device in which the student has accessibility. Furthermore, regarding language teaching, especially in reading activities, these materials must be created in PDF, JPEG, XML, and HTML format. Finally, OVAs are attractive for students, which is one reason why these elements are suitable for a perfect lesson when they are organized in a specific place.

Adobe RoboHelp 2020

Weelden & Siegel (2019), define *Adobe RoboHelp* as a Help Authoring Tool (HAT), its primary function being to allow users to quickly create help files, policy listings, and knowledge-based content in a rich media environment. With HTML5 and CSS3 engines, the application allows access to interactive and responsive functions, full support for the implementation of HTML5. In addition, mobile access platforms also have advanced features with the help of Dynamic

Content Filters, which helps create collaboration tools, custom logarithm integration, auto-correction, Etc.

In this new technological era, information and communication technologies-ICTs facilitate access to educational content and reduce the burden of exposure in class in favor of giving more significant emphasis on specific topics. It is essential not to lose sight of the fact that in this context, the acceleration of the search processes requires developing two skills in the students that allow them to improve their selection criteria, evaluation, and application of the results of their computer-mediated search.

Adobe RoboHelp, creates basic information systems in which it can be included tables of contents, sections, glossaries and also allows the development of help systems, organizational policies, and online learning content based on professional knowledge in dynamic web pages being attractive for the user and easy access either by internet, intranet or extranet. (*RoboHelp User Guide*, 2021).

One of the essential features of RoboHelp is the attractiveness that its interface has; also, the accessibility that people can get is determinant because people can use it whether via the internet that is when it is open for every person that wants access to it or intranet that is when people can use it when they are inside a local network. If institutions have or do not access to the internet, this technological tool can work either with or without it; just a network must be set in the institution to work with it.

Talledo & Venancio (2016), mention that Adobe RoboHelp Software is a documentation tool for software products which allows to deliver differentiated content through screens, using HTML5 multiscreen, and allowing to generate outputs with just one click, it has accessible functionality for projects or to publish content in EPUB 3 formats, KF8 and MOBI, always maintaining efficient maintenance and storage integrated in the cloud and also allows collaborations on shared topics and PDF reviews.

Moreover, RoboHelp can gather all the information that can be required when someone is building a website. Multiple language platforms have lots of resources that make learning easier and enjoyable. Unfortunately, most conventional platforms can work only with internet access,

so even if they have good content, there is no possibility that people can have access without it. RoboHelp can do that and much more because there is no need for the internet to use its content.

Along with the author's perspective, RoboHelp as a software documentation tool is an excellent instrument for organizing material regarding English language teaching; this instrument has everything to create a website in which audios, readings, and another kind of multimedia to generate a sequence of content according to the necessities of the people who tend to use a dynamic tool to work or study.

HTML 5

García (2021), defines HyperText Markup Language or hypertext market language (HTML), a language through which someone can create internet pages, its function being to show the order of the content of the web page, this is done through the so-called tags these serve to define the different elements that make up a web page such as images, texts, lists, multimedia files, Etc.

The HTML language is an essential feature that a web page must have; therefore, this language coding helps programmers develop web pages inserting images or other multimedia sources into a specific place in a website. The set of codes can be gotten through the internet; most of these templates are available for different purposes. Despite the content that is developed, in many cases, websites accept collaborative information that in most cases is not relevant; that is why people who create these websites need to discriminate the information to build a good website.

In accordance with Casabona & Ceci, (2016), consider as fundamental characteristics of the HTML5 simplicity since it tries to make the code of applications and web pages more simple and accessible concerning previous versions, the manageability of applications since it reduces to the maximum the number of plugins installed by the user It also has device independence, that allows developing sites and applications that are compatible with different devices and achieve an excellent visual design for each of them, and finally, it allows to introduce better marking elements which develop an acceptable semantic structure which makes the sites accessible without difficulty.

Easiness is a characteristic that HTML language has because it helps build websites simpler no matter how much the person will use it. Regarding language teaching, considering the different

websites, most of them are very easy to use. All of them have been developed with this amicable language that all the people use. HTML allows giving structure to a web page to achieve the organization and visualization of the content. That is a set of tags that define text, images, videos, Etc. Currently, the version that is used at the moment is HTML5.

Malqui (2018), mentions that the HTML5 language is currently a recognized standard globally, and its standards are defined by the W3C body (World Wide Web Consortium of the network of internet-based web pages). This version incorporates new labels and improves the areas in the incorporation of multimedia and evaluation of forms, constituting this an advance of current web design concerning the user's needs. In addition, the new standard is available for all browsers offering tools for the creation of more accessible pages such as semantics, forms and multimedia.

The authors did not mention that without HTML, no internet pages will be able to come out; even though is considered a language programming, it is the base of everything where all the webpages are mount on the internet. Every single web page that needs internet connection need to have it to function perfectly.

JavaScript

According to Prescott (2017), JavaScript is a light programming language and interpreted just in time, implemented with first-class functions. Although it is well known as a scripting language for web pages, also used in non-browser environments such as Node.js, Adobe Acrobat, Apache, and CouchDB, this programming language is based on prototypes with support for object-oriented programming such as functional programming.

Arenaza & Erickson (2019), define JavaScript a programming language which is used for the creation of dynamic web pages incorporating animated texts, actions that are activated with buttons and messages appear for the user, in short it is an interpreted programming language that is incorporated within the web page, and is part of the HTML code, enters any browser without intermediate processes.

Java Script is the third layer of the cake of standard web technologies; it is used mainly on the client-side (that is, it runs on the person's computer, not on the server). It allows creating

stunning effects on websites. Java Script permits that a web page can show interaction in its content. It also shows timely content updates, interactive maps, 2D / 3D graphics animation, displacement of video reproducing machines, Etc., whenever these features can be seen on a website, JavaScript is involved.

Luna (2019) considers that the main essence of JavaScript is taken from the C language and that it is currently integrated into the engine of the most popular web browsers such as Google Chrome, Mozilla Firefox, Opera, Safari, and Internet Explorer depending on the web implementations. The motor may or may not have certain particular functionalities.

In accordance with the author, Java Scripts allows to have dynamism between the elements in the most popular browsers available on the internet. This characteristic helps those websites to be more interactive for their users. Finally, this programming language adequate different functionalities in terms of accessibility and usability.

Cascading Style Sheets CSS

According to De Luca (2018), in its definition of Cascading Style Sheets (CSS), they are cascading style sheets that allow defining the display rules of the web page in a medium or device, that is, to establish design characteristics such as colors, measurements, size, etc., These characteristics will be reflected on the monitor screen, mobile phones, printers, tablets or television.

CSS style sheets allow various utilities and among the most important, Aubry, (2017) mentions the following: Separate the structure of the page and its content (HTML) from the text and page format, more possibilities of formats and presentations of the page, regroup the styles, make quick updates, define a style once and apply it as many times as desired, avoid errors due to causes of repetition.

De La Cruz (2020), considers that having the content of a separate file from the presentation gives way to ensuring the content and that it will remain accessible in case the CSS file for any reason is disabled or overwritten; this is since it handles efficiently handling of fonts, colors, text styles, color scales, and different parameters. Using CSS can modify the visual order of the elements that go beyond the order in which the code is written.

From the perspective of the authors CSS, define any style that need to have the website that is under construction, along with the other elements presented before, the CSS style, come inside the RoboHelp package and at that point is easier to create the content and have the specific requirements to insert any element that is needed.

1.2 Learning Reading Skills

Language

García et al. (2017), defines language as the universal faculty of the human species through which they communicate, fulfilling a communicative function. This is because of intentional transmission of information; since human beings use different means of communication, there is gestural or mimic language, tactile language, written language, and verbal language, and all lead to a communicative purpose.

Valles (2016), defines language as the fundamental element of human development and a vital source for integration, considering that the communicative process of the human being is primarily language from the first years of life generates oral communicative acts. Through development, skills are specified through complex codified systems because by utilizing the language, either oral or written; people can have access to knowledge, social adaptation, and effective communication.

Learning a language is the soul of any means of social integration. Even though a language can have different ways to communicate, the most important is oral communication. People in their daily activities can have different information needed to be shared: People, because of the necessity to communicate, have created languages that vary from place to place according to their geographical setting. Language is the most beautiful tool that a person could have to express their ideas and feelings, without it the world would not be the same.

Rueda & Wilburn (2017), mentions that nowadays, due to the originality and modernity of the teaching methods, learning a foreign language must be based on the oral and communicative practice of the language, in addition to the exercise of grammar, for which reason it is imperative to know the rules and principles structure and use of a language, for this he suggests using

analysis methods such as phonology, morphology, syntax and semantics to guide practice according to needs.

Different types of language have different ways of organizing information, in addition to the way people use the language according to the area or region in which they live, the complexity of what language implies, it can only be understood when studied in a comparative way, the comparison of languages like English with languages like Indian or Asian languages are totally different beginning from their alphabet as well as the way how the phonetic of the language.

Language is the crucial globally tool no matter what language people speak, and communication is the substantial element that helps people live in a place without barriers. It is also power, and regarding the English language, it is the leading language among every nationality to communicate, do business and study no matter the person that travels to any part of the world, knowing English could be the benefit to have a better life in terms of education, work or even leisure activities.

Language Skills

According to Centro Virtual de Cervantes (2017), defines language skills as the ways in which the use of languages is activated. Generally, didactics classify them depending on the mode of transmission, whether oral or written, and their role in communication being productive or responsive. Four skills are presented in a language: speaking, writing, listening, and reading.

Language skills are developed according to the way how people are immersed in the language. In some cases, students develop their skills differently because teachers present activities that are sometimes more motivational and meaningful than others. The development of receptive and productive skills also depends on the student's ability to perceive the language and how their multiple intelligences are set into their brain.

However, the Common European Framework of References for Languages (2003), refers to these skills as language activities, dividing them into five areas instead of the traditional four, they argue that within oral expression two sub-skills are grouped, these being; the ability of an individual to speak while the other consists of the ability that he possesses to interact either in a conversation or debate.

The Common European Framework of Languages as the principal regulator helps institutions consider what language learners need to know in the specific areas, they need to consider to develop the different skills of the language. The four skills of the language for some people can become complex to develop, but because of CEFR bands, educational institutions can divide the different levels from an A1-C2 in their curricula with the content they have to know by each level, which means that an A1 cannot learn complex content that a B1 student needs to produce.

Moreno (2018) presents practical examples of linguistic skills considering the four traditional skills: listening comprehension refers to listening to a song, oral expression to leave a message, reading comprehension with reading a label or a book; and finally, written expression, writing an email alluding to these primary processes to four verbs; listening, speaking, reading and writing, also refers that the neurological and physiological processes involved in these skills are unidirectional and relatively simple as long as the user has a sufficient command of the language used and the mobile media involved.

The four skills are continuously developed in different ways. Many people stay for a long time in the silent period that is the initial time in which a person receives all the information to produce later little by little. Many people get blocked in this phase because of lack of practice. It is recommended to practice the language to have a better dominium and competence so they could be understood by others.

Receptive Skills

According to Castro (2016), receptive skills are known as oral comprehension and reading comprehension; since the individual does not need to produce a language or message, receives it, and understands it due to these actions, it can also be called passive ability, but nevertheless, it becomes a skill active at the moment of receiving the language and decoding the meaning in order to understand it through what is heard or read.

Maldonado (2012) proposes that the acquisition of a new language depends on some factors and that it is related to receptive skills together with productive skills, the development of one skill helps the other, reading comprehension and listening comprehension comprise a physical and Interpretive where there is an analytical process in which the individual captures the information

in oral or written form, understands it but does not produce it, the development of receptive skills is gradual.

According to Durán (2001), in his lecture on the use of receptive skills to help the student in mastering the English language, he considers that receptive skills are Listening and Reading, which focus on developing vocabulary and continuous improvement of grammar, through reading and audio exercises generating a level of perception, reading speed and improving the ability to interact with native speakers of the language.

Receptive skills are the skills that a person does not need to produce anything because people perceive what others communicate. Those skills are the most important because input is always needed to produce back a response later. Even though they are separate skills, they need reading and listening to work together because the ears perceive the oral skill, and the eyes can perceive the reading skills. If people cannot see, they would not be able to read, or if a person cannot listen, they would not be able to hear and understand what the other person tried to say.

The receptive skills help understand the language before producing it to communicate feelings and any information people need to express. Furthermore, the authors stipulate those receptive skills need one another; In this case, reading and listening must be engaged to produce a better understanding of the language, and if a person needs to express something in the target language, first they need to be able to understand what the other person needs.

Reading skills

Castillo (2018) considers reading as an activity that allows information to be obtained, which is incorporated into cognitive structures to be processed and conformed to instruction and knowledge for its management in different areas, discipline or subjects, highlighting reading of a procedural nature: reading is a Cognitive process which comprises a series of sub-processes such as information retrieval, information hierarchy, hypothesis formulation, data processing relating what is learned with what is already known, processes that the reader develops as progress is made in the reading.

Reading because of its complexity, vocabulary, and grammar sets are needed before understanding the language. The reading process must start gradually according to the

complexity of the texts that are presented. Learning how to read might be complicated but not impossible. One of the essential factors to learn how to read would be to have exciting readings to read according to the learner's level not to be complicated when understanding a text.

Grijalva (2016) considers that reading is a form of knowledge which helps to find solutions in life. In many cases, it can be considered as a form of pleasure and happiness, enriches knowledge, and contributes to the search for vital answers through written texts; these can be Scientific, literary, or educational, all have the purpose of transmitting knowledge as soon as they arouse the reader's curiosity.

According to the Common European Framework of References (2003), in reading comprehension activities, the user as a reader receives and processes the information from written text entries either by one or more authors, some of the reading activities that he proposes are; read for general guidance, read for information, read for directions, and read for pleasure.

Reading skill is the most critical skill and listening because the first thing a person does when learning a language is to perceive the language, whether by listening to something or understanding a text. Reading can be hard when the text is more complex than the level at which the person is. Readings need to be given to students according to the level, and the level of difficulty should be gradual, just in that way a person would be able to be competent in the language.

Karaoke Reading Function

García & Gómez (2017) consider that the function consists of highlighting or amplifying the text as a track develops, this function is quite useful for individuals who are beginning to enter the world of reading since it is common to use these technological applications in the educational environment, orienting it to learning literacy and developing their cognitive abilities.

Martín et al. (2016) refers to the use of the karaoke function to improve the reading of the English language mentions that when these tools are used, students improve their pronunciation of the foreign language, the use of the karaoke function to read the foreign language from the point of view of Cultural view provides benefits since speed or tonality do not alter the transmission of linguistic content.

Karaoke is currently very popular, which is why Alberdi et al. (2016) mention that these technological tools have a great acceptance in educational activities regardless of the age of the consumers, having their main didactic applications both in the management by the teachers and by the students, the teacher can give a dynamic and motivational class for the Meanwhile, the student practices reading and linguistic pronunciation depending on the content that is presented.

1.3 Teaching-Learning Foreign Language

Concerning what was mentioned by Ussa (2017), certain elements are immersed in the learning and acquisition of the foreign language, which include those that have already been developed previously in the process of acquisition of the mother tongue, such as the development From creativity, imagination and the construction of logical thinking, these learning elements contribute to restoring thought and the creation of communication links with the new language.

Ricoy & Álvarez-Pérez (2016) mention that learning a foreign language has visible obstacles in terms of the teaching style and method applied by the teacher as there is a diversity of methodologies that are attractive to students such as; Grammar-translation or traditional method, direct method, audio-oral method, audiovisual method, communicative approach and project-based learning, the application of these methods generates active participation between the teacher and the student, facilitating the teaching-learning.

Chávez-Zambano et al.(2017) state that in Latin America, teaching and learning a language other than Spanish have become a challenge in professional training since there are still difficulties in teaching languages. Furthermore, it has slowly incorporated the study programs with this; the desired results have not been achieved in the students in their graduation in terms of knowledge and dominium in at least one foreign language.

Teaching English Language Learning

According to the EF English Proficiency Index, more than a million people speak English as a first or second language, for most people, English proficiency expands horizons, reduces barriers and accelerates the exchange of information, nowadays scientists, engineers And researchers cannot miss out on global innovation due to language barriers, these being the

incentives to learn English, despite all the demand for English proficiency far exceeds supply and a total command of the language is not achieved. However, in the last surveys carried out in Latin America, 12 out of 19 countries improved their English proficiency in the last evaluations carried out as seen in the following image. (Education First, 2020)

In March 2000, the Ministry of Education issued the Ministerial Agreement (746), Ecuador (2021), which directs its efforts to the pedagogical and curricular improvement of the English language, for this, it agrees to ratify the hourly load of five class periods per week for learning the English language in the eighth, ninth, tenth year of basic education and in the three years high school, considering that currently the English language is one of the most used worldwide.

Colcha et al. (2019) mention that the teaching of learning the English language is supported by various techniques and methods that allow direct interaction, through which teaching will fulfill the role of transmitting knowledge and teaching grammar, vocabulary, oral expression, listening comprehension, reading, and writing in which learning must be received autonomously towards whoever is directed, however, the teacher must have communication techniques acting as a facilitator. At the same time, the student agrees to use the English language as long as possible.

Basic Learning Standards

According to the Ministry of Education (2021) learning standards are descriptions of the learning that students are expected to acquire and constitute standard references that they must achieve throughout their student career, this has the purpose of helping, guiding, and monitoring the actions of the actors involved in the educational process are aimed at creating continuous improvement and offering resources for decision-making regarding public policies in order to achieve a high level of quality in the educational system.

According to the Organic Law of Intercultural Education (LOEI) (2017) In its Art. 22 Competence of the National Educational Authority defines that the standards and indicators of educational quality will be used for the evaluations carried out by the National Institute of Educational Evaluation, it is mentioned that the standards will be of at least two types: curricular which refers the student's academic performance is aligned with the mandatory national

curriculum; professional which refers to the performance of the entities that belong to the educational establishment.

Monteagudo & López (2018) mention that learning standards have their stipulated components: skill or ability, content, demands, context, condition or practice, all these components focus on creating an egalitarian education implicitly or explicitly for all young people, which will strengthen their incorporation into the field acquiring knowledge according to their curricular design.

Common European Framework of Reference for Languages

The Common European Framework of References (2003), provides a common basis for the development of language programs, exams, manuals, etc., throughout Europe, describes in an integrative way everything that language students have to learn and do in order to use a language to communicate, proposes knowledge and skills that they must acquire during their development in order to act in an effective way and defines the levels of mastery of the language through which the progress of the students in each phase of learning during the course of their lives is checked.

Rey et al.(2016) consider that the insertion of the Common European Framework of Reference for Languages has been given with novel approaches and distant from traditional methodologies, in reference to the theoretical-practical requirements and the socio-professional and communicative capacities that this framework requires, its elaboration is It is adapted in a hierarchy-subordination approach from the systemic-structural-functions method, through this strategy it allows the strengthening of a teacher-student interaction, achieving a more leading and committed participation.

Broek (2017) defines the CEFR (Common European Framework of References) as a document that has specific measures aimed at the elaboration of policies, study plans, text development, teacher training, and evaluation, for which it suggests an adequate and coherent use of the CEFR that is, assume the responsibilities of facilitating and coordinating cooperation between all parties involved in language teaching this includes all language policymakers and education

administrators promote awareness of language use and language skills with regard to language education.

Linguistic Politics

According to the Common European Framework of References (2003), the linguistic policy is the action of an Administration, these policies have the objective of determining how and in what field the languages can be used and to cultivate the competences of the students. For this, it divides them into proficiency levels; Level A1: Corresponds to the beginner level; Level A2: Corresponds to the elementary level; Level B1: Corresponds to the intermediate level; Level B2: Corresponds to the upper intermediate level; Level C1: Corresponds to the advanced level; Level C2: Corresponds to the very advanced level.

Reyes et al. (2019) mention that language policy is related to the development of public policies: it uses state policy in order to influence the status of languages and the use of the same that are under its jurisdiction by regulating agreements that guarantee a representation and equitable participation of language groups in legislation, jurisdiction, and administration.

Language policies are recognized and put into practice in the social environment given this Johnson (2016), from his sociocultural point of view, he proposes language policy as a component that directly impacts the structure, function, use and learning of a language, it also implies an official regulation, which provides economic, political and educational opportunities, it also maintains Implicit mechanisms that establish the use of language and interaction in educational, work and social environments.

The misconception of the role of the Common European Framework of Reference for languages is big without noticing that its framework gives the perfect reference in how people need to learn a language and what an educational institution must do in order to create its curricula to help students to learn a language. Furthermore, to have different bands from A1-C2 means that when gradually learning to communicate, they will obtain their proficiency in a particular time.

Teaching Methods

From Alcoba's perspective (2016) a teaching method is the set of activities and techniques that a teacher uses in order to meet one or more educational objectives; they must be related between the method and the teaching purposes; in this way, the techniques and activities applied in the classroom make sense as a whole and respond to all the learning needs exposed and shared by a scientific community.

Rosell & Paneque (2019) they consider teaching methods as the modes of action of student teachers, which are developed in an orderly and interrelated way, to facilitate teachers assimilation of the content to be taught, since its aspect must be taken into account internal or logical operation that predominates in each stage of learning, a fact that provides the independence and creative activity of the students.

From the point of view of Navarro & Samón (2017) teaching methods are immersed in what are pedagogical conceptions since it is a process of teaching and learning direction, this being a complex process due to the presence of convergent and divergent mechanisms used by various actors of the educational system, which have the function of transmitting the teaching content on the one hand, while on the other hand it is the way to get the content and for the receiver to assimilate it.

Presentation, Practice, and Production (PPP)

Blake & Zyzik (2016) define Presentation Practice Production (PPP) as a sequence that represents a pedagogy that assumes that explicit knowledge becomes implicit through the practice of this pedagogy. It is commonly used in learning a second language of a person or any other language that the person learns after his mother tongue; this second language is also called L2.

According to Sánchez (2019) Presentation Practice Production (PPP) is an instructional model that consists of teaching students the grammatical concept that they are required to learn, then the language used is shown in the same context that is practiced during class, finally the student produces the concept of what they have learned by themselves in an original way in order to internalize their learning.

Moreno (2021) considers that Presentation Practice and Production (PPP) is a class planning model that is based on the same deductive methodology that focuses on the teaching-learning process, this method is one of the most modern used by professionals in all In the world, in its beginnings this method was designed for adults, but upon seeing its results, it began to be implemented in primary educational centers.

Thinking-Based Learning (TBL)

According to the point of view of Prieto (2017) the Thinking-Based Learning (TBL) teaching method or critical thinking is an active teaching method in which it focuses on the student prioritizing the reasoning of the contents above memorization, the process of this methodology is based on the reasoning of the students in making decisions, comparing, counteracting, predicting, etc., on certain topics before being taught, in addition the teacher will give feedback, clarifying doubts of the students allowing them to know the topic before being studied or presented by the teacher.

There are new methodologies for teaching a foreign language, Andrade & Patiño (2021) mention that Thinking Based Learning is one of the most innovative and effective methodologies based on anticipating the shortcomings that affect the learning and acquisition of the English language by managing complex thinking such as improving ideas, active thinking, expanding skills and creativity in each subject, generating in the student interest in the acquisition of the English language.

The constant change in which education finds itself requires continuing to evolve educational practices and methodologies. Morron (2020) mentions that due to the educational transformation, the emergence of emerging methodologies such as Thinking Based Learning (TBL), which is an active thinking method which requires sequencing activities within it, in order to obtain a learning goal, with progress in each class, for example in an English class the student is assigned to carry out a task about his environment applying the use of simple language such as grammar or vocabulary, this makes the student get involved with the use of English, generating confidence language and logical thinking about use in your environment.

Comparison of virtual tools for the development of reading skills

Below is a comparative table of the different technological tools available in the market for teaching the English language, with which their applicability for teaching reading skills has been analyzed. Below in Table 1, the comparison is shown.

Table 1. Comparison between virtual tools for the development of reading skills

| Name | Features | Reference |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| ABA English | ABA English is a paid technological application that offers the opportunity to learn the English language from beginner to advanced level in a personalized and entertaining way through different tools that use conventional methods such as: live group classes, personalized lessons, ABA films and flexibility, offering certificates at each level legalized by ABA English. | (ABA English, 2021) |
| Duolingo | Duolingo is a 100% free technological application, it proposes to learn English with short, fun and effective lessons, with personalized learning methods, immediate response verification, stay motivated through prizes and continuous improvement as the lessons progress. | (Duolingo, 2021) |
| HiNative | HiNative is a global question and answer platform for language study, you can ask and answer questions about languages and cultures with native speakers from all over the world. | (HiNative, 2021) |
| Basuu | Basuu is a social network for language learning. It has 12 courses in different languages. Registration is free or people can purchase a premium subscription to access more features; grammar lessons, McGraw-Hill Education language certificates, and custom vocabulary exercises. | (Basuu, 2021) |
| VOA Learning English | VOA Learning English is a special Voice of America program dedicated to helping English learners around the world improve their English language proficiency. The program includes up-to-date lessons, stories, news reports, written in simple vocabulary and spoken at a speed that makes them easy to understand. | (VOA Learning English, 2021) |

Elaborated by: the author

From all the platforms reviewed from the list above, it is essential to mention that most of the platforms are paid, and, most importantly, none of them centers itself on developing reading skills. Having a different platform to develop that particular skill is vital.

CHAPTER II. METHODOLOGICAL DESIGN

2.1 Research Design

Research approach

A mixed research approach has been used in the present research work under a multimethod premise, where quantitative and qualitative approaches are mixed. (R. Hernández et al., 2018) where, with this approach, the validity of the research was increased through a triangulation of activities in the research process that broaden the comprehensive and complete vision for the development of English language reading skills in A1 level students.

Establishing the mixed approach as follows, from the qualitative context from the particular with a workshop of experts in which their expectations and interests were collected to then integrate them in a general way in the development of the proposal and then from the quantitative context The developed proposal was taken from the general point of view, taking it to the particular through hypothesis testing.

Research Design

Regarding the research design, what was applied was a quasi-experimental design, because the two groups of study were not randomly assigned, involving the comparison of the treatment and control groups as in the randomized tests; where the strategy applied so that the groups are equivalent was that their variances are equal eliminating the atypical data of the data groups, before applying the contrast tests, seeking confidence in the results.

Deep Levels of Research

In this research seeking to establish a depth of relevant research, the application depth level has been used, framed in technological and investigative innovation, always aiming for statistical evaluation to intervene irrefutably through the study of the implementation of the technological resources implemented to forecast their impact on the development of reading skills in the English language.

Research Modality

In reference to the research modality of this research work, the socio-educational modality was chosen. It allowed to verify the educational hypothesis regarding the social reality of the learner and develop reading skills based on daily activities.

Research Type

In reference to the types of research, for this project, two types have been used: documentary and comparative.

According to Parraguez et al. (2017), the type of documentary research is carried out by consulting documents, books, scientific articles, and magazines to bond the theoretical conceptions that validate the research. In this sense, the present research work has used this type of documentary research, mainly based on the Common European Framework of Reference for Languages, to channel reading skills in the English language.

According to Morlino (2016), Comparative research allows obtaining results to make precise hypotheses with which the characteristics, techniques, and problems proposed with two or more groups are explored, and it is aimed at highlighting the difference of the phenomena studied in the given contexts. Therefore, it is very convenient for the present research to work with this type of research since it has allowed applying the technological tool created and investigating the statistical behavior in the two population groups.

Research Method

Regarding the research method used for this research, the hypothetical-deductive method has been used, as indicated by Hernández (2018), It consists of a procedure that begins with assumptions as hypotheses, deducing from these conclusions that must be verified with facts. In this sense, the t-Student statistical test has been used for independent samples, in order to deduce if there are significant differences with the two study groups investigated.

Population

The population is defined as the set of people with frequent characteristics that are the subject of research (Ñaupás, 2014). Where the common characteristic of the population of this research is that they are students of the Languages Center of the "Instituto Superior Tecnológico Cotopaxi," specifically two groups of students of the Beginner A1 level, with eighty-two students in total, where to ensure that the two samples have equal variances, outliers were eliminated, specifically those that had scores lower than 7 points. Because the population is small, the need for a sample is not necessary, using the following data below:

Table 2. Population

| Class Level | Men | Percentage | Women | Percentage | Total | Percentage |
|-------------|-----|------------|-------|------------|-------|------------|
| A1 | 28 | 38% | 46 | 62% | 74 | 100% |

Elaborated by: the author

Research techniques and instruments

For the present investigation, two instruments have been used, which are detailed below.

The first is a pre-test instrument applied through a "survey," wherewith its application it is sought to validate three factors raised in the research, which are: the usability of the platform, methodological validity of the technological resources created, and verify compliance with the CEFR for the development of reading skills. To give reliability to each question of the survey, it has been done by applying the Likert scale and establishing a quality relationship with the obtained data. (Matas, 2018). Likewise, to give reliability to the results of the instrument, the Cronbach's Alpha statistic has been used, organized into three factors that link the correlations of each of the survey items (Duque, 2017). Proceeding to calculate the statistic with the SPSS software and accepting the reliability when the statistic is greater than 0.8.

The second is a post-test instrument applied by means of a graded "interview" with an evaluation rubric to the two groups of students who received the experimental treatment and the control group; therefore, after the end of the experimental period, an evaluation was applied to both groups on the dependent variable under study, obtaining a final grade. The interview was

established to measure reading skills according to the communicative processes of the CEFR of the language in a qualitative and quantitative way; with the data obtained; the contrast test could be applied in a concrete way to verify the incidence sought in the hypothesis.

Validity and Reliability

The survey was designed using a five-point Likert scale because it allows questioning about the level of agreement or disagreement of the experts, avoiding closed questions Matas (2018). The Likert scale applied is shown below:

Table 3. Likert scale applied

| Agreement level | Totally agree | Agree | Neither agree nor disagree | In agreement | Strongly disagree |
|-----------------|---------------|-------|----------------------------|--------------|-------------------|
| Given value | 5 | 4 | 3 | 2 | 1 |

Source: Survey for teachers
Elaborated by: the author

For data processing and reliability analysis of the survey, Cronbach's alpha statistic was calculated using the SPSS software package. This statistic allowed to evaluate the reliability and internal constancy of the set of instrument items. In addition, to calculate this statistic, the questions of the survey applied have been organized into three factors, which are detailed below in the following table:

Table 4. Survey questions grouped by factors

| Factor | Nº | Observation |
|-------------------------------------------------------------|-------------|-------------------|
| Platform usability | Question 1 | With Likert scale |
| | Question 2 | |
| | Question 3 | |
| | Question 4 | |
| Methodological validity | Question 5 | |
| | Question 6 | |
| | Question 7 | |
| Compliance with the Common European Framework of References | Question 8 | |
| | Question 9 | |
| | Question 10 | |

Source: Testing phase - expert workshop
Elaborated by: the author

In the present research, the results obtained by Cronbach's Alpha showed a coefficient greater than 0.8, which means that the instrument has an excellent internal consistency. Below is the Cronbach's Alpha statistic calculated for the three applied factors:

Table 5. Reliability Analysis - Cronbach's Alpha

| Factors | Reliability statistics | |
|-------------------------------------------------------------|------------------------|---------------|
| | Cronbach's alpha | Related items |
| Platform usability | 0,891 | 3 |
| Methodological validity | 0,838 | 4 |
| Compliance with the Common European Framework of References | 0,852 | 3 |

Source: Survey for teachers
Elaborated by: the author

2.2 Characterization of the institution

Historical review

The "Instituto Superior Tecnológico Cotopaxi" (ISTC) was established on March 8, 2017, after "Instituto Tecnológico Superior Ramón Barba Naranjo" was closed; and ISTC through a resolution from the Ecuadorian Higher Education Council (CES) RPC-SO-08-No.140-2017 began functioning. The institution comprehensively trains competent and innovative third-level professionals with an ethical, social, and environmental commitment that promotes sustainable territorial development. Moreover, the languages center contributes to improving the students' skills to find better opportunities for their life. (Instituto Superior Tecnológico Cotopaxi, 2021).

Mision

It is an institution of higher education, oriented to the comprehensive training of competent and innovative third-level professionals with an ethical, social and environmental commitment that promote sustainable territorial development. (Instituto Superior Tecnológico Cotopaxi, 2021).

Vision

To be a university with high-quality standards, a benchmark for technical and technological transformation that contributes to the sustainable and sustainable development of society. (Instituto Superior Tecnológico Cotopaxi, 2021).

2.3 Research Proposal

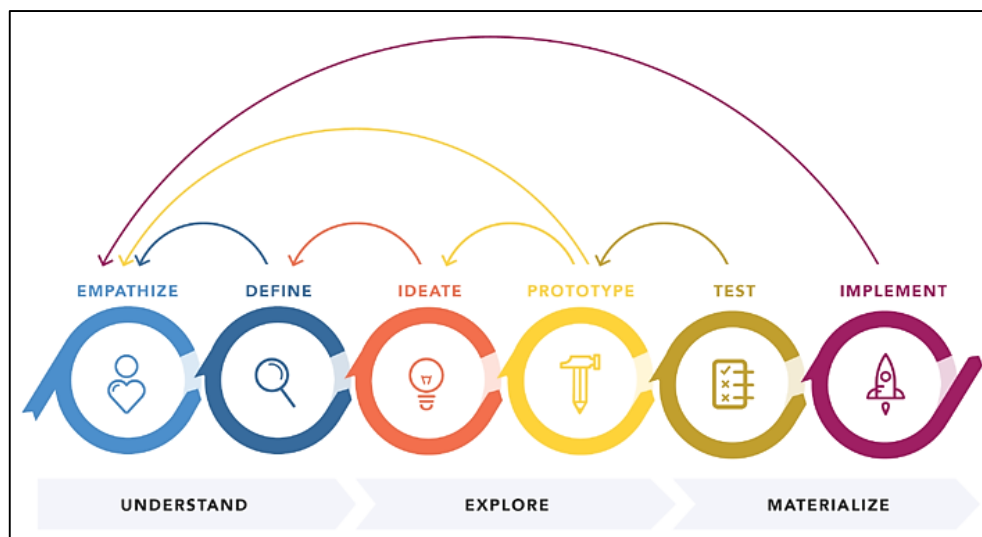
For the development of the research proposal, the technological learning resource developed has been named as "My first reading digibook", which is developed on a web platform, using the RoboHelp tool, under two methodologies that are explained below:

The first, with the design methodology "Design Thinking", (Echegaray et al., 2017), with which it has sought to identify the necessary requirements for the innovative development of technological resources for learning the English language based on teamwork, where experts contribute different points of view and knowledge, to match the needs of experts, technological resources and the development of reading skills in the English language proposed by the Common European Framework of Reference.

The second, with the foreign language teaching methodology "Presentation-Practice-Production" (PPP), specifically oriented for the development of reading skills in the English language, with which the PPP stands out as a concrete teaching method oriented to the apprentice as an entity with real communication that needs in daily life, prioritizing the guidelines of the Common European Framework of Reference, because this has become an essential guideline for the teaching of the foreign language. (Garrote, 2019).

Design Thinking Phases (DT)

For the execution of the DT methodology, there are the following phases: Empathize, Define, Idea, Prototype; those that are linked to determine the requirements of the experts towards creating a technological tool with practical resources that develop the reading skills of the English language in students at level A1. The profiles of the experts who have collaborated in this research are detailed in Annex A. Graph 1 shows the stages of the DT methodology with their connections.

Graph 1. Stages of Design Thinking (DT)

Sources: (Rodríguez, 2021)

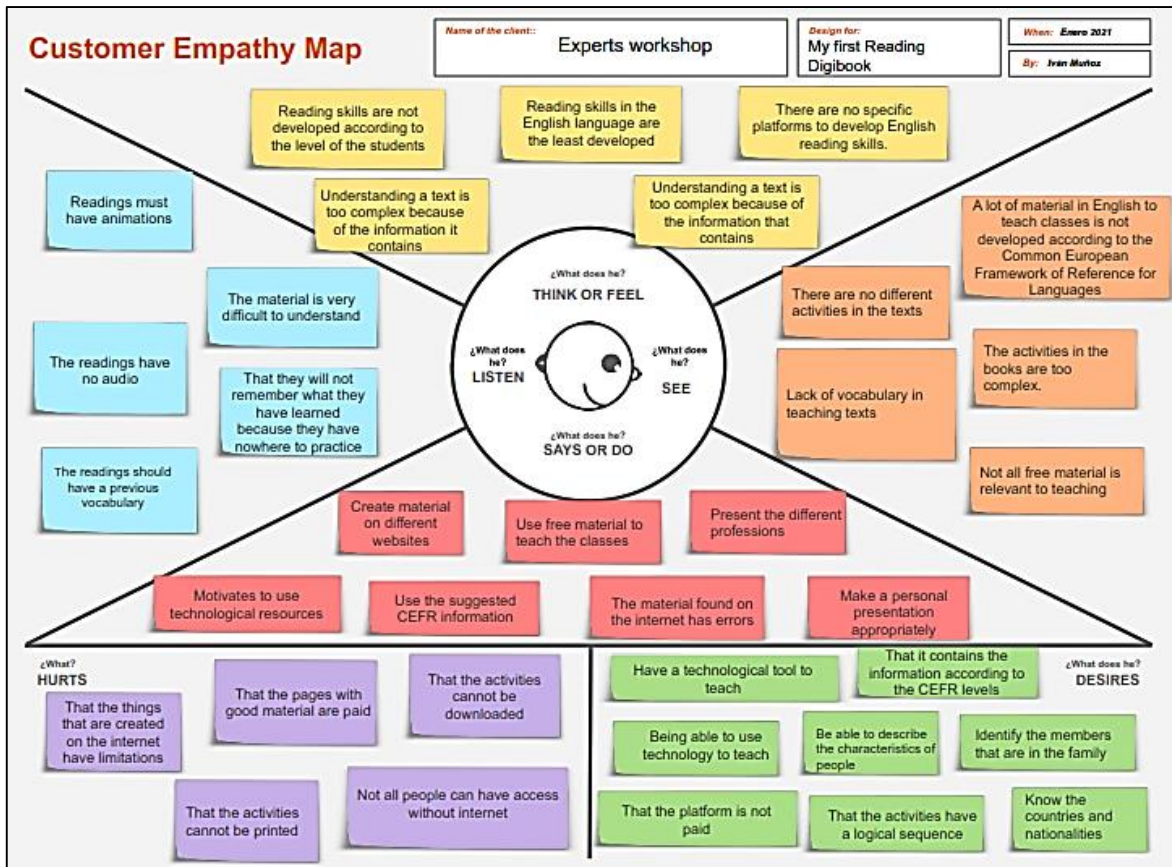
Development of the platform within the DT framework

Empathize phase

The methodological process refers to the first phase to empathize and deeply understand the experts' needs, with which the initial appreciation of the eight teachers of the Languages Center of the “Instituto Superior Tecnológico Cotopaxi” was obtained. As an instrument of this stage, an Empathy Map was used in which the following questions were reflected in a consolidated way: What do you think and feel? What do you hear? What do you see? What does you say and do? What does it hurt? What do you expect?

Under the general theme of generating technological resources and the development of reading skills in the English language proposed by the Common European Framework of Reference, the workshop was held in which all the experts, who were responding to the different questions of the empathy map and placing in the corresponding section through post-its. The results obtained are described in Graph 2.

Graph 2. DT Methodology - Empathize Phase - Empathy Map



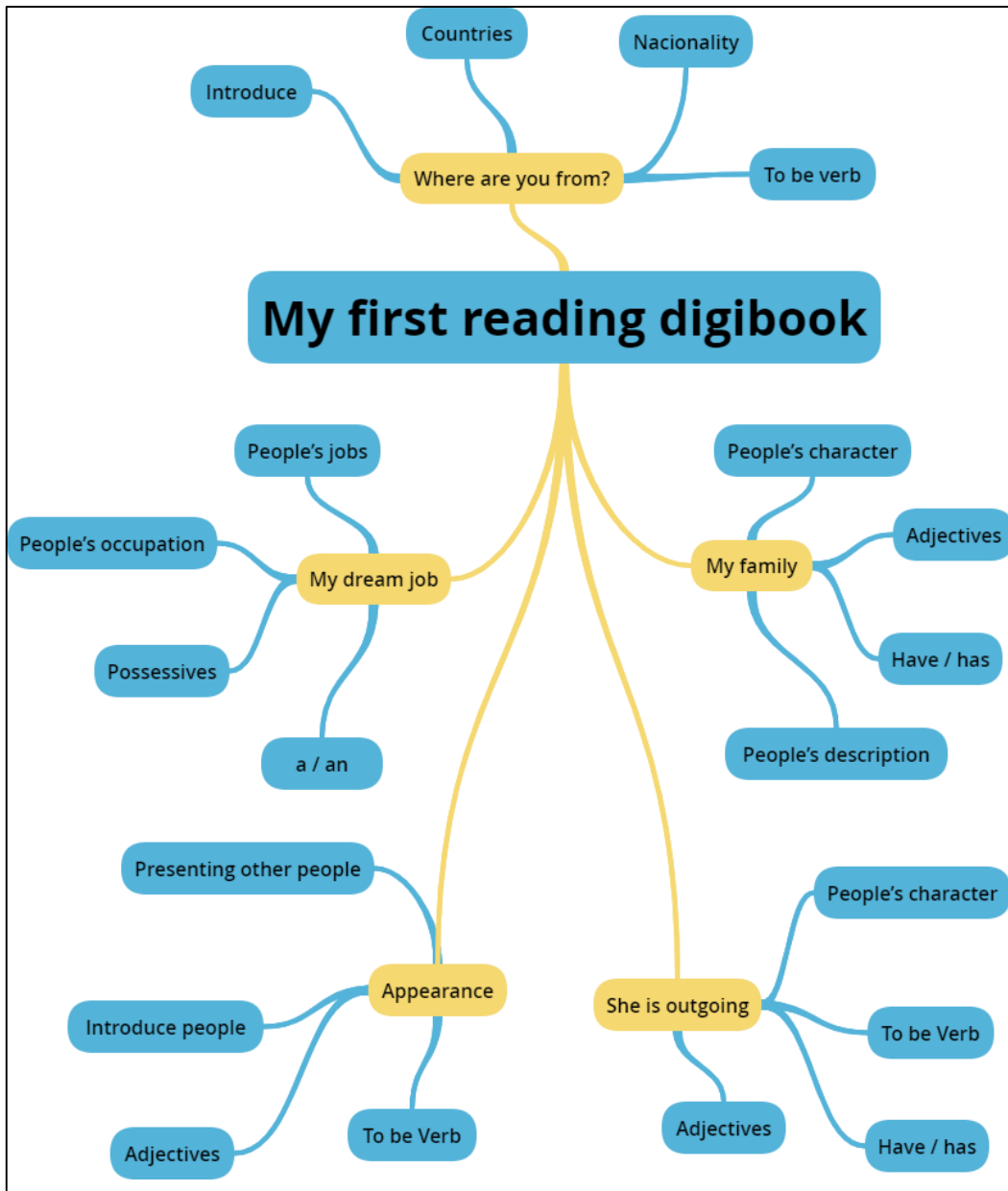
Source: Experts workshop

Elaborated by: the author

Defined Phase

Once the previous empathy phase is finished, the define phase is reached, where at this stage, the different criteria on the development of English reading skills are arranged hierarchically, collected on the empathy map, which will be used to determine the themes to be developed in technological resources. The mental map that collects the criteria of this phase is presented in the graph 3 following.

Graph 3. DT Methodology - Defined Phase - Mind Map

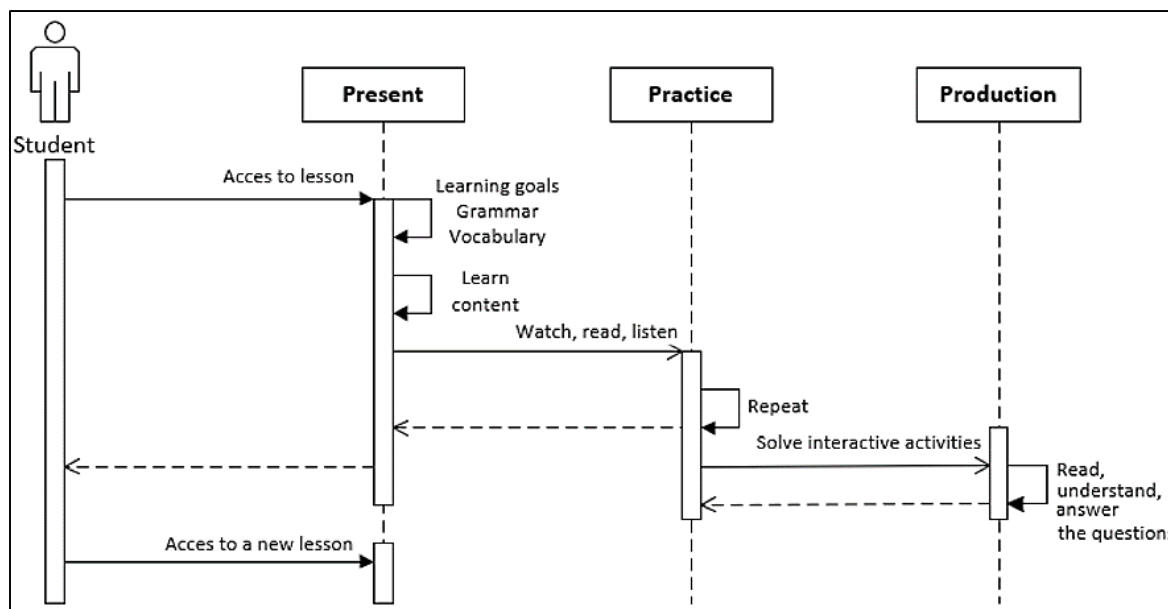


Source: Experts workshop

Elaborated by: the author

Idea Phase

To continue with the implementation of the DT methodology, the Idea phase is reached in which the “Present - Practice - Production” (PPP) foreign language teaching methodology is integrated, graphically organized in a sequence diagram, for easy application according to the criteria applied in this phase. You can see the diagram in the Graph 4 below.

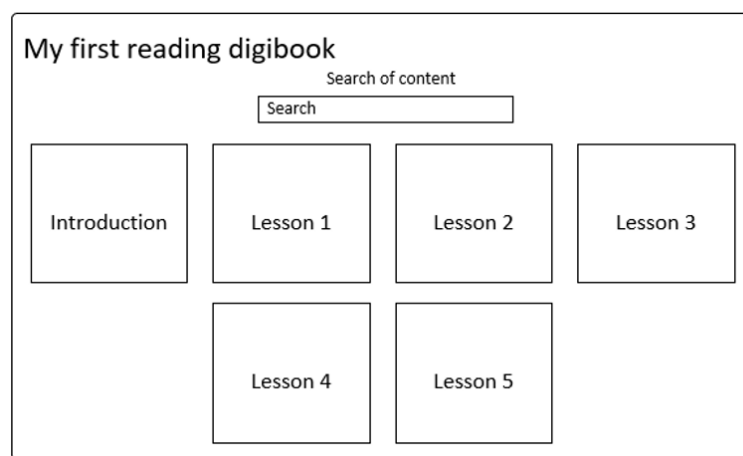
Graph 4. DT Methodology - Idea phase - Sequence diagram

Source: Experts workshop

Elaborated by: the author

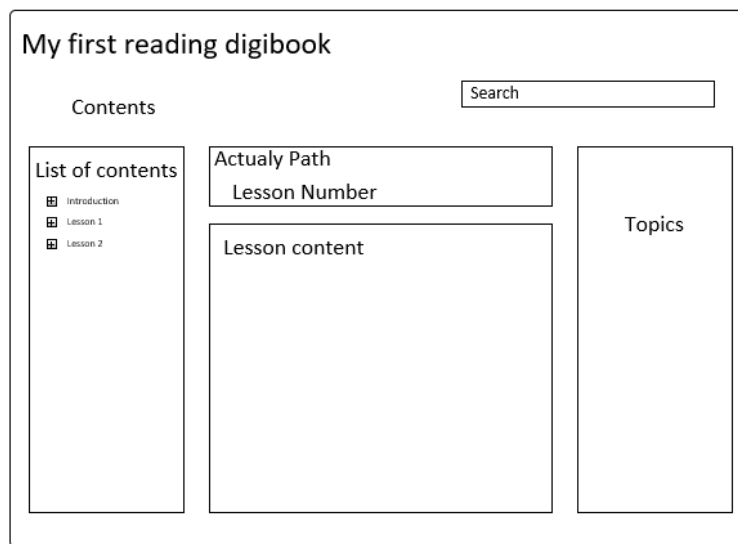
Prototype Phase

For the development of this phase, the preliminary mockups were carried out, which would guide the development of the interface of the planned technological resources, according to the requirements analysis from the previous phases of the DT methodology. Mockups of the main and content screen are presented below in Graphs 5 and 6.

Graph 5. DT Methodology - Prototype Phase - Main Screen Mockup

Elaborated by: the author

Graph 6. DT Methodology - Prototype Phase - Content screen mockup

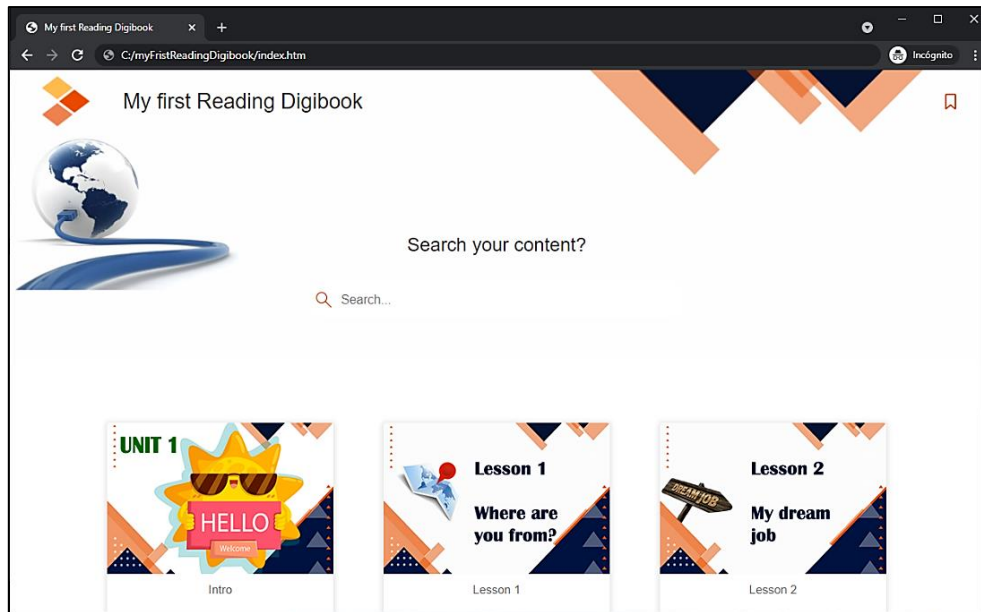


Elaborated by: the author

Test Phase

For this testing phase, technological resources were developed on a web platform making use of the RoboHelp computational package, which allows the integration of multimedia components, such as audio, images, video, CSS styles, and Javascript programming on the client-side, all this over the standard HTML markup language. Also, the advantage of using RoboHelp as an integration tool is that it can be exported to different types of formats that work online or offline. In the specific case of the tool created in this research, it has been exported for use in a subdomain of the institutional website of the "Instituto Superior Tecnológico Cotopaxi."

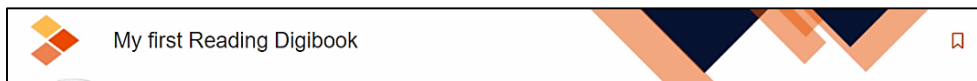
For the testing phase of the tool, a pre-test survey with a 5-point Likert scale was developed, which was filled out by the experts, who have accompanied the entire development of the DT Methodology, in the present investigation, the analysis and processing of the survey it is reflected in chapter 3 of this document. Below, different screenshots are presented that reflect the implementation of the technological tool developed, with the application of the CEFR, according to the lesson activities proposed in Annex B.

Graph 7. Home Screen

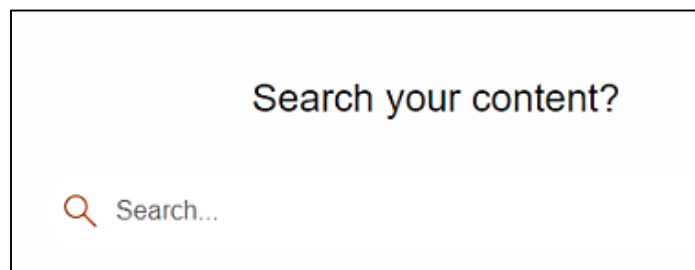
Elaborated by: the author

Graph 7 shows the home screen of the technological resource developed as an interactive platform that gathers different information that students will have access to.

In this screenshot, the bookmark access button is located on the top right corner of the site; bookmarks save any pages that students have been interested or it also helps to keep as a reminder of activities that can be practiced later on. As can be seen on graph 8.

Graph 8. Title Bar - Bookmark Access Button

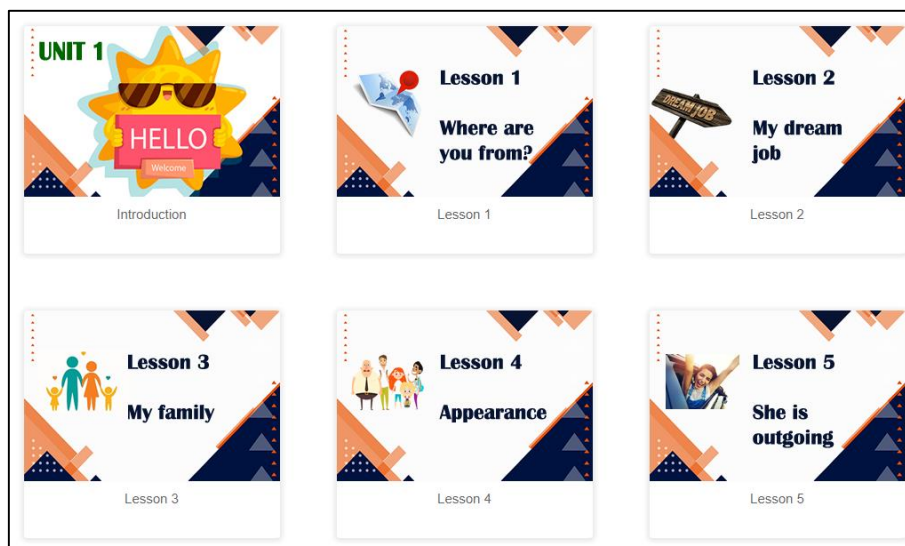
Elaborated by: the author

Graph 9. Search Area on the Main Screen

Elaborated by: the author

The search area is fundamental for any person that has difficulties of accessibility to the lessons, activities, or any other ova included in the platform. It could also be helpful for people who are getting used to practicing with this technological resource. As can be seen on graph 9.

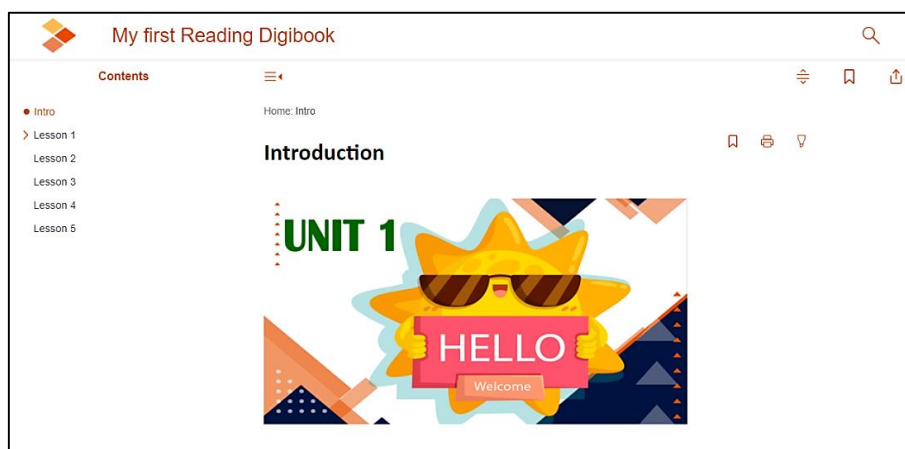
Graph 10. Lesson Access Area



Elaborated by: the author

The lesson access area is fundamental to start working on the platform; it gives all access to the content that will help students to reinforce their reading skills. On the graph 10, every unit has five lessons divided into different activities to reinforce the student's receptive and productive skills.

Graph 11. Access to Unit 1

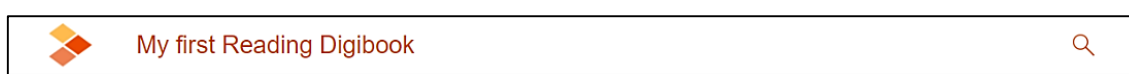


Elaborated by: the author

In this section, the students are going to have on the top left side the lesson, when they give a click, the content of the lesson will appear; also, in the middle of the window, the cover of the unit will appear with its introduction where the students will know the main content that he or she is going to learn. As can be seen on graph 11.

On graph 12, students will see a search button designed to find any information related to the lesson.

Graph 12. Title Bar - Search Button



Elaborated by: the author

Graph 13. Content Panel



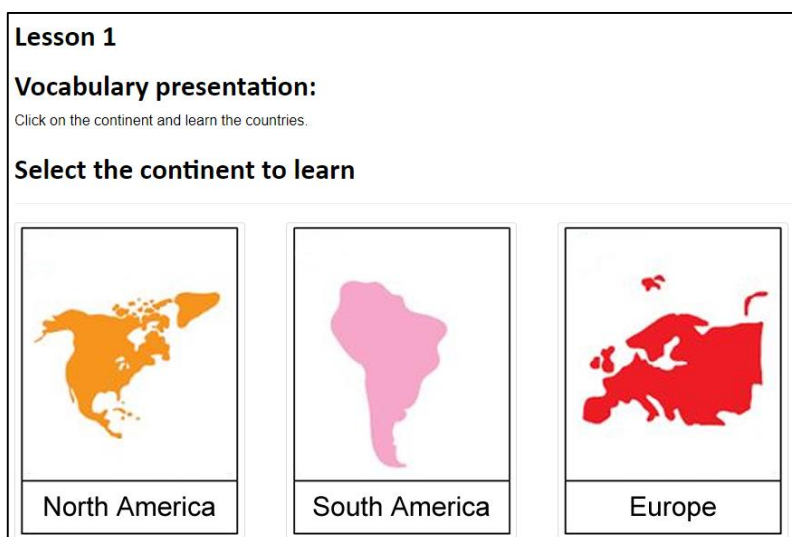
Elaborated by: the author

In the panel content, every lesson will be visible to all students and the teacher. In unit 1, five lessons are going to be available in which gap filling activities, karaoke reading and other activities to develop the reading skills of the students will be able. That is shown on Graph 13.

In this section, every single topic of the lesson will appear with some features above the in this topic where you could bookmark the page, print or highlight any relevant information that the student considers important. Graph 14 is shown below.

Graph 14. Topics Lesson Panel

Elaborated by: the author

Graph 15. Lesson 1 - Presentation of the Vocabulary

Elaborated by: the author

In the vocabulary section as can be seen in the graph 15, all the items that will be on the reading texts will be shown first. Every word has its respective pronunciation. In this part, a photographic carousel will be available so students can practice as many times as they need while they could practice how the word is written and pronounced.

The activities of every lesson vary to give the students a fresh start in every language element that is presented so they could be motivated to learn by playing, analyzing, and producing the language in an organized way. The way to evaluate the activity is when the student does the activity correctly, the written letters will be colored in green, and if the answer is incorrect, it will be colored in red. As can be seen in Graph 16.

Graph 16. Lesson 1 - Activity 1

Lesson 1

Activity one:

Look at the spaces in the crossword puzzle, then complete them according to the clues given to you

Elaborated by: the author


All the activities vary from time to time, but Karaoke reading is an activity that is always there, students after listening and reading the text, they will be exposed to different grammatical features implicitly. In this particular part, a gap-filling activity is shown, students will have the possibility to analyze the sentences to complete the task. Something essential to mention is that the activities are developed according to the A1 level of the Common European Framework of Reference for Languages. As is shown in Graph 17.

Graph 17. Lesson 1 - Activity 2

Lesson 1

Activity two:

Watch and read what Ivan is talking, then fill the gaps with the correct information



Hi! My name and,

I years . I really good at

English Language .

I from in Italy.

I can speak English .

My favorite artist . He sings very well.

My dream job .

Elaborated by: the author

Graph 18. Lesson 1 - Activity 3

Lesson 1

Activity Three:

Read and listen to Richard talking about the people from his class, then read and answer the questions.

This is my class. My name is Richard. I am 22 years old and I am from France. Juan is my best friend. He is 24 years old and he is from the USA. Daniel is my teacher and he is from Italy. He is 34 years old. Pablo is my classmate. He is from Spain and he is 20 years old. Maritza is from Mexico. She is my friend and she is 27 years old. Lucy is also my classmate. She is from China. She is 18 years old.

Where is Daniel from?
Your answer

Where is Maritza from?
Your answer

Where is Juan from?
Your answer

Where is Richard from?
Your answer

Where is Lucy from?
Your answer

Where is Pablo from?
Your answer

Elaborated by: the author

In the final activity of the lesson, students will have to answer some questions regarding a piece of reading. Similar activities are placed on the platform, always respecting the level of the students. As is shown above in Graph 18.

CHAPTER III. ANALYSIS OF THE RESEARCH RESULTS

3.1 Survey Processing and Analysis

Below is the analysis of the results of the survey carried out with the experts, according to the format of Annex C.

Question 1. My First Reading Digital Book has a friendly interface for student use.

Table 6. Friendly Interface for Students

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 5 | 62% |
| 3 | Agree | 2 | 25% |
| 2 | Neither agree nor disagree | 1 | 13% |
| 1 | In agreement | 0 | 0% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers

Elaborated by: the author

Following the data obtained from the survey, 62% of teachers think that the platform's interface is friendly, 25% agree with it, and just 13% are not sure if the interface of the technological resource was developed according to the easiness of its use. Consequently, according to the criteria gotten, the resource to develop the students reading skills is easy to use.

Question 2. The platform contains all the information required to develop reading comprehension on A1 students.

Table 7. Information Required to Develop Reading Comprehension

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 4 | 50% |
| 3 | Agree | 3 | 37% |
| 2 | Neither agree nor disagree | 1 | 13% |
| 1 | In agreement | 0 | 0% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers

Elaborated by: the author

In the graph, 50% of teachers claim that all the information gathered in the technological resource can help develop the students reading skills as well as 37% agrees with the relevance of the content. However, 13% are unsure if all the information collected is enough to develop the reading skills. Consequently, the information engaged on the technological resource is according to the necessities of the students in their first stage of the A1 level according to the CEFR.

Question 3. The elements used in the technological learning resource have an adequate sequence of content management.

Table 8. Adequate Content Element Sequence

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 2 | 25% |
| 3 | Agree | 3 | 37% |
| 2 | Neither agree nor disagree | 2 | 25% |
| 1 | In agreement | 1 | 13% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers

Elaborated by: the author

From the data collected from the survey, 37% of the people mentions that the content gathered on the platform has a sequence from content to content as well as the other 25% that they agree with it; however, 25% of the population are not sure whether the content in the resource has a valid sequence. Finally, the 13% is in agreement with the way how the elements were placed on the platform. From this perspective, the platform uses the content that is necessary to develop the reading skills on the daily basis following a sequence.

Question 4. The content presentation is approached in a graphic and interactive way

Table 9. Interactive Content

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 1 | 12% |
| 3 | Agree | 3 | 37% |
| 2 | Neither agree nor disagree | 3 | 38% |
| 1 | In agreement | 1 | 13% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers
Elaborated by: the author

According to the information, 38% of teachers state that they neither agree or disagree regarding the interactive content that is immersed on the platform, the 37% agree with the illustrations and the way how the activities are placed, the 13% agree as well as the 12% that believes the technological resource is very graphical and is very attractive to use.

Question 5. The lessons have a technological environment for practice to consolidate learning.

Table 10. Technological Environment for Practice

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 2 | 25% |
| 3 | Agree | 2 | 25% |
| 2 | Neither agree nor disagree | 4 | 50% |
| 1 | In agreement | 0 | 0% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers
Elaborated by: the author

Regarding the data obtained, 50% of language teachers are unsure whether the environment created on the platform could be beneficial for students' practice. Furthermore, 25% agree that looking at the technological resource is suitable for engaging students in reading practice. Finally, with the same average, the other 25% accept the platform as an alternative way to understand small readings.

Question 6. The karaoke reading mode is beneficial for A1 level readers when they begin to understand a text.

Table 11. Benefits of Karaoke Reading Mode

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 3 | 37% |
| 3 | Agree | 3 | 38% |
| 2 | Neither agree nor disagree | 2 | 25% |
| 1 | In agreement | 0 | 0% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers

Elaborated by: the author

Following the data collected, 38% of the teachers from the area highlight that the karaoke mode is a good activity for students that begins to understand a small familiar text to develop reading skills, as well as the 37% that agree with the same criteria, however, 25% are not sure whether the reading karaoke mode could be beneficial for A1 beginner students.

Question 7. The tool has challenges that allow the application of the contents of the lessons.

Table 12. Application Challenges in the Lessons

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 5 | 62% |
| 3 | Agree | 2 | 25% |
| 2 | Neither agree nor disagree | 1 | 13% |
| 1 | In agreement | 0 | 0% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers

Elaborated by: the author

In this question, it is notable that most of the population that took the survey believes that the application developed creates challenges in the lessons according to the level of the students. Furthermore, there is an acceptance too with 25% of the teachers. Finally, 13% do not know if these features are good to develop the students reading skills.

Question 8. The reading activities contain familiar words and names and simple phrases used in everyday life.

Table 13. Familiar Words and Simple Phrase on Reading Activities

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 5 | 62% |
| 3 | Agree | 3 | 38% |
| 2 | Neither agree nor disagree | 0 | 0% |
| 1 | In agreement | 0 | 0% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers

Elaborated by: the author

Regarding the 62% of the teachers, agree that reading activities are immense familiar words and understandable phrases that are good for students starting to get to know the language, with the same acceptance 38% believe that those activities are suitable for those type of learners.

Question 9. The reading activities have a basic repertoire of simple words and phrases related to personal data and specific situations.

Table 14. Reading Activities Based on Personal Data and Specific Situations

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 3 | 37% |
| 3 | Agree | 2 | 25% |
| 2 | Neither agree nor disagree | 3 | 38% |
| 1 | In agreement | 0 | 0% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers

Elaborated by: the author

As observed in the graphic, 38% of teachers are unsure if the reading sets are based on specific situations or personal data. On the other hand, 67% of the teachers agree that the content used to develop the activities have specific information on the reading pieces according to the CEFR that help students from the A1 level to obtain their knowledge gradually.

Question 10. The reading material is informative and simple based on short and simple descriptions, especially if there is visual support.

Table 15. Informative Reading Material with Visuals

| Given value | Agreement level | Frequency | Percentage |
|-------------|----------------------------|-----------|------------|
| 4 | Totally agree | 4 | 50% |
| 3 | Agree | 4 | 50% |
| 2 | Neither agree nor disagree | 0 | 0% |
| 1 | In agreement | 0 | 0% |
| 0 | Totally disagree | 0 | 0% |
| Total | | 8 | 100% |

Source: Survey for teachers

Elaborated by: the author

According to the 100% of the teachers the material developed for the platform has informative reading material based on the use of visuals that make reading pieces more dynamics for its use.

3.2 Hypothesis Testing

To verify the hypothesis of the present investigation, the statistical t-Student test was used for small samples with equal variances.

Gutierrez and Vladimirovna (2016) mention that the t-Student test is a parametric test that allows the analysis of significant differences on the population means of two groups with small samples, in which the greater the difference between the two means, the greater is the probability that a statistically significant difference exists.

3.2.1 Obtaining Data for the Application of the Statistical Test

To obtain the data, a post-test instrument applied through a qualified “interview” with an evaluation rubric was used, applied to two groups of students from the first levels of the Languages Center of the "Instituto Superior Tecnológico Cotopaxi" during the second academic period of the year 2020, assigned into the teaching schedule of the researcher of the present research project, evaluating the two parallels during the first academic unit. The evaluation rubric applied in the interview as can be seen in Annex C.

After the end of the experimental period, which was based on the use of technological learning resources on the web, the interview was applied to the acquired reading skills in the English language, obtaining a final grade. A detailed description of the two groups is shown below.

- Experimental Group - Beginners C: Students who passed A1 Level **with the use of** technological tools
- Control Group - Beginners L: Students who passed A1 Level **without the use of** technological tools

With the data obtained, the contrast test could be applied in a concrete way to verify the incidence sought in the hypothesis, through a statistical t-Student test, considering that the variances are equal, due to the variability of the student's performance, so that there are no outliers, for which low-performing students have been eliminated from the analysis, specifically those with an average lower than 7 points. Therefore, using for comparing two means of independent and normal populations.

In Annex E, tables are shown with the lists of the two groups of students, with their respective grades, which will be used for the statistical analysis.

3.2.1 Statement of the hypothesis

- Null hypothesis $\rightarrow H_0: \mu_1 = \mu_2$

The use of technological learning resources **does not affect** the development of the English language reading skills in A1 students' level

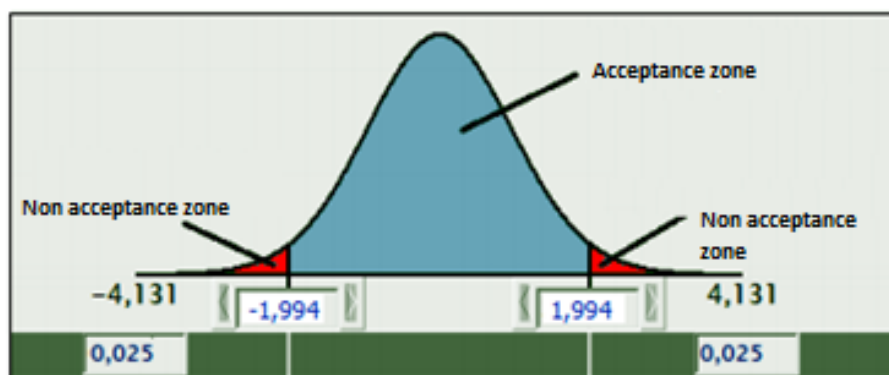
- Alternative hypothesis $\rightarrow H_0: \mu_1 \neq \mu_2$

The use of technological learning resources **affects** the development of the English language reading skills in A1 student's level.

3.2.2 Determination of the critical value

The free software PRQS (Probabilities, Quantiles and Random Samples) was used to determine the statistic, considering a "Level of significance" or "Type I error" of 5% and with $n_1 + n_2 - 2$ degrees of freedom. Where the "Critical Value" found is $t_{\alpha} = 1,994$ which divides the "Acceptance Zone" and the "Non-acceptance Zone" of the normal distribution graph, as can be seen in the Graph 29.

Graph 19. Determination of the critical value



Source: Free software PRQS
Elaborated by: the author

3.2.4 Obtaining the Statistic

The statistics were obtained in the SPSS computer package, for a "t-test of two independent samples assuming equal variances". Obtaining the results shown below in Table 15 and Table 16.

Table 16. Statistics for the calculation of the t-Student test

| Group | N | average | Desv. Deviation | Desv. Average error |
|-----------------------------|----|---------|-----------------|---------------------|
| Value Group 2 - Beginners L | 33 | 8,4533 | 0,59473 | 0,10353 |
| Group 1 - Beginners C | 41 | 8,7302 | 0,47305 | 0,07388 |

Source: SPSS statistical software

Elaborated by: the author

Table 17. Independent samples test

| | Levene's test of equality of variances | | t test for equality of means | | | | | | |
|-------------------------------------------------------------------------------------|----------------------------------------|-------|------------------------------|------------------|---------------------|---------------------------|-------------------------------------------|----------|----------|
| | Sig. | t | gl | Sig. (bilateral) | Difference of means | Standard error difference | 95% confidence interval of the difference | | |
| | | | | | | | lower | Higher | |
| Value Equal variances are assumed It is not assumed in equal variances | 1,175 | 0,282 | -2,232 | 72 | 0,029 | -0,27691 | 0,12409 | -0,52427 | -0,02955 |
| | | | -2,177 | 60,365 | 0,033 | -0,27691 | 0,12718 | -0,53129 | -0,02253 |

Source: SPSS statistical software

Elaborated by: the author

3.2.5 Statistical Decision

To make the statistical decision, two analyzes are considered:

- **First:** After the statistical analysis carried out, it is found that the "Statistic t" determined is $t = 2,232$ is greater than the "Critical value" of $t_{\alpha} = 1,994$. Therefore $t > t_{\alpha}$; where the statistician is positioned in the "non-acceptance zone".
- **Second:** We have that the "Probability obtained at two tails statistically" determined is $\rho = 0.029$ is less than the "Level of significance" of $\alpha = 0.05$; where $\rho < \alpha$.

Therefore, according to the analyzes carried out, the "null hypothesis $\rightarrow H_0: \mu_1 = \mu_2$ " and the "Alternative hypothesis" is accepted $\rightarrow H_0: \mu_1 \neq \mu_2$ ".

3.2.6 Conclusion of the hypothesis

At the end of the study time, seeking to validate the present investigation, the hypothesis was verified using the statistical test "Student's t-test", with a significance level of $\alpha = 0.05$ by comparing the final academic performance of two study groups, validating that the use of technological learning resources has a favorable impact on the development of English reading skills in A1 level students, which is ultimately reflected with the increase in final passing averages.

CONCLUSIONS

Regarding the conclusions of this research project, the following are mentioned below:

The conceptual and scientific-technical technical bases of technological tools and reading skills have been supported; The same ones that validate the fundamental pillars of this research, assuming a critical evaluative position and a comparative study of other existing tools, supporting the present proposal.

The methodological design, through the hypothetical-deductive research method, guided the guidelines to verify the hypothesis raised in the present investigation using a statistical t-Student test with a significance level of 5%, by comparing the academic performance of two groups study, determining that the use of technological learning resources favorably affects the development of English reading skills in A1 level students.

Through the Design Thinking design methodology executed with the help of experts and the PPP foreign language teaching methodology oriented explicitly for the development of reading skills, it was possible to design technological resources based on web tools that allow the learner of the English language to appropriate the second language with real communication activities in everyday life.

Finally, it is concluded that a technological tool based on web resources has been implemented to develop reading skills of the English language in A1 level students of the "Instituto Superior Tecnológico Cotopaxi" according to the Common European Framework (CEFR)

RECOMMENDATIONS

Regarding the recommendations of this research, there are certain things that were considered like:

After having used the platform implemented in this research, it is recommended that the “Karaoke Reading” activity be taken into account in all the learning units, because it stimulates the learner's hearing and sight.

It is recommended to extend this research proposal to the following levels and skills of the languages program of the Common European Framework of Reference, since the teaching of the English language would be strengthened.

Manage efforts that allow the training of teachers in web tools, so that they can generate technological resources for the teaching of the foreign language.

BIBLIOGRAPHY

- ABA English. (2021). *Niveles de inglés | Mejora tu nivel de inglés | ABA English*.
<https://www.abaenglish.com/es/niveles-ingles/>
- Alcoba, J. (2016). La clasificación de los métodos de enseñanza en educación superior. *Contextos Educativos. Revista de Educación*, 0. <https://doi.org/10.18172/con.657>
- Andrade, C., & Patiño, F. (2021). *La metodología thinking based – learning para optimizar funciones del hemisferio izquierdo específicamente la habilidad de reading en el idioma inglés*. <http://repositorio.utn.edu.ec/handle/123456789/11069>
- Arenaza, R., & Erickson, R. (2019). Lenguajes de programación Javascript Java y Javascript. Características. Norma de escritura. Variables y operadores lógicos. Mensajes. Ejercicios. Estructuras condicionales. Funciones y objetos. Aplicaciones. *Universidad Nacional de Educación Enrique Guzmán y Valle*.
<http://repositorio.une.edu.pe/handle/UNE/3026>
- Aubry, C. (2017). *HTML5 y CSS3: Revolucione el diseño de sus sitios web*. Ediciones ENI.
- Basuu. (2021). *Acerca de Busuu, la comunidad internacional del aprendizaje de idiomas*. Busuu. <https://www.busuu.com/es/about>
- Belloch, C. (2017). *Las Tecnologías de la Información y Comunicación en el aprendizaje*. 9.
- Berzal, F., Cortijo, F., & Cubero, J. (2017). *Desarrollo Profesional de Aplicaciones Web con ASP.NET*. iKor Consulting.
- Biancarosa, G., & Griffiths, G. (2012). Technology Tools to Support Reading in the Digital Age. *The Future of children / Center for the Future of Children, the David and Lucile Packard Foundation*, 22, 139-160. <https://doi.org/10.2307/23317415>
- Blake, R., & Zyzik, E. (2016). *El español y la lingüística aplicada*. Georgetown University Press.
- Broek, S. (2017). *LA APLICACIÓN DEL MARCO COMÚN EUROPEO DE REFERENCIA PARA LAS LENGUAS EN LOS SISTEMAS EDUCATIVOS EUROPEOS*. 11.
- Cabrera, J., Sánchez, I., & Rojas, F. (2016). Uso de objetos virtuales de aprendizaje OVAS como estrategia de enseñanza – aprendizaje inclusivo y complementario a los cursos teóricos – prácticos. *Revista Educación en Ingeniería*, 11(22), 4-12. <https://doi.org/10.26507/rei.v11n22.602>

- Casabona, E., & Ceci, R. (2016). *Sitios Multiplataforma con HTML5 + CSS3: Domine el nuevo paradigma de la web*. RedUsers.
- Castillo, J. (2018). *Proceso lector como instrumento de aprendizaje*. 110.
- Castro, E. (2016). *Destrezas receptivas del lenguaje y su incidencia en la producción escrita del idioma inglés en los estudiantes de primero de bachillerato de la unidad educativa Humberto Moreira Márquez de la ciudad de Ventanas los ríos*. <http://dspace.utb.edu.ec/handle/49000/1907>
- Cervantes, C. C. V. (2017). *CVC. Diccionario de términos clave de ELE. Destrezas lingüísticas*. Instituto Cervantes. https://cvc.cervantes.es/ensenanza/biblioteca_ele/diccio_ele/diccionario/destrezas.htm
- Chávez-Zambano, M. X., Saltos-Vivas, M. A., & Saltos-Dueñas, C. M. (2017). La importancia del aprendizaje y conocimiento del idioma inglés en la enseñanza superior. *Dominio de las Ciencias*, 3(3 mon), 759-771. <https://doi.org/10.23857/dc.v3i3>
- Colcha, E., Herrera, Z., Barragán, R., Fernanda, D., & Salazar, E. (2019). Entorno educativo y aprendizaje, estrategias de estudio en el idioma inglés. *Ciencia Digital*, 3(2.6), 349-369. <https://doi.org/10.33262/cienciadigital.v3i2.6.571>
- De La Cruz, R. (2020). Propuesta para implementar un sistema de gestión académica con HTML5 en el IEST Público Padre Abad – Aguaytía; 2020. *Universidad Católica Los Ángeles de Chimbote*. <http://repositorio.uladech.edu.pe/handle/123456789/19322>
- De Luca, D. (2018). *HTML5: Entiende el cambio, aproveche su potencial*. USERSHOP.
- Duolingo. (2021). *Aprende un idioma completamente gratis*. Duolingo. <https://es.duolingo.com/course/en/es/Aprender-ingl%C3%A9s>
- Duque, M. (2017). *Alfa de Cronbach para validar un cuestionario de uso de TIC en docentes universitarios*. 1, 12.
- Durán, P. (2001, enero 1). *Estudio de la relación de las destrezas receptivas y las productivas en la adquisición del inglés con fines académicos*.
- Echegaray, L., Isabel, U., & Barrutieta, G. (2017). *DESIGN THINKING: Un modelo para la aplicación en la Administración Pública*. INAP.
- Ecuador, D. (2021). *Registro Oficial*. <https://www.derechoecuador.com/registro-oficial/2011/06/registro-oficial-no-478---lunes-27-de-junio-de-2011>

- Education First. (2020). *EF EPI 2020—EF English Proficiency Index*.
<https://www.ef.com/ec/epi/>
- English Education First. (2020). *EF EPI 2020—EF English Proficiency Index*.
<https://www.ef.com/wwen/epi/>
- Europarat (Ed.). (2003). *Marco común europeo de referencia para las lenguas: Aprendizaje, enseñanza, evaluación* (2. ed). Anaya.
- Feria, I., & Zúñiga, K. (2016). Objetos virtuales de aprendizaje y el desarrollo de aprendizaje autónomo en el área de Inglés. *Praxis*, 12(1), 63-77.
<https://doi.org/10.21676/23897856.1848>
- García, J. (2021). *La guía definitiva de HTML5 y CSS3: Todo lo necesario para programar páginas web desde cero*. Sonia Castellano de Arriba.
- García, L., Page, M., Gómez, P., & Martínez, P. (2017). *Conocimientos básicos de Lengua Española*. Editorial Centro de Estudios Ramon Areces SA.
- Garrote, M. (2019). *Didáctica de segundas lenguas y lenguas extranjeras en Educación Infantil y Primaria*. Ediciones Paraninfo, S.A.
- Grijalva, D. (2016). *El placer de leer juegos de palabras*. 6.
- Gutiérrez, E., & Vladimirovna, O. (2016). *Estadística inferencial I: Para ingeniería y ciencias*. Grupo Editorial Patria.
- Hernández, A., Ramos, M., Placencia, B., Indacochea, B., Quimis, A., & Moreno, L. (2018). *Metodología de la Investigación Científica*. 3Ciencias.
- Hernández, R., Fernández, C., & Baptista, P. (2018). *METODOLOGÍA DE LA INVESTIGACIÓN: LAS RUTAS CUANTITATIVA, CUALITATIVA Y MIXTA*. McGraw-Hill Interamericana.
- HiNative. (2021). *HiNative | Una comunidad de preguntas y respuestas para los que aprenden idiomas*. <https://hinative.com/es-MX>
- Instituto Superior Tecnológico Cotopaxi. (2021). *Sitio institucional*. Quienes somos.
<http://web.istx.edu.ec/>
- Johnson, D. (2016). *Language Policy*. Palgrave Macmillan UK.
<https://doi.org/10.1057/9781137316202>
- Khotimah, K., & Wahyu, A. (2019). *Reading in The Digital Age: Electronic Storybook as a Teaching Tool for Beginning Readers*. <https://doi.org/10.2991/icei-19.2019.47>

- Ladrón, M. Á. (2019). *Selección, elaboración, adaptación y utilización de materiales, medios y recursos didácticos en formación profesional para el empleo. MF1443 (Ed. 2019)*. Tutor Formación.
- Lama, A. (2018). The use of Technology to Enhance Reading and Listening Skills for Students with PLDS. *International Journal of Advanced Research*, 6, 841-845. <https://doi.org/10.21474/IJAR01/8206>
- Lerma-Blasco, R. V., Murcia Andrés, J. Alfredo, & Mifsud Talḡ, E. (2016). *Aplicaciones web*. McGraw-Hill España.
- Luján-Mora, S. (2016). *Programación de aplicaciones web: Historia, principios básicos y clientes web*. Editorial Club Universitario. <http://rua.ua.es/dspace/handle/10045/16995>
- Luna, F. (2019). *JavaScript—Aprende a programar en el lenguaje de la web*. RedUsers.
- Maldonado, S. (2012). *El currículo actual del idioma inglés y su incidencia en el desarrollo de las destrezas receptivas y productivas de los estudiantes de la Modalidad Regular del DEDI*. <https://repositorio.uta.edu.ec:8443/jspui/handle/123456789/2488>
- Malqui, D. (2018). *Diseño y desarrollo Web accesible utilizando HTML5 y CSS3 con nivel de conformidad A, respecto a las pautas WCAG*. <http://riberdis.cedd.net/handle/11181/5479>
- Matas, A. (2018). Diseño del formato de escalas tipo Likert: Un estado de la cuestión. *Revista electrónica de investigación educativa*, 20(1), 38-47.
- Ministerio de Educación. (2021). *Estándares de Aprendizaje – Ministerio de Educación*. <https://educacion.gob.ec/estandares-de-aprendizaje/>
- Monteagudo Fernández, J., & López Facal, R. (2018). Estándares de aprendizaje y evaluación del pensamiento histórico, ¿incompatibles? Análisis de currículos, programaciones, exámenes y opinión de expertos en España. *Perfiles educativos*, 40(161), 128-146.
- Moreno, M. (2018). La integración de destrezas motiva a los alumnos. . . ISSN, 32.
- Moreno, O. (2021). *Presentation practice production (ppp)*. https://www.academia.edu/28324547/PRESENTATION_PRACTICE_PRODUCTION_PPP
- Morlino, L. (2016). *Introducción a la investigación comparada*. Grupo Anaya Comercial.
- Morron, M. (2020). *Aprendizaje Basado En Tareas, El Arte de Diseñar Tareas Auténticas*. Amazon Digital Services LLC - KDP Print US.

- Navarro, D., & Samón, M. (2017). Redefinición de los conceptos método de enseñanza y método de aprendizaje. *EduSol*, 17(60), 26-33.
- Ñaupas, H. (2014). *Metodología de la investigación: Cuantitativa-cualitativa y redacción de la tesis*. Ediciones De La U Ltda.
- Olmedo, V., Andoney, J., & Heinze, G. (2017). Uso de las tecnologías de la información y comunicación (TIC) en las residencias médicas en México. *Acta médica Grupo Ángeles*, 15(2), 150-153.
- Parraguez, S., Chunga, G., Flores, M., & Romero, R. (2017). *El estudio y la investigación documental: Estrategias metodológicas y herramientas TIC*. Gerardo Chunga Chinguel.
- Prescott, P. (2017). *La programación JavaScript*. Babelcube Inc.
- Prieto, A. (2017). *Flipped learning: Aplicar el Modelo de Aprendizaje Inverso*. Narcea Ediciones.
- REPUBLICA DEL ECUADOR. (2017). 2020.
- Rey, P. de la C., Tardo, Y., Maymir, R., & Méndez, Y. (2016). Gestión didáctica para la enseñanza de lenguas extranjeras: Retos y proyecciones en la educación superior. *MEDISAN*, 20(6), 851-859.
- Reyes, M., Murrieta, G., & Hernández, E. (2019). Políticas lingüísticas nacionales e internacionales sobre la enseñanza del inglés en escuelas primarias. *Revista pueblos y fronteras digital*, 6(12), 167-197.
- Ricoy, M.-C., & Álvarez-Pérez, S. (2016). La enseñanza del inglés en la educación básica de personas jóvenes y adultas. *Revista mexicana de investigación educativa*, 21(69), 385-409.
- RoboHelp User Guide*. (2021). <https://helpx.adobe.com/la/robohelp/user-guide.html/la/robohelp/using/overview.ug.html>
- Rodríguez, L. (2021). *Qué es el Design Thinking*. <https://www.macguffin.es/blog/qué-es-el-design-thinking>
- Rosell, W., & Paneque, E. (2019). CONSIDERACIONES GENERALES DE LOS METODOS DE ENSEÑANZA Y SU APLICACION EN CADA ETAPA DEL APRENDIZAJE. *Revista Habanera de Ciencias Médicas*, 8(2), 0-0.
- Rueda, M., & Wilburn, M. (2017). Enfoques teóricos para la adquisición de una segunda lengua desde el horizonte de la práctica educativa. *Perfiles educativos*, 36(143), 21-28.

- Sánchez, M. (2017). *UF2404—Principios de la programación orientada a objetos*. Editorial Elearning, S.L.
- Sánchez, R. C. (2019). *Patrones de secuenciación de actividades en la enseñanza de inglés como lengua extranjera y su incidencia en el aprendizaje: Estudio cuasi-experimental*. 56.
- Sánchez, Y. (2018). *Aplicación de los procesos innovadores en los servicios de información juvenil. SSCE0109*. IC Editorial.
- Talledo, S. M., & Venancio, J. (2016). *Implantación de aplicaciones web en entornos internet, intranet y extranet*. Ediciones Paraninfo, S.A.
- UNESCO. (2015, julio 16). *Las TIC en la educación*. UNESCO. <https://es.unesco.org/themes/tic-educacion>
- Ussa, M. del C. (2017). Aprendizaje de lenguas extranjeras y su relación con el contexto. *Cuadernos de Lingüística Hispánica, 17*, 107-116.
- Valles, B. (2016). El Lenguaje como elemento clave para la integración de los niños con discapacidad en Educación Inicial. *Revista de Investigación, 34(70)*, 155-178.
- Veytia, M., Lara, R., & García, O. (2018). Objetos Virtuales de Aprendizaje en Educación Superior. *Eikasia: revista de filosofía, 79*, 207-224.
- VOA Learning English. (2021). *VOA Learning English—Beginning Level*. VOA. <https://learningenglish.voanews.com/p/5609.html>
- Weelden, W., & Siegel, K. (2019). *Adobe RoboHelp 2019: The Essentials*. IconLogic, Incorporated.

ANNEXES

Annex A. Expert profiles

For the election of the collaborating experts in the design of the platform, the competences and mastery in the fields of linguistics and technology were considered as a multi-disciplinary team within the Higher Technological Institute according to the following detail.

Table 1. Academic profile of the experts

| Item | Expert | Educational Background | Working field |
|------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Lic. Mayra Elizabeth Alpusig Granja. Mgs. | <ul style="list-style-type: none"> • Bachelor of Science in Education Specialization English • Magister in University Teaching and Educational Administration • Magister in Linguistics Applied to Bilingual Teaching Spanish-English • Training of trainers | <ul style="list-style-type: none"> • Director of the Research Unit Instituto Superior Tecnológico Cotopaxi • Teacher of the English Language at the Language Center of the Instituto Superior Tecnológico Cotopaxi • English teacher at the Technical School of the Armed Forces. |
| 2 | Lic. Verónica Elizabeth Agama Molina. Mgs. | <ul style="list-style-type: none"> • Teacher of Second Education Specialty English • Bachelor of Science in Education Specialization English • Magister in Linguistics in learning English • Training of trainers | <ul style="list-style-type: none"> • Director of the Language Center of the Instituto Superior Tecnológico Cotopaxi • Teacher of the English Language at the Language Center of the Instituto Superior Tecnológico Cotopaxi • Director of the Language Center of the Technical School of the Armed Forces. |
| 3 | Lic. Mary de los Ángeles Vizúete Jácome. Mgs. | <ul style="list-style-type: none"> • Bachelor of Education Sciences English Specialization • Magister in socio productive project management • Training of trainers | <ul style="list-style-type: none"> • Secretary of the Language Center of the Instituto Superior Tecnológico Cotopaxi • English Language Teacher at the ISTC Language Center • English teacher at the Technical School of the Armed Forces. |
| 4 | Lic. María Verónica Ortega Nieto | <ul style="list-style-type: none"> • Bachelor of Science in Education Specialization English • Training of trainers | <ul style="list-style-type: none"> • Head of the English Language Area of the Instituto Superior Tecnológico Cotopaxi • Teacher of the English Language at the Language Center of the Instituto Superior Tecnológico Cotopaxi |

| | | | |
|----------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | <ul style="list-style-type: none"> English teacher at the Technical School of the Armed Forces. |
| 5 | Lic. Yajaira Marianela Herrera Guanoquiza | <ul style="list-style-type: none"> Bachelor of Science in Education Specialization English Training of trainers | <ul style="list-style-type: none"> Teacher of the English Language at the Language Center of the Instituto Superior Tecnológico Cotopaxi English teacher at the Technical School of the Armed Forces. |
| 6 | Lic. Víctor Patricio Claudio Claudio | <ul style="list-style-type: none"> Bachelor of Science in Education Specialization English | <ul style="list-style-type: none"> Teacher of the English Language at the Language Center of the Instituto Superior Tecnológico Cotopaxi English teacher at the Technical School of the Armed Forces. |
| 7 | Ing. Fausto Guillermo Córdova Borja. Mgs. | <ul style="list-style-type: none"> Computer Science and Computer Systems Engineer Higher Diploma in University Teaching Master in Technologies for Teaching Management and Practice Master's Degree in Software Engineering and Computer Systems Training of trainers | <ul style="list-style-type: none"> Director of the IT Services Unit Teacher of the ICT area of the Instituto Superior Tecnológico Cotopaxi |
| 8 | Ing. Janeth Paulina Segovia Chávez Mgs. | <ul style="list-style-type: none"> Engineer in Electronics and Instruments Higher diploma in university teaching Magister in technologies for management and teaching practice University Master in Software Engineering and Computer Systems Training of trainers | <ul style="list-style-type: none"> Professor of the Exact Sciences Area of the Universidad de las Fuerzas Armadas ESPE. |











Annex B. Lesson activities

Lesson 1: I am from Ecuador



Keywords: Countries

1. Look at the words and then scan the code to play.

| | | | | |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |  |  |
| The UK | Italy | Ecuador | France | The USA |
|  |  |  |  |  |
| Spain | Japan | China | Mexico | Brazil |

2. Use the letters to complete the hidden codes below to discover the countries.

| | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|
| A = 1 | B = 2 | C = 3 | D = 4 | E = 5 | F = 6 | G = 7 | H = 8 |
| I = 9 | J = 10 | K = 11 | L = 12 | M = 13 | N = 14 | O = 15 | P = 16 |
| Q = 17 | R = 18 | S = 19 | T = 20 | U = 21 | V = 22 | W = 23 | X = 24 |
| Y = 25 | Z = 26 | | | | | | |

| | | | | |
|----|---|----|---|----|
| | | | | |
| 10 | 1 | 16 | 1 | 14 |

| | | | | | |
|---|----|---|----|---|----|
| | | | | | |
| 2 | 18 | 1 | 26 | 9 | 12 |

| | | | | |
|---|---|---|----|---|
| | | | | |
| 3 | 8 | 9 | 14 | 1 |

Reading

3. Read the text and answer the questions.

This is my class. My name is Richard. I am 22 years old and I am from France. Juan is my best friend. He is 24 years old and he is from the USA. Daniel is my teacher and he is from Italy. He is 34 years old. Pablo is my classmate. He is from Spain and he is 20 years old. Maritza is from Mexico. She is my friend and she is 27 years old. Lucy is also my classmate. She is from China. She is 18 years old.

a. Where is Daniel from?

Daniel is from Italy

b. Where is Maritza from?

.....

c. Where is Juan from?

.....

d. Where is Richard from?

.....

e. Where is Lucy from?

.....

f. Where is Pablo from?

.....

Lesson 2: My dream job



Keywords: Jobs

1. Look at the words and then scan the code to play.

| | | | | |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |  |  |
| a doctor | an artist | an engineer | a dentist | a secretary |
|  |  |  |  |  |
| a waitress | a waiter | a teacher | a vet | a chef |

2. Look for jobs and circle them in each line.

mexicoonedoctorjapaneightwaitresschinasevenartistfranceninechefitalyonesecretary
 brazilelevenengineerecuadortwelveteacherspainthirteendentisttheusafourteenvet
 theukseventeenchefmexicofifteenwaiterjapansixteenteacherecuadoreighteenartistbrazil
 nineteensecretarytheuktwentydoctorfrancetenvettheusasixteenteacheritalyseventeen

Reading

3. Read the text and answer the questions.

Hello, my name is Alyson. I am good at cooking meals. My dream job is to become a chef. In my class, Pedro is interested in English. His dream job is to become a teacher. Sebastián is crazy about houses. His dream job is to become an engineer. Carla is mad about animals. Her dream job is to become a vet. Lenin is mad about music. His dream Job is to become an artist. Iván is good at working in restaurants. His dream job is to become a waiter.

- a. What is Carla's dream job?

Carla's dream job is to become a vet

- b. What is Ivan's dream job?

.....

- c. What is Alyson's dream job?

.....

- d. What is Sebastian's dream job?

.....

- e. What is Lenin's dream job?

.....

- f. What is Pedro's dream job?










.....

Lesson 3: My family is really big.

Keywords: Family



1. Look at the words and then scan the code to play.

| | | | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| mother | father | grandmother | grandfather | brother |
|  |  |  |  | |
| sister | uncle | aunt | cousin | |

2. Find words about family members in this word search. Put a tick in the words you find.

| | |
|--------------------|--------------------------|
| father | <input type="checkbox"/> |
| mother | <input type="checkbox"/> |
| brother | <input type="checkbox"/> |
| sister | <input type="checkbox"/> |
| grandfather | <input type="checkbox"/> |
| grandmother | <input type="checkbox"/> |
| uncle | <input type="checkbox"/> |
| aunt | <input type="checkbox"/> |
| cousin | <input type="checkbox"/> |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W | B | C | C | A | L | W | M | L | G | L | F | S | U | M | A |
| G | P | B | G | G | B | R | O | T | H | E | R | M | Q | U | D |
| F | M | F | C | M | G | R | A | N | D | F | A | T | H | E | R |
| A | E | X | W | H | P | G | F | L | S | I | S | T | E | R | E |
| T | R | I | R | L | M | T | J | U | S | H | C | P | C | N | A |
| H | T | M | O | T | H | E | R | N | P | G | Z | U | O | C | Y |
| E | Y | M | O | D | T | G | P | C | D | S | O | F | U | B | I |
| R | V | H | I | L | B | R | Z | L | Z | A | A | E | S | T | I |
| D | D | X | B | N | O | X | I | E | D | B | S | W | I | N | M |
| V | N | C | Z | O | P | K | R | K | U | R | V | K | N | N | S |
| G | R | A | N | D | M | O | T | H | E | R | O | E | D | A | J |
| V | W | J | A | U | N | T | B | U | U | F | C | C | K | Y | O |

Reading

3. Read and choose the correct word.

Hi, my name is Joan. My family is really big. José is my father. He has short dark hair. His favorite hobby is listening to music. Sofía is my mother. She has long straight hair. Her favorite hobby is watching TV. My brother's name is Milton. He has short curly hair and his favorite hobby is playing soccer. Laura is my grandmother. She is tall and she has wavy hair. Her favorite hobby is reading books.











- a. Sofía has (short / **long**) straight hair.
- b. Laura has (wavy / curly) hair.
- c. Milton has (long/short) curly hair. d. José has (wavy/dark) hair.
- e. Sofía's favorite hobby is watching (TV/movies)
- f. Laura's favorite hobby is reading (stories/books)
- g. Milton's favorite hobby is playing (soccer/tennis)
- e. José's favorite hobby is listening to (the radio/music)

Lesson 4: She has long dark hair.











Keywords: Appearance



1. Revise these words, then scan the code and play.

| | | | | |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
| long hair | short hair | dark hair | blond hair | curly hair |
|  |  |  |  |  |
| plump | slim | eyes | nose | beard |

2. Complete with vowels and match with the pictures.

| | | |
|-------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------|
|  | b _ _ r d |  |
|  | l _ n g h _ _ r |  |
|  | n _ s _ |  |
|  | s h _ r t h _ _ r |  |
|  | _ y _ s |  |
| | d _ r k h _ _ r | |
| | s l _ m | |
| | b l _ n d h _ _ r | |
| pl _ m p | | c _ r l y h r |

Reading

3. Read and write a name in each statement.

Hi, my name is David. My family is great. My father's name is Carlos. He is plump and he has short blond hair. His eyes are brown. My mother's name is Liliana. She is slim and she has long dark hair. Her nose is big. My brother's name is Damian. He has short curly hair and he is slim. Silvia is my sister. She is short and she has long blond hair. Her nose is small. My grandfather is plump. He has short dark hair. His eyes are blue.

- a. She is short. She has long blond hair.**Silvia**.....
- b. He is plump. He has short blond hair.
- c. She is slim. She has long dark hair.
- d. He is slim. He has short curly hair.
- e. His eyes are blue and he is plump.
- f. He is eyes are brown. He is plump.
- g. Her nose is small and she is short.
- e. Her nose is big and she is slim.

Lesson 5: She is outgoing

Keywords: Character adjectives



1. Revise these words. Then scan the code and play.

| | | | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| hard working | lazy | funny | serious | kind |
|  |  |  | | |
| impolite | outgoing | shy | | |

2. Read the sentences and write one of the adjectives from activity 1.

- Helena is really sociable. She has many friends**outgoing**.....
- Carlos helps old people to cross the street a lot
- María is very timid, she is embarrassed to speak
- Jessica studies very much. She likes Geography
- José is not respectful. He is so rude too
- Pablo sleeps a lot. He is always exhausted
- He does not like people. He does not like jokes
- He makes jokes a lot. We have much entertainment.....

Reading

3. Read and answer the following question.

Hi, my name is Ivan. I have many friends at school and I am outgoing. I am short and has long hair. Lenin is tall. He has short hair and he is really impolite. Carla is short and has long curly hair. She is hardworking. Lesly has straight hair and she is kind. Laura is plump and has small eyes. She is funny. Verónica has a big nose and small eyes. She is serious. Saul has brown eyes and he is lazy. Daniel has dark hair. He is often impolite.

- a. What is Daniel like? ...He is often impolite.....
- b. What does Lenin look like?
- c. What is Saul like?
- d. What does Carla look like?
- e. What is Lesly like?
- f. What does Laura look like?
- g. What is Verónica like?
- e. What does Ivan look like?
- f. What is Laura like?

Annex C. Survey format



PONTIFICIA UNIVERSIDAD CATÓLICA DEL ECUADOR SURVEY FOR TEACHERS

Technological learning resources to develop reading skills

Directions:

Mr./Mrs.

Read each statement about the importance of using technological learning resources to develop the students' reading skills and finally tick each criterion according to the parameters written below.

Agreement level: 5: TA= Totally agree, 4: A=Agree, 3: NA/ND= Neither agree nor disagree, 2: IA= In agreement, 1: TD= Totally disagree

Objective:

To identify relevant information about the applicability of the technological resource and the development of the reading activities.

| | | Agreement Level | TA | A | NA ND | IA | TD |
|----|-------------------------------------------------------------------------------------------------------------------------------|--------------------|----|---|----------|----|----|
| # | Items | Quantitative scale | 5 | 4 | 3 | 2 | 1 |
| 1 | My First Reading Digital Book has a friendly interface for student use. | | | | | | |
| 2 | The platform contains all the information required to develop reading comprehension on A1 students. | | | | | | |
| 3 | The elements used in the technological learning resource have an adequate sequence of content management. | | | | | | |
| 4 | The content presentation is approached in a graphic and interactive way | | | | | | |
| 5 | The lessons have a technological environment for practice to consolidate learning. | | | | | | |
| 6 | The karaoke reading mode is beneficial for A1 level readers when they begin to understand a text. | | | | | | |
| 7 | The tool has challenges that allow the application of the contents of the lessons. | | | | | | |
| 8 | The reading activities contain familiar words and names and simple phrases used in everyday life. | | | | | | |
| 9 | The reading activities have a basic repertoire of simple words and phrases related to personal data and specific situations. | | | | | | |
| 10 | The reading material is informative and simple based on short and simple descriptions, especially if there is visual support. | | | | | | |

Annex D. Evaluation rubric applied in the interview - (Post Test)



PONTIFICIA UNIVERSIDAD CATÓLICA DEL ECUADOR EVALUATION RUBRIC APPLIED IN THE INTERVIEW - (POST TEST)

| Skill | N° | Evaluation criteria | Question descriptor | Qualitative criterion | | | | | % of skill | |
|-------------------------------|----|----------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------------------------------|--------------------|-----------------|---------------------------|----------------------------|
| | | | | Scale | | | | | Maximum percentage | Achieved percentage |
| | | | | Complies Excellently | Acceptably complies | Neither complies nor does not comply | Minimally complies | Does not comply | | |
| 4 | 3 | 2 | 1 | 0 | | | | | | |
| Visual skills | 1 | The student can perceive the written text | The student can match a word with a picture of the vocabulary learned | | | | | | 16% | |
| Spelling skills | 2 | The student can recognize handwriting | The student recognizes the correct spelling of the vocabulary word in a group of words | | | | | | 16% | |
| Language skills | 3 | The student identifies message from text | The student uses proper grammar in a set exercise | | | | | | 16% | |
| Semantic skills | 4 | The student can understand the message | The student can order sentences referring to the text | | | | | | 16% | |
| Cognitive skills | 5 | The student can interpret the message | The student answers specific questions according to the text | | | | | | 16% | |
| Quantitative criterion | | | | Maximum words | | | Words read | | Maximum Percentage | Achieved percentage |
| Reading fluency | 6 | The student is fluent when reading a message | The student can read a number of words in a certain time | 200 | | | 178 | | 20% | 0 |
| | | | | Final grade achieved | | | | | | |

Annex E. Legalized grades



LC - LANGUAGES CENTER
LC-101 - BEGINNERS - ENGLISH I
 2020-2P

GRADES

| LEVEL: | FIRST | PARALLEL: | C | | |
|--------|------------|----------------------|----------------------|------|------------|
| No. | ID | SURNAMES | NAMES | U1 | EVALUATION |
| 1 | 0503691446 | ALMACHE RAMIREZ | HEIDY LISBETH | 9,01 | MUY BUENO |
| 2 | 0504314956 | ARIAS CARDENAS | JORGE RICARDO | 9,10 | MUY BUENO |
| 3 | 0504743055 | AUCATOMA POAQUIZA | MAYRA ALEXANDRA | 8,87 | MUY BUENO |
| 4 | 0605794999 | BONILLA CASILLAS | EDISON MAURICIO | 8,51 | MUY BUENO |
| 5 | 0504073479 | CAICEDO SANDOVAL | JESICA PAOLA | 8,94 | MUY BUENO |
| 6 | 0503767055 | CANDO AREQUIPA | LISBETH CAROLINA | 8,38 | BUENO |
| 7 | 0202636981 | CANDO REMACHE | EVELYN TATIANA | 9,06 | MUY BUENO |
| 8 | 0504264904 | CHANCHICOCHA SOPA | FLAVIO IVAN | 8,65 | MUY BUENO |
| 9 | 0504364969 | CHANGOLUISA MORENO | ANDERSON STALIN | 8,38 | BUENO |
| 10 | 1752374312 | CHICANGO REYES | KATHERINE NAYELI | 8,56 | MUY BUENO |
| 11 | 0504305731 | CHILLAGANA CAGUATE | ANDERSON PAUL | 9,10 | MUY BUENO |
| 12 | 0550156210 | CHILUISA CHICAIZA | YULISA CRISTAL | | SIN NOTAS |
| 13 | 0504327255 | CLAUDIO CLAUDIO | JONATHAN ALEXANDER | 7,95 | BUENO |
| 14 | 0503664377 | CRESPO CRESPO | WENDY ELIZABETH | 9,35 | MUY BUENO |
| 15 | 0504100199 | CRIOLO ACHOTE | DARWIN WLADIMIR | 8,58 | MUY BUENO |
| 16 | 0804213791 | GAMARRA RODRÍGUEZ | KAREN ANDREINA | 8,94 | MUY BUENO |
| 17 | 0550376917 | IZA QUIMBITA | WILIAN STALIN | 8,87 | MUY BUENO |
| 18 | 1724700016 | LEMA HERRERA | ANGIE NAYELY | 9,31 | MUY BUENO |
| 19 | 0550255954 | MADRIL QUISHPE | JHADIRA ANABEL | 8,37 | BUENO |
| 20 | 0550126270 | MADRIL JACOME | NICOLE ANAHI | 8,90 | MUY BUENO |
| 21 | 1726827098 | NARANJO UTO | LADY GABRIELA | 9,12 | MUY BUENO |
| 22 | 0503900136 | PADILLA TOCTAGUANO | SAYRA POLETH | 8,71 | MUY BUENO |
| 23 | 0504866369 | PARRA PEREZ | HEADY NAILYN | 9,43 | MUY BUENO |
| 24 | 0550125066 | PATA MERA | INGRIS ISAMAR | 9,03 | MUY BUENO |
| 25 | 0504414236 | PRUNA PLAZARTE | PAUL ALEXANDER | 8,01 | BUENO |
| 26 | 0504101155 | PULLOPASIG GUTIERREZ | DARWIN MAURICIO | 8,27 | BUENO |
| 27 | 0550413082 | QUIMBITA YANEZ | FATIMA NICOLE | 9,55 | EXCELENTE |
| 28 | 1804625851 | QUISHPE ARIAS | SILVIA NATALY | 8,64 | MUY BUENO |
| 29 | 1850268838 | RODRIGUEZ CHILUIZA | KEVIN ALEXANDER | 8,60 | MUY BUENO |
| 30 | 1850354059 | SANCHEZ MOPOSITA | CARLOS ARIEL | 7,61 | BUENO |
| 31 | 0550056238 | SILVA REALPE | JAVIER ALEJANDRO | 8,97 | MUY BUENO |
| 32 | 0504119892 | SIVINTA TIPAN | ERICK ALEXANDER | 9,01 | MUY BUENO |
| 33 | 0605537018 | TIUQUINGA CHINLLE | JENNIFER ALEXANDRA | 8,66 | MUY BUENO |
| 34 | 0504895145 | TOAPANTA ANALUISA | VERÓNICA CAROLINA | 7,81 | BUENO |
| 35 | 0550011936 | TOAQUIZA CHANCUSIG | WELLINGTON ORLANDO | 8,14 | BUENO |
| 36 | 0504038142 | TOCUMBE TIPAN | BRAYAN RIGOBERTO | 8,87 | MUY BUENO |
| 37 | 1850156124 | UGSHA COLLAGUAZO | STALIN ALEXANDER | 8,34 | BUENO |
| 38 | 0550008460 | ULLCO CHALUIZA | EDWIN NEPTALI | 8,69 | MUY BUENO |
| 39 | 0550206551 | VIRACOCCHA IZA | STEEVEN ALEXANDER | 9,37 | MUY BUENO |
| 40 | 0550141725 | VIRACUCHA CHANCUSIG | SANDY RUBY | 7,87 | BUENO |
| 41 | 0503340259 | YANCHAPAXI ARMAS | RICARDO ESTEBAN | 9,21 | MUY BUENO |
| 42 | 2000129144 | ZARABIA VIVAS | MARIA DE LOS ANGELES | 9,20 | MUY BUENO |

MUÑOZ TIGLLA IVÁN SANTIAGO
 ID.: 0502961329
 TEACHER



LC - LANGUAGES CENTER

LC-101 - BEGINNERS - ENGLISH I

2020-2P

GRADES

| LEVEL: | | FIRST | PARALLEL: | L | |
|--------|------------|-----------------------|--------------------|------|------------|
| No. | ID | SURNAMES | NAMES | U1 | EVALUATION |
| 1 | 0550426118 | ALCARRAZ MARTINEZ | DIANA PAOLA | 8,98 | MUY BUENO |
| 2 | 0504340498 | AMAYA CAICEDO | JHOSELYN LISSETH | 7,25 | BUENO |
| 3 | 1727291492 | ANGO TUPIZA | JESSICA NICOLE | 8,32 | BUENO |
| 4 | 1727485649 | ARGOTI CONTRERAS | KATHERIN PAMELA | 8,19 | BUENO |
| 5 | 0504307976 | BASTIDAS SALAZAR | LISET CAROLINA | 8,89 | MUY BUENO |
| 6 | 0504618851 | BAUTISTA TAIFE | BRAYAN PATRICIO | 8,74 | MUY BUENO |
| 7 | 1752769495 | CALCAN ALBA | SHEYLA MARIBEL | 8,73 | MUY BUENO |
| 8 | 1104378912 | CARDENAS CORDOVA | ALEXANDRA VERONICA | 9,08 | MUY BUENO |
| 9 | 2300044266 | CEPEDA ESTRADA | ENID ARACELY | 8,42 | BUENO |
| 10 | 0503932428 | CHARRO SEGOVIA | JAROL ALEXANDER | 7,52 | BUENO |
| 11 | 0502498264 | CHICAIZA AGUAS | RITA MARIBEL | 4,62 | REGULAR |
| 12 | 0550228019 | CHICAIZA CRUZ | MARTHA JULIA | 8,93 | MUY BUENO |
| 13 | 0503668618 | CHIMBA ESPINEL | ISMAEL DAMIAN | 7,84 | BUENO |
| 14 | 0550665335 | CORDOVA CORDOVA | NATHALY ALEJANDRA | 8,09 | BUENO |
| 15 | 0503284507 | ESPIN TAPIA | EDWIN PAUL | 8,19 | BUENO |
| 16 | 1725638934 | FREIRE RAMOS | CAROLINA MISHELLE | | SIN NOTAS |
| 17 | 0504339359 | GARCIA CHANGOLUISA | IRENE ALEXANDRA | | SIN NOTAS |
| 18 | 0504597089 | GUAGCHINGA MOYA | NATALY MARIBEL | 7,31 | BUENO |
| 19 | 0504678343 | GUAMBIANGO TIPANTASIG | JEFFERSON OSWALDO | 8,67 | MUY BUENO |
| 20 | 1750184630 | LITA ALPALA | EMILY DANIELA | 8,45 | BUENO |
| 21 | 0504131277 | LUTUALA CHACHA | MARCOS VINICIO | | SIN NOTAS |
| 22 | 1725641706 | MACAS OROZCO | DIANA CAROLINA | | SIN NOTAS |
| 23 | 1751184357 | MOLINA VELASCO | NATHALY ELIZABETH | 8,05 | BUENO |
| 24 | 0504238270 | MORENO TOAZA | DIEGO MARCELO | 8,54 | MUY BUENO |
| 25 | 1727644971 | NARANJO ROBALINO | JOYCE LISETH | 9,56 | EXCELENTE |
| 26 | 0504362849 | PILATASIG CHICAIZA | DARWIN ORLANDO | 7,46 | BUENO |
| 27 | 0550663629 | PINCHA GUASTI | JESSICA MARIBEL | 8,55 | MUY BUENO |
| 28 | 0550041792 | PRUNA PILAGUANO | EVELYN MIKAELA | 8,93 | MUY BUENO |
| 29 | 0503998858 | QUIMBITA CADENA | EVELIN JAQUELINE | 8,90 | MUY BUENO |
| 30 | 0504375684 | QUISIPANGUI VASQUEZ | GALO ALEXANDER | 7,15 | BUENO |
| 31 | 1756130132 | RECALDE ESPINOZA | LIZBETH DEYANEIRA | 8,83 | MUY BUENO |
| 32 | 0504263724 | RUEDA CELA | ERIKA ROXANA | 3,37 | DEFICIENTE |
| 33 | 0504069477 | SALGUERO CARRILLO | EDWARD GEOVANNY | 8,51 | MUY BUENO |
| 34 | 0503995029 | SHIGUI TOAPANTA | ELVIA ROCIO | 8,64 | MUY BUENO |
| 35 | 0550375604 | TAIFE TOCTAGUANO | JESSICA PAOLA | 2,32 | DEFICIENTE |
| 36 | 0503738163 | TIGLLA MOPOSITA | JESSICA MARISOL | 8,61 | MUY BUENO |
| 37 | 1728728104 | TOAPANTA BERRONES | EVELIN PAMELA | 9,24 | MUY BUENO |
| 38 | 0550236160 | TOAQUIZA ORTEGA | TANIA LISBETH | 8,79 | MUY BUENO |
| 39 | 0502714314 | VELASCO GUANOLUISA | ANA LUCIA | 8,94 | MUY BUENO |
| 40 | 0503764946 | VERGARA PACHECO | LUCIA MARIBEL | 8,66 | MUY BUENO |

MUÑOZ TIGLLA IVÁN SANTIAGO

ID.: 0502961329

TEACHER