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EASTERN CAMPUS

SCHOOL OF ARTS AND SCIENCE

FOREIGN LANGUAGES SCHOOL

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Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages, English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus

To obtain the degree of:

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Abstract

La investigación "Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages, English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus" busca indagar sobre los beneficios que las Tecnologías de la Comunicación y la Información (TIC) en profesores y alumnos. También tiene como objetivo diseñar una propuesta en la que un Laboratorio de Idiomas sea la base del proceso de aprendizaje en estudiantes de nivel intermedio de las carreras de Lenguas Modernas, Profesorado en Inglés y docentes de la sección de idiomas de la Universidad de El Salvador, Facultad Multidisciplinaria Oriental. El método utilizado en esta investigación fue el Método Cualitativo que permitió trabajar la opinión de los docentes e identificar el uso que los docentes tienen de las Nuevas Tecnologías en un Laboratorio de Idiomas. La muestra para este estudio fue de cuatro docentes que fueron entrevistados y se pidió a 20 estudiantes que respondieran un cuestionario, todos ellos de la sección de idiomas de la Facultad Multidisciplinaria Oriental, de la Universidad de El Salvador. Para concluir, en los resultados obtenidos demuestran que un laboratorio de idiomas es reconocido como una herramienta que potencia no solo el proceso de enseñanza, ya que cambiaría parcialmente el diseño de las lecciones, sino también el proceso de aprendizaje, dando a los estudiantes acceso a herramientas variadas y diferentes. Asimismo, se suma la presentación de una propuesta de plano para el equipamiento del laboratorio de idiomas ubicado en la Universidad de El Salvador, Campus Oriente, más específicamente en el laboratorio de idiomas número 1 dentro del edificio de la Unidad Biblioteca de esta Universidad.

The research "Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages,

English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus" seeks to inquire about the benefits that Information and Communication Technology (ICT) have on teachers and students. It also aims to design an action plan in which a Language Laboratory is the base on the learning process in junior students of Modern Languages, English Teaching degrees and the teaching base of English Teachers at the University of El Salvador, Eastern Campus. The method used in this research was the Qualitative Method that allowed to work on the teachers' opinions and to identify the use that teachers have of New Technologies in a Language Laboratory. The sample for this study was four teachers who were interviewed and 20 students asked to respond a questionnaire, all of them from the language section of the Eastern Campus, at the University of El Salvador. To conclude, in the results obtained, a language laboratory is recognized as a tool that enhances not only the teaching process, since it would partially change the design of the lesson, but also the learning process, giving students access to varied and different tools. Also, the presentation of a plan proposal for the equipment of the language laboratory located at the University of El Salvador, Eastern Campus, more specifically in the language laboratory number 1 within the university library building is added.

Key words: ICT, teaching, learning, language laboratory, foreign languages.

Introduction

Throughout the years, some researchers have concentrated on the use of ICT in the classroom to assist students in understanding the knowledge they are receiving; however, only a small number of these studies are linked to foreign language learning. Therefore, the research "Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages, English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus" aims to learn more about the advantages of Information and Communication Technology (ICT) for teachers and students in the process of teaching/learning foreign languages. It also seeks to develop an action plan in which a Language Laboratory serves as the basis for junior students of Modern Languages, English Teaching degrees, and English Teachers' teaching.

The researches started describing the problem, and provided background information about the Information and Communication Technology, its definition and history, the ICT in Latin-American education, the use and incorporation of ICT in the classroom, the pedagogical in ICT models, the impact of ICT on education, and the ICT for MINED in El Salvador. In the same way, a review of the information about the Language Laboratories is presented. It is composed by their definition, history, layout of traditional languages labs, and a review of the present day of digital language labs. Besides, it is attached information about the current status of the language laboratories of the school of languages at the University of El Salvador, Eastern Campus. All this was the basis to conduct an action plan whose objective is to offer a well-equipped Language Laboratory structure to change and improve the process of teaching and learning of foreign languages using ICT.

At the end of this research study, the researchers provide a plan proposal for the equipment of a language laboratory based on the results obtained; then

conclusions and respective recommendations are raised to implement the constant use of ICT within the classroom.

Thus, the research paper is divided as follows: Chapter 1 is called Statement of the Problem, it raises the problem that guides this investigation. This includes the statement of the problem, the guiding objectives for carrying out the investigation. Following is the Rational that contains the logical bases that give the course of action of the investigation; the questions that arise from the research, and the state of art where the researches that have been carried out previously in relation to this topic are expressed.

Chapter 2, called Theoretical Framework, presents the definition and history of New Technologies in a global way; then, focusing them on Latin America and its use within the classroom for teaching. In the same way, the use of New Technologies is described; also, how it is closely related to the different pedagogical models of teaching, and how at the national level it has been of great importance since its apogee. As well, this chapter defines what have been the Language Laboratories, their history, and design of traditional languages labs. At the end of this chapter, it is shown the General Operationalization Table and the categorical system of the research.

Chapter 3 is the Methodological design where the methodology that served as the structure to carry out this research. It is defined and in turn, the process in which the research was developed is described in detail. This chapter works specifically with the method and the methodology, with the vision and the paradigm/approach of the on which the research is based, the design and the type of research by time are detailed, the techniques, scenario, social group, the role of the researchers, the sample strategies, the inclusion criteria, ethic aspects, data collection plan, instruments, the inductive analysis, and the limitations are also presented.

Chapter 4 corresponds to the analysis of the research data. This chapter presents the analysis of the different types of instruments used for data collection. For a better structure of the data, the transcription of the interviews is presented first and then the analysis of each of the results presented in the interview. The second part is the analysis of the data collected with the questionnaires. This chapter includes tables and graphs for the best representation of the data obtained.

Chapter 5 offers the development of the plan carried out in response to the results. In this chapter, the design of the proposed Languages Laboratory is defined. Emerging this from the analysis of the data obtained from the results of the instruments. In addition, each of the components that will be needed for the operationalization of the proposed design is described and explained in detail. Note that in this chapter their respective annexes are attached below due to their need for a better comprehension of the information.

Chapter 6 comprises the last chapter of the investigation where the conclusions of the investigation carried out are expressed. In this chapter is taken into account first, each of the objectives set at the beginning of the investigation; secondly, the way in which the investigation was developed; and finally, the results that the data analysis provided for the investigation. This chapter presents the recommendations to the corresponding individuals and institutions that we highlight as researchers.

Afterward, the limitations that took place in the development of the investigation are given. Likewise, the information on the documents that were the basis for the investigation is listed as references.

As the last information, the pertinent documents with which the investigation was carried out are annexed.

CHAPTER 1: STATEMENT OF THE PROBLEM

Research Profile

Research Proposal:

Study of the New Technologies in the process of learning and teaching foreign languages degrees in junior students of Modern Languages, English Teaching degrees and English teachers at the University of El Salvador, Eastern Campus.

Statement of the problem:

The necessity of exposure to Information Technology and Communication in the teaching-learning process of foreign languages degrees in Junior students of Modern Languages, English Teaching degrees and English Teachers at the University of El Salvador, Eastern Campus.

Rationale

Nowadays, the use of New Technologies has become essential for the full development of skills in the educational field. Generally, it is claimed that New Technologies improve the students' performance in all branches of human learning. For some authors, Latin American countries should already be at the forefront with technology both at work and education levels (Carneiro, Toscano, & Díaz, 2008). As a matter of fact, the use of Information and Communication Technology (ICT) as teaching resource was the first step in the implementation of Education Technology in educational centers. Regarding languages, New Technologies take a significant role inside of the process of teaching and learning languages. Under those circumstances, foreign languages students need exposure to different cultures in some way to get completely involved in the process of learning a new language.

Vega, Álvarez G., & Álvarez A. (2011) mention that ICT objective is to educate and assess the essential ideas and aptitudes of science so that people can use computer technology in everyday life and develop new social and economic opportunities for them, their families and their communities. With this in mind, it is necessary to carry out a research paper that shows the needs of exposure to New Technology that junior students of Modern Languages and English Teaching degrees at the University of El Salvador, especially in the Eastern Campus had.

Moreover, the relevance of this research is of great value since it offers an overview of the learning process that students have had so far, giving way to possible changes, if necessary, that may benefit future students studying these careers.

The school and the education system not only have to teach New Technologies, they not only have to continue teaching subjects through New Technologies, but these New Technologies apart from producing changes in the school they produce a change in the environment and, as the school is intended to prepare people for this environment; if it changes, the school activity has to change. (Majó, 2003)

To illustrate the above, the use of New Technologies like a Languages Laboratory as a tool to improve their macro-abilities in their process of learning.

To summarize, the realization of this research paper is of great value because the results that will be found will be useful for the realization of future projects that would benefit the teaching-learning process to future generations of graduates of foreign language careers and even teachers' development in the class.

Questions

- What is the importance of the use of Information and Communication Technology in Foreign Language Learning?

- How does the use of New Technologies benefit the student population of the University of El Salvador, Eastern Campus, in Foreign Languages Degrees?

- What Language Lab design best suits the foreign language teaching-learning process at a university level?

- How does the use of New Technologies improve teachers' performance in the classroom?

- Which are some struggles teachers may face managing the New Technologies in the classroom?

Objectives

General Objective

● To inquire about the benefits that Information and Communication Technology (ICT) have on teachers and students of the Foreign Languages School in the University of El Salvador, Eastern Campus.

● To design proposal in which a Language Lab is the base on the learning process in junior students of Modern Languages, English Teaching degrees and English Teachers at the University of El Salvador, Eastern Campus.

Specific Objectives

● Inquire about the development of ICT throughout history.

● To study about the different advantages of teachers and students when using ICT.

● To relate teacher and students needs about the use of technology in the classroom.

● To diagnose which macro-skills students develop the most when using technology in a classroom.

● To determine the most suitable Language Laboratory design to be used in the language degrees at the University of El Salvador, Eastern Campus.

State of the Art

Over the years there have been some studies focused on the use of ICT within the classroom to support students in the information they are receiving; however, a very small number of these studies are related to learning of foreign languages. Alberto, Arias, & Cabrera (2011) showed that there is an assortment of advantages and benefits that the integration of ICT provides in the teaching and learning process. They proved the use of ICT gives the opportunity to teach all the skills when selecting them carefully according to the students' needs and the main objectives of their classes. Consequently, it was demonstrated ICT helps students to practice and develop their macro skills. The research also proved that implementation of ICT in the teaching learning process not only depends of financing but also of technical support. When integrating ICT in schools it is important to take into account that the investment goes forward the equipment; but also imply that teachers will make use of ICT to have the Community services. For this, it is important to have the adequate technological equipment like computers, projectors, Internet access, etc. to cover the needs of the whole population of students.

The research carried out by Eduviews (2009), found that blended learning models are used in many ways throughout America's schools. The research team for this paper conducted in-depth interviews with district and school leaders in locations throughout the United States. It provided results from that some schools have been redesigned to incorporate digital instruction as a daily component of learning; to others that proved blended learning offers significant benefits for the district's ESL students and their teachers. In fact, blended learning doesn't merely provide benefits to language students but also it was aiding students fulfill physical education, math, and helping teachers meet professional development requirements. These districts considered their professional development to be successful, technology infrastructure and funding needs. In all cases, the results showed that educators were strategic about

their blended learning implementation which positively influenced their teaching and learning initiatives.

One of the works that efficiently tested the fact of transforming the traditional classroom into a digital classroom runs by Cabero (2015). In summary it showed the design of content to be used in virtual learning actions has gone through different stages under the influence of both the available technology and the knowledge acquired about digital instruction.

The research carried out by Young (2008) demonstrated the value of adding technology tools into a teacher's instruction method in order to provide a more effective teaching into the classrooms. It proved that when teachers add technology tools to effective instructional strategies in their curriculum; first, students could be more excited about learning; second, their attitudes could be positive about technology; third, they could be more engaged in the lesson; and also, their test scores could improve.

The results of the research of Ghavifekr & Athirah (2015) showed that technology-based teaching and learning is more effective in comparison to the traditional classroom. They demonstrated that it is not purely because using ICT tools in the classroom but also equipment will prepare an active learning environment which is more attractive and effective for both teachers and students. The results of this study are in line with the research finding by Macho (2005) that proved using ICT with internet connection in education would enhance students' learning. However, most of the teachers in this study were agreeing that ICT helps to improve classroom management as students are well-behaved and more focused. At long last, this study proved that students learn more effectively with the use of ICT as lesson designed because they become more interesting.

Cabero (2006) emphasizes that the meaning of e-learning for education does not lie in its technical dimension (the platform utilized) but in the control and meaning assigned to a series of variables. According to him, these variables are how the

contents are presented, the role of the teacher and the student, the synchronous and asynchronous communication tools used and their application in the teaching act, the didactic strategies used, the attention focused on the organizational characteristics, the electronic activities provided, etc. That is, all the educational acts use the web as a medium and resource, independently of the fact that other instruments can additionally be used.

Hall (1999) tries to demonstrate how the use of innovative technologies in the classroom facilitates teaching effectiveness and student development of cognitive skills. For her, using technology in course design allows flexibility, adaptation and "just-in-time" delivery of course material. She develops the idea that Just-in-time delivery allows the capability to uniquely customize course material in a matter of moments. The power of this method of delivery includes the capability to present time or reference sensitive information, to allow crisscrossing of knowledge, and to present the most current and up-to-date information available. She concludes that developments in technology will make it increasingly less costly and time intensive to include electronic tools in web-based/internet delivered courses. She also maintains the idea that existing and New Technologies will continue to be creatively applied to achieve institutional goals. For her, innovations will occur including new uses for the World Wide Web, Listservs, and videoconferencing tools. Simultaneously, she believes computer tools will become "smart", that they will have more "intelligent" capabilities and that these tools will facilitate us filter and access the information needed. Students will be responsible for demonstrating understanding, not just memorizing ideas. To do so, teachers will need to become creative and adventurous in their teaching and classroom management.

Klopfer, et al. (2009) in their education arcade paper tried to explain the instructional power of digital games, social networking simulations and how teachers can leverage them. For them, the emergence of innovative technologies forces

educators to understanding and leveraging these technologies for classroom use; at the same time, the on-the-ground implementation of these technologies in the classroom can (and does) directly impact how these technologies continue to take shape. They believe there will be challenges to implementing these technologies in the classroom. Even the most fundamental, non-tech lessons have their hiccups. Like anything that is new, there is a learning curve. The challenges may not be as great as is thought, and the best way to avoid setbacks is to spend a little time with these technologies before getting to the classroom. They presented results that showed that the ability of digital games, simulations, and social media technologies to facilitate and leverage deep learning is evident enough to warrant further exploration and development of new best practices. But that teachers do not need to wait for the distant future to understand if and how they can implement these technologies.

Even the Minister of education of El Salvador (2004) has presented a distance study modality with the objective to contribute to the satisfaction of initiatives for the improvement and academic training of young people and adults from the least favored social strata, included the New Technologies in its methodology. The methodology is based on direct and constant contact with the student. In this sense, the distance between the sender-receiver is overcome through meetings, interviews, consultancies, letters, telephone communication and other forms more related to New Technologies. The didactic medium in the distance modality is self-learning, which is mediated by the self-study module, the intervention of the tutor and the support of technological means.

There are also studies based on the benefits of technology focusing in language skills. Hennessy, Deaney, & Ruthven (2005) explained that the use of ICT acts as a catalyst to motivate teachers and students to work in new ways. The researcher understood that as learners become more autonomous, teachers believe that they need to inspire and support their students to act and think independently. Likewise, Lee

(2001) says the use of Computer Assisted Language Learning (CALL) changes students' attitudes towards learning and increases their self-confidence.

For Costley (2014) Information and communication Technology (ICT) have several advantages for teaching and learning. First, students take an active role, which can help them retain more information. Next, follow-up discussions include more information that can help students become more independent. Finally, students can process new learning materials and improve their language learning skills.

Riasati, Allahyar, & Tan (2012) mention that the use of technology has changed methods from teacher-centered to student-centered methods. For them, teachers should be moderators and guide the learning of their students. This change is very useful for students to improve their learning. Warschauer (2000) has described two different points of view on the integration of technology in teaching. First, the cognitive approach gives students the opportunity to significantly increase their exposure to the language and acquire their own knowledge. Second, in the social approach, students must have the opportunity to have authentic social interactions to practice real-world skills. This can be achieved by collaborating with students in real activities.

The Eaton International Consulting (2010) found that computer communication is a useful feature for language learning. Computerized discussions involve more even participation than face-to-face discussions. Zhao (2013) supported the above view and stated that access to authentic material in the target language is essential for successful language learning.

According to Rodinadze & Zarbazoia (2012), technology helps students and teachers to learn course materials due to its rapid accessibility. Advances in technology play a key role in preparing students to use what they have learned in each subject to find their place in the world of work. Technology facilitates student learning and is a true educational tool that enables learning to occur.

Baytak, Tarman, & Ayas (2011) examined the role of technology in language learning. The results showed that the integration of technology in the classroom improved student learning. Students said that the use of technology in schools makes learning enjoyable and helps them learn more. Students also said that technology makes learning interesting, fun and interactive. The other finding of this research is that the use of technology increases student motivation, social interactions, learning and engagement.

Mouza (2008) and Sabzian, Pourhossein, & Sodouri (2013) stated that one of the effects of using technology in language teaching is greater collaboration between teachers and students. When teachers allow students to become assistants in the classroom process, it can increase student confidence. Students have the opportunity to strengthen the opinions and skills they have already acquired. Students can help teachers integrate technology as students have had plenty of time to master the technology while teachers work in direct class.

Drayton, et al. (2012) also suggested that using the computer room is a real learning experience that increases student responsibility. Teachers said that the use of the internet and email promotes student-centered learning. Parvain & Salam (2015) conducted a study and found that the use of technology gives students the opportunity to increase their exposure to language in a meaningful context and develop their knowledge. Students should have opportunities for social interaction to practice their skills in real life. This is achieved through student collaboration on real-world activities.

Baytak, Tarman, & Ayas (2011) also examined the effects of technology on learning. The results of this study showed that students improved their learning by incorporating technology into their classrooms. The researchers indicated that the technology made students' learning interesting and interactive, and increased their motivation, social interaction, and participation.

Peregoy & Boyle (2013) conducted a study on the use of technology to improve students' reading and writing skills. The results of this study show that technological tools improve students' reading and writing skills because they are easy to use and allow students to learn faster and more effectively. The other result of this study was that students learn more effectively when they use technological tools instead of the traditional teaching method, as the Internet provided a favorable learning environment for learners' learning, facilitated a new platform for learners who can have a convenient access to learning lessons.

The other study was done by Alsaleem (2014) on using WhatsApp applications in English dialogue logs to improve students' writing, vocabulary, word choice and speaking skills. Based on the results of this study, it was concluded that WhatsApp improved students' skills in writing, speaking, vocabulary and word choice. Godzicki, et al. (2013) carried out a study that examined the motivation and engagement of students in the classroom. The results of this study showed that when technology is used as a teaching tool in the classroom, students are more likely to participate in the classroom. Technological tools show improvements in terms of accessibility and motivation.

Lin & Yang (2011) conducted a study to see if wiki technology would improve students' writing skills. Students were invited to join a wiki page where they write passages and then read and answer passages from their classmates. Students indicated that the immediate feedback they received was a benefit of using this type of technology. Another finding is that students learned vocabulary, spelling, and sentence structure by reading their classmates' work.

CHAPTER 2: THEORETICAL FRAMEWORK

Theoretical Framework

Information and Communications Technology (ICT)

      History of ICT in education. The history of ICT goes back to 1958 when the first program for teaching dedicated to binary arithmetic appears with an IBM 650 computer, developed by Raht and Anderson at IBM (Rodríguez & Carmona, 2015). Then, by 1969 The University of California founded the Educational Technology Center in Irving, under the direction of Alfred Bork, where materials for computer-assisted education were developed.

      In Europe, the first projects were made to introduce computers in secondary education in 1970. Among them, the French plan by J. Hebenstreit was the development of the LSE programming language[1] to facilitate the shared use of the programs, and the creation of research and development teams for EAO[2] programs. Other important advances of this time were the development of the computer programming language "Common Algorithmic Language" (COMAL) and the Pascal Programming Language that some universities began to use in an attempt to replace basic education to take advantage of the benefits of the structured programming.

      In 1972, the United States government awarded, through the American National Science Foundation (ANSF), $ 10 million to two private companies to achieve nationally applicable computerized teaching systems. These two companies were Control Data Corporation (CDC) and Miter Corporation (MC) and they produced the first versions of their systems, known as Programmed Logia for Automatic Teaching Operations (PLATO) and Shared Interactive Computer Controlled Information Television (TTCCIT).

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[1] By its French initials *Langage symbolique d'enseignement*

[2] by its acronym in French *Enseignement Assisté par Ordinateur*

In 1970, The Canon Company launches the first pocket calculator. Later in 1972, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Council of Scientific Unions (ICSU) highlighted two works. One of them was the use of the first videocassette players for educational purposes; the other was the demonstration of the PLATO system connected from the terminals in Paris to the computer in Illinois.

In 1973, the National Development Program for Computer Aided Learning (NDPCAL) project began in Great Britain. The use of computers was intended to create an environment that developed exploration, experimentation, and learning, through the development of interactive instructional systems based on the use of the computer with programs to simulate the behavior of complex systems and organizations.

In 1977, Microcomputers or personal computers (PCs) appeared on the market, producing a real revolution, not only in areas such as home, professions or offices, but also in the educational field. It is from the commercialization of microcomputers when in most countries the elaboration of plans to incorporate computers to secondary schools was implemented.

In 1980, Seymour Papert, who until 1965 had studied pedagogical problems with Jean Piaget, and in 1966 collaborated with Marvin Minsky in the direction of the Artificial Intelligence laboratory, gives a series of reflections on the use of computers in education and promotes the educational programming language LOGO[3]. Papert's hypotheses were two; the first was children can learn to use computers; and the other that this learning can change the way they learn another knowledge.

Papert's proposal is diametrically opposed to what was being done with computers. In the PLATO system, the computer had a series of lessons programmed for the student to learn. With the LOGO language, Papert wants the child to program

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[3] Name coined by Feurzeig that derives from the Greek logos, which means word or thought.

the computer to do what the child wants. In essence, the LOGO program provides the child with a graphic environment in which there is a "turtle" that can obey a series of basic instructions, such as advancing a certain distance, turning a certain angle to the right or left, leaving or not drawn a stroke along the path it travels and if the computer screen is in color, the color of the turtle's stroke can be varied. But, in addition the computer can learn sequences of instructions and repeat them under predetermined logical conditions.

By 1985 programs that were incorporated into teaching in study centers began to appear. Office tutorials that teach the operating system MS-DOS, WORDSTAR, WORDPERFECT, LOTUS, DBASE, WINDOWS, and other computer applications appeared. Programming languages such as PASCAL[4], C[5], COBOL[6], BASIC[7], dBASE[8], etc. were taught.

In 1986, the Casio Company presented the first scientific calculator with the ability to graph, which allows graphing functions of a single variable and associating a table of values.

It was in 1996 that Texas Instruments makes the T1-92 algebraic calculator appear, which contains a powerful CAS (Computer Algebra System). Recently, Flash technology appeared, which allows incorporating and updating programs electronically, and there are also peripheral data collectors CBL (Calculator-Based-Laboratory) and CBR (Calculator-Based-Ranger) that can be modeled physical phenomena.

ICT in Latin-American Education. According to Sunkel (2008) there is currently a recognition of the central role that education plays in the development processes of a country. This is related to the capacity of the countries to face the

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[4] Developed in 1970 by Niklaus Wirth and is named after the famous French mathematician Blaise Pascal.
[5] Originally developed at Bell Labs by Dennis Ritchie between 1972 and 1973.
[6] Acronym for "Common Business-Oriented Language"
[7] Acronym for "Beginners' All-purpose Symbolic Instruction Code"
[8] Meaning "Database" developed in 1979

challenges posed by the scientific-technological revolution, to be updated with the productive transformation, as well as to solve social problems. According to the development that has been taking place in the world, education is no longer a consequence of economic growth to be seen as one of the sources of the development process. In sum, in the Latin American region, education is considered a decisive element for development.

For him, education is conceived as a source of development whose objective is oriented to satisfy the need to improve its quality and equity. Although the contents and orientations of education are not homogeneous between countries, there is a common substrate of coincidence. This substratum includes aspects such as reforming the contents and pedagogical practices based on new supports of knowledge and changes in the world of work, rethinking the role and training of teachers, and as a most important point, introducing ICT in schools.

In the conception of education as a source of development, it faces new challenges such as providing universal access to information and promoting communication skills between individuals and social groups. Educational policies that involve the incorporation of ICT in educational establishments, as well as their effective use in teaching / learning processes and in the organization of the teaching task, are the way to respond to these challenges. Therefore, they are not a simple fashion but respond to the development needs of Latin American countries and insertion in the globalized world.

One of the key problems of the relationship between national education policies and ICT is the difficulty of implementing to education elements that are strange to it, that do not arise or develop within education systems and are therefore not installed naturally. This means that the incorporation of ICT into education is a graft of a model originating outside the education systems (Bonilla, 2003).

In this process from 'out' to 'inside' in the incorporation of ICT into education has been reduced by two types of logic: the logic of learning from technology, providing knowledge about ICT and its codes; and the logic of learning with technology, putting technology at the service of teaching-learning processes.

In addition, ICT is an equal factor in opportunities such as accessing high-quality materials from remote sites, learn independently of the physical location of subjects, access interactive learning and flexible learning proposals, reduce physical presence to access learning situations, develop learning services to overcome the situation of limited access to information that poor countries mainly have, generate better information on progress/preferences/learning capacity, the ability to evaluate and certify online learning, etc.

Furthermore, ICT also increases educational levels due to changes in teaching-pedagogical processes and strategies implemented by teachers, in promoting more creative and diverse learning experiences, as well as in the possibility of fostering independent and lifelong learning according to the needs of subjects.

However, these promises of ICT in education are far from true. According to Tedesco (2014) it is not a question of denying the innovative potential of New Technologies but of emphasizing that the exercise of that potential does not depend on the technologies themselves but on the social and pedagogical models in which it is used. The reduction of social inequalities is not born of ICT but of the educational policy framework in which they are inserted.

To contextualize the progress of the process of incorporating ICT into education, it is necessary to take into account first some of the features presented by the 'digital divide' in Latin America. In particular, there is the internal gap in inequalities in access to ICT within Latin American countries. The internal divide is conditioned by aspects such as differences in connectivity between countries, income level and geographic location.

With this new form of exclusion in the digital divide, the question arises about the existence of an ICT policy in the field of education. A first indication in Latin America in this field is the formation of the Latin American Network of Educational Portals (RELPE for his initials in Spanish). Established in 2004 as a regional cooperation agreement on educational it computing policies, it represents the commitment of educational authorities in 17 countries in the region to the use of ICT in education.

Among the different agreements, Sunkel (2008) mentions:

1. Establish the Latin American Network of Educational Portals in order to promote the use of Information and Communication Technology at the service of improving the quality and equity of education through the free exchange and use of digital resources located in the portal's members.

2. Establish actions for the exchange of policies, experiences, and collaboration in the use of ICT in the field of education, in the following areas:

a) Acquisition, reconditioning, sustainability policies for the delivery of equipment (hardware and software) to schools, together with actions that favor the connectivity of schools.

b) Strategies for teacher training in pedagogical and management uses supported by ICT.

c) Strategies for the incorporation of ICT in pedagogical practices such as delivery and development of educational content for the Internet, software tools and support materials for teachers.

d) Specific strategies for students, oriented to train and certify their ICT skills.

> e) Strategies for opening educational centers to encourage the active participation of the entire community in innovation and massification projects for the access and use of ICT.

> f) Development of studies and evaluations of ICT results in the school system, which are regionally comparable and allow the search for complementarity to address solutions to common Latin American problems.

RELPE is a network consisting of the educational portals designated for this purpose by the Ministry of Education of each of the participating countries, which are shown in the table 1:

Table 1

RELPE member countries and their corresponding Educational Portals

Country	Website
Argentina	http://www.educ.ar
Bolivia	http://www.boliviaeduca.bo
Brazil	http://rived.proinfo.mec.gov.br
Chile	http://www.educarchile.cl/
Colombia	http://www.colombiaaprende.edu.co
Costa Rica	http://www.mep.go.cr
Cuba	http://www.rimed.cu
Ecuador	http://www.educacionecuador.com
El Salvador	http://www.edured.gob.sv
Mexico	http://sepiensa.org.mx
Nicaragua	http://www.portaleducativo.edu.ni
Panama	http://www.meduca.gob.pa
Paraguay	http://www.educaparaguay.edu.py
Peru	http://www.huascaran.edu.pe

Dominican Republic	http://web3.educando.edu.do
Uruguay	http://www.todosenred.edu.uy
Venezuela	http://portaleducativo.edu.ve

Source: Adapted from Guillermo Sunkel (2008)

The network offers teachers and students a connectivity space through which a huge regional knowledge file is accessed. The objective of this network is to bring New Technologies closer to school and education in general, making available to teachers, students and families, materials and digital resources that can support teaching and learning processes.

Another aspect to consider is access to New Technologies from schools. The issue of access refers to two main themes: on the one hand, issues relating to the technological resources available in educational establishments for students and teachers; on the other hand, issues associated with "computer density" (the rate of students per computer), which is a factor that conditions the "effective use" that the students can make of ICT.

Regarding the first, it should be noted that the provision of a technological infrastructure is the basis that makes it possible to integrate the use of ICT in schools, but it is not the ultimate objective of the computerization process of the school system. In other words, it is a necessary but not sufficient condition for achieving the proper educational objectives, which relate rather to the integration of ICT into pedagogical practices.

Internet access is key to school networking and participation in an educational community. Indeed, through Internet access teachers can access resources available on educational portals, exchange experiences, participate in projects with their colleagues and in training courses, regardless of their geographical location. All of which necessarily has implications for teaching-learning processes.

Use of ICT in the Classroom. An important point apart from the ease of access to TICs is the extent to which equipment and connections are used. This indicator is important because it provides an overview of the actual degree of penetration of ICT into teaching work and student learning.

According to Benavides & Pedró (2007) the level of use of ICT in schools is low and the frequency is far from daily. In addition, the level of use outside the school environment continues to grow, with levels that exceed the use of ICT in the school environment. There are many reasons that could explain this, one has to do with the infrastructures and equipment (the number of students per computer) and the other with the technical possibilities of these equipment (the level of updating of existing equipment). However, a key point of low frequency of use has to do with the impossibility of integrating it in a viable and consistent manner with current teaching models and methods.

Computers are not used in all subjects and therefore there is a high percentage of subjects in which the level of integration is virtually non-existent or, from another perspective, there are a large number of teachers who do not integrate them into their teaching activities (Benavides & Pedró, 2007, pág. 50)

It can be observed in the educational field that there are teachers with traditionalist teaching, who use ICT as a way of giving information to students, and instead those teachers who are constructivists have been teaching with ICT and doing it in a different way than how is collaborative learning. However, from the use of ICT it cannot be said that the teacher with his pedagogical practice, when he uses them is excellent, does not carry a potential for teaching and learning, since it depends on many factors to achieve the proposed objectives when starting an activity.

However, there is no denying that there have been changes both conceptually and in pedagogical practices in certain contexts; among which we can mention some

conceptual redefinitions, diversification of pedagogical strategies and tools, and the emergence of new teaching models.

Coll (2008) suggests two fundamental ideas in creating a proposal for the use of ICT within the classroom. The first is that ICT can function as psychological tools capable of mediating the inter- and intra-psychological processes involved in teaching and learning. The second, that ICT fulfill this function by mediating the relationships between the three elements of the interactive triangle (students-teacher-content) and helping to shape the context of activity in which these relationships take place. Its proposal is divided into five major categories of uses, which are shown along with some representative examples of each in the table 2.

Table 2

Categories for Using ICT

Category	Typical examples
ICT as mediating instruments of the relationships between students and learning contents (and tasks).	· Search and select learning content. · Access content repositories with complex forms of organization. · Access content repositories that use different forms and representation systems (multimedia and hypermedia materials, simulations, etc.) · Explore, deepen, analyze, and assess learning content (using databases, visualization tools, dynamic models, simulations, etc.) · Access to repositories of tasks and activities with a greater or lesser degree of interactivity.

Category	Typical examples
	· Perform learning tasks and activities or certain aspects or parts thereof (prepare presentations, write reports, organize data, etc.).
ICT as mediating instruments of the relationships between teachers and the teaching and learning content (and tasks).	· Search, select and organize information related to the contents of the teaching.
	· Access repositories of learning objects.
	· Access databases and banks of proposals for teaching and learning activities.
	· Prepare and keep records of the teaching and learning activities carried out, their development, the participation that students have had in them and their products or results.
	· Plan and prepare teaching and learning activities for further development in the classroom (prepare calendars, schedule the agenda, schedule, prepare classes, prepare presentations, etc.).
ICT as mediating instruments of the relationships between teachers and students or between students	· Carry out communicative exchanges between teachers and students not directly related to the contents or tasks and activities of teaching and learning (personal presentation, request for personal or general information, greetings, farewells, expression of feelings and emotions, etc.).
	· Carry out communicative exchanges between students not directly related to the contents or tasks and activities of teaching and learning (personal presentation, request for personal or general

Category	Typical examples
	information, greetings, farewells, expression of feelings and emotions, information or assessments related to extracurricular issues or issues, etc.
ICT as mediators of the joint activity deployed by teachers and students during the completion of teaching tasks or learning activities.	· As auxiliaries or amplifiers of certain teacher actions (explain, illustrate, relate, synthesize, provide feedback, communicate critical assessments, etc. using presentations, simulations, visualizations, modeling, etc.). · As auxiliaries or amplifiers of certain actions of students (make contributions, exchange information and proposals, show progress and results of learning tasks). · To track the progress and difficulties of the students by the teacher. · To monitor the students' own learning process. · To request or offer feedback, guidance and help related to the development of the activity and its products or results.
ICT as instruments that configure environments or work and learning spaces.	· Configure individual learning environments or spaces online (for example, self-sufficient materials for autonomous and independent learning) · Set up collaborative online environments or workspaces (for example, CSCL -Computer-Supported Collaborative Learning tools and environments).

Category	Typical examples
	· Set up online environments or activity spaces that are developed in parallel and to which participants can join, or from which they can leave, according to their own criteria.

Source: Based on Coll (2008).

Incorporation of ICT in the Classroom. There are strategies that seek pedagogical appropriation of ICT in different scenarios where the daily use of ICT is promoted by the educational community, through face-to-face and virtual accompaniment so that teachers can teach better and students can learn more.

Pérez (2017) identifies these needs of the educational environment through some strategies developed in three categories. The first is defined as the stages of technological appropriation where the level of appropriation by teachers is shown. It notes that teachers should as the first level have access to technology and identify their new educational context, being aware in the development of pedagogical and technological skills to be applied in new teaching strategies. As a second level the adoption of technologies, where teachers decide to optimize their learning process of the use of ICT for the teaching of their subjects; that is, they become aware of the need to find a teaching sense to the incorporation of technology into their classes. And as a third level is the appropriation of technology where teachers adopt that the use of ICT is essential within their classroom practices and develop, supported by technological resources, complete digital facilitator tools, classroom proposals, competitive teaching strategies or projects with strong pedagogical and didactic purposes.

The second of the strategies that Pérez (2017) proposes is the teaching strategy where he conceptualizes the teaching strategies linked to the use of technological resources, of which teachers rely in their stage of technological appropriation. According to his research, the teaching strategies linked to technological

tools are first found where the different teaching strategies used and applied by teachers in the classroom are known and how they incorporate ICT into these practices. Second, there are the types of technological resources used where the technological resources used are further identified and how they generate an impact on learning environments in correlation with teaching strategies. Thirdly, there is the use of technological resources where the way to integrate both in teaching strategies and technological resources within the classes is analyzed.

Finally, Pérez (2017) presents the third of the strategies as the construction of learning by subjects. It seeks to articulate technological resources with the conceptual expertise of teachers, in addition to the needs identified in the subjects in the face of the process of teaching the contents. For him, there must be an implementation of flexible models that involve the qualification of teachers with learning opportunities; this leads to the possibility of developing critical skills and incorporating new strategies into educational processes, enriching the training of participants. In addition, he proposes virtual learning communities where an invisible network of relationships is built that seeks and cares for the community; where vulnerability and diversity are valued; where curiosity reigns; and experimentation and research are standards.

It should be noted that the trainings and supervisions towards teachers run many times through the Ministry of Education of each country in which ICT is being implemented within public education.

Pedagogical and ICT Models. For Martín (2009) most studies and research on the validity and evolution of educational paradigms, mainly on education-technology, agree to highlight the validity of constructivism as a pedagogical paradigm of our time.

The principle of "learning to learn" is proposed as the basis of this model, and argues that knowledge is a construction of the human being, which is done from cognitive bases that he already possesses: the teacher is a guide that facilitates the tools for the student to generate his own learning. Constructivism converges

and is associated from the beginning with the Internet, a universe with which it shares an important nexus: both represent innovation. From this confluence begins to form in the early years of the new millennium a substantial idea for the advancement of educational processes: learning is individual, but it is socially mediated, they are verified in natural groups of belonging to people, so that it is not possible to understand the two dimensions, individual and social (Martín, 2009, pág. 81).

According Siemens (2005), conventional educational paradigms, such as behaviorism, cognitivism and even constructivism, which have been present in the early stages of technological development, have been overtaken by the revolution of info technologies.

It is clear that, despite its denial, connectivism is embedded in constructivist currents, although emphasizing not only the learning built inside and by the person himself, but on that other facet of the process of learning that is placed outside the person, the way in which one learns within groups and organizations, the way to learn in network. Nor is this vision of networks as structural models, which emerges strongly by associating it with the Internet and technological development, entirely new. Already in the early seventies, in the work The De-School Society, it is pointed something to the value of networks as educational tools when Ivan Illich (1971) mentions "we can give the apprentice new links to the world rather than continue to channel all educational programs through the teacher" (Page 23).

Siemens' connectivism is based on the idea that knowledge is based on a desire to learn, but through interactions between people and technological devices; networking and the ongoing updating of information. The student learns continuously through networks and connections that he establishes, learns online and online. According to this theory, learning is built/created in community and knowledge is the result of the joint construction of experts (teachers) and apprentices.

Impact of ICT on Education. ICT have impacted diverse sectors of a country, needing processes in education to transform the Teaching and Learning Process. In schools, three alternative scenarios were determined in which people must adapt to the use of ICT (Graells, 2012) as mentioned below:

- Technocratic stage. Schools adapt simply by making small adjustments: first, the introduction of "digital literacy" of students in the curriculum to use ICT as an instrument to improve productivity in the information process (learn about ICT) and then progressively the use of ICT as a source of information and provider of teaching materials.

- Reformist scenario. "For ICT to develop their full transformation potential (...) they must be integrated in the classroom and become a cognitive instrument capable of improving intelligence and enhancing the adventure of learning."

- Holistic scenario: The centers carry out a profound restructuring of all its elements. As Majó (2003) indicates "the school and the education system not only have to teach New Technologies, they not only have to continue teaching subjects through New Technologies, but these new technologies apart from producing changes in the school they produce a change in the environment and, as the school is intended to prepare people for this environment, if it changes, the school activity has to change." (Page 14).

ICT for MINED in El Salvador. In 2005, the efforts made by international and national organizations caused education in El Salvador to focus on promoting the use of ICT in public and private schools. The government incorporated ICT into the study programs developed, which motivated other institutions to make efforts to implement them in more social areas.

The Infocentros Association was a non-profit, apolitical and social interest association that promoted the use of ICT in the country's educational system as auxiliary tools to improve the competitiveness and effectiveness of the student

population. The objectives of this association were based on providing the population with access to new means of communication and information through technology, with a national network of Infocentros; in generating opportunities for employment and improvement, offering training in different areas; in promoting business development, with the creation of an electronic commerce platform; and in improving the standard of living of Salvadorans, through the development of content and applications.

In addition, the Government of El Salvador prepared the National Education Plan 2021 (2005) promoted under the coordination of the Ministry of Education, in order to coordinate efforts to improve the national education system. The objective of the plan was to formulate priority educational policies and goals for the following years. Within the 2021 plan was the "CONÉCTATE" program. This program was aimed at providing the national educational system with technological tools that would improve academic quality levels and that would develop, in students, the technological competencies required by the current workplace to raise the country's competitiveness level. Additionally, the program sought to improve the quality of electronic and connectivity services that the Ministry of Education already had. This notably improved the situation of ICT in education.

CONÉCTATE was a program designed to promote the productive use of ICT, as well as a continuous and well-planned investment in the maintenance and updating of resources, so that the national educational system would maintain high levels of quality in the application of technologies to learning processes. The program was directed and executed by the vice ministry of technology, the benefits obtained from this program were received by students, educational centers and the Salvadoran population in general.

The government program was constituted by five underlying programs: Grado Digital, Aulas Informáticas, Edunet, Computadoras Para Mi Escuela, and miPortal.

First, the Grado Digital Program was a technology certification program aimed at students over 15 years of age and, in general, the entire population, it allowed to

certify skills and competencies in the basic management of computer technologies for free. Second, the Aulas Informáticas Program provided educational centers with computer labs and provided tools for teachers and students that allowed them to support learning processes. Third, the Edunet Program offered the opportunity of access to connectivity and communication services to public educational centers, through a telecommunications network that, with a sustainable model, benefited the country's social sectors. Fourth, the Computadoras Para Mi Escuela Program consisted of the collection, through donations, of computers and other computer equipment from government institutions and the private sector. The objective of this program was to provide the national educational system with technological tools that would improve academic quality levels. Finally, the miPortal Program made available to the educational community, through an Internet site, information on various educational content and services, as well as contributing to the creation of a national virtual educational network that allowed everyone to share users, knowledge and experiences associated with educational work.

As it can be appreciated, the MINED has work proposals for the educational development of El Salvador, however, only few of them bet on the use of technology within the classrooms despite the importance it has in the process of teaching learning.

The Language Laboratories

Definition of Language Laboratory. A language laboratory is a room specially equipped for learning languages; initially used for active speech and comprehension training.

When it comes to design, there are three important generations; the beginning (by 1908) is set by a gramophone[9] and the lessons were recorded on gramophone records; this was passive work. The first offices with active work were created in 1950

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[9] A phonograph, in its later forms also called a gramophone (as a registered trademark since 1887, as a generic name in the United Kingdom since 1910) or since the 1940s called a record player, is a device for the mechanical recording and reproduction of sound.

on the basis of cassette-mounted tape recorders. The following is the second generation of cassette player-built cabinets. The latest generation of language labs is multimedia and built with personal computers. In this way, there were language laboratories to listen only, to listen and speak, and to listen, speak and record the voice of the student.

History of Language Labs. The first generation of language lab was established at the University of Grenoble in 1908. These early language labs used phonographs to deliver audio, and were yet undivided into individual booths.

In the 1940s, linguists at the University of Michigan developed the behaviorist audio-lingual method of foreign language learning. This method was based on repeated listening and speaking drills and the language labs had to be modified to it. In terms of learning theory, the method referred to Skinner's behavioral psychology. Skinner argued that language learning can be learned as a behavior; therefore, according to the stimulus-response scheme taught, followed by positive reinforcement (reward). According to this method, learning is done by imitation, so the exercise scheme provided a stimulus, a student response, the correct solution on the tape and the repetition of the correct solution. By this time, the students were separated by cubicles to achieve some acoustic isolation, and also so that the student could act separately from other students.

Since the seventies and eighties, the audio-lingual method has been replaced by the so-called communicative method, which in addition to listening and speaking, also deals with reading and writing in the foreign language. This, in addition to the rapid evolution of technology, made way for today's language labs to predominantly contain personal computers.

Layout of Traditional Language Labs. The second generation of language laboratory, also called 'traditional' language laboratory consisted of a teacher console networked to multiple stations for individual students.

Figure 1

Traditional Language Laboratory Layout

Source: Adapted from Wikipedia, the free encyclopedia.

As shown in the figure 1, the teacher console typically included a tape recorder to play the instructional recording, a headset and system of switches to enable the teacher to monitor either the audio being played or an individual student, and a microphone for communicating with students. Each student station typically included a student tape recorder, headset, and microphone. The tape recorder both enabled recording of students' spoken responses and allowed them to record instructional content for more previous independent study.

Figure 2 shows the layout of a second-generation language lab separated by cubicles compared to a third-generation language lab.

Figure 2

Language Labs Separated by Cubicles

Source: Adapted from Wikipedia, the free encyclopedia.

Starting in the 1980s, many schools transformed their old language labs into computer suites. However, the advent of affordable multimedia-capable PCs in the late 1990s led to a resurgence and transformation of the language lab with software and hard drives rather than reels of analog tape, giving way to the third generation of language labs. In the 1990s, new PC-based hybrid digital systems allowed for expanded functionality, in terms of better "management" of student and teacher audio with some levels of Internet and video formats. Language lab providers "manage" the media in these hybrid systems, creating a complementary network on top of the existing PC network for audio connections and communications at fixed locations.

Present day. Today, language labs are at least partially equipped with software. In the language lab, student computers (multimedia computers complete with keyboard, mouse, screen, and headphones) are connected to a teacher's computer and / or server via LAN[10]. The teacher can send video clips with sound to the students on their computers. They can then talk to him (for example a market scene) and then compare what they said and what the original sound is. This is supported by an optical visualization of speech modulation (waveform analysis). The teacher can listen to each student, talk to him, send him text messages, etc. and the speed and variety of the delivery of media from teacher to student, student to teacher, is much quicker and therefore much more engaging for both teacher and student.

Further developments in language labs are now apparent as access moves from a fixed network and related Microsoft operating systems to online and browsers. Students can now access and work from these new 'clouds' from their own devices at anytime and anywhere. Students can interrogate and record audio and video files and be marked and assessed by their teachers remotely.

Current Status of the Language Laboratory of the Language School of the University of El Salvador, Eastern Campus. Part of the tools used in teaching a

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[10] Initials of Local Area Network, a computer network that interconnects computers within a limited area such as a residence, school, laboratory, university campus or office building.

foreign language are ICT. For this, the language laboratory of the University of El Salvador, Eastern Campus, was designed. Thereby, foreign language students obtain a systematic and orderly training in the field in order to complement their academic training to respond to job requirements.

Initially, the laboratory consisted of a single classroom and it was considered to assimilate the importance of the use of the laboratory in learning to promote that the student himself could perform different exercises with the help of headphones that were connected to the equipment that were cassettes. However, the laboratory did not have the necessary and sufficient tools to be able to fulfill the purpose that was initially intended.

So over time this language lab was divided into two rooms that are used as classrooms that now have a smart TV, a projector, and speakers.

General Operationalization Table

The operationalization table that directs the research "Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages, English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus" is reflected in the table 3.

Table 3

General Operationalization Table

General Operationalization Table	
Issue	Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages, English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus.

General Operationalization Table

Statement	Importance of the use of Information Technology and Communication in the teaching-learning process of foreign languages degrees in Junior students of Modern Languages, English Teaching degrees and English Teachers at the University of El Salvador, Eastern Campus.
General Objective	To inquire about the benefits that Information and Communication Technology (ICT) would have on teachers and students of the Foreign Languages School in the University of El Salvador, Eastern Campus.
	To design an action plan in which a Language Lab is the base on the learning process in junior students of Modern Languages, English Teaching degrees and English Teachers at the University of El Salvador, Eastern Campus.
Categories	Interview data: the reinforcement in education, the difficulties found, the activities that can be developed, the macro-skills that can be worked and the time.
	Questionnaire: Rating of the learning process, Help through virtual practices, Experience rating of virtual practices, Macro-skills developed, and Knowledge of laboratory elements.
Method	Qualitative Method – Action Research
Methodology	Transformational Methodology
Design	Descriptive Design
Approach	Socio Critical Approach
Sample	There are two different individual groups for obtaining information. The first is to collect information on the beliefs of

General Operationalization Table	
	five teachers. The other for obtaining information of the students' population. Being these 20 students.
Instrument	Structured interview and questionnaire
Data Collection	Both instruments were collected on a virtual way. Students were asked to complete the questionnaire by their own. Teacher s were interviewed in a virtual conference.

Source: Own elaboration.

Categorical System

The Categorical System used in the research "Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages, English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus" is reflected in table 4.

Table 4

Categorical Matrix of the Research

First Order Category	Second Order Category	Third Order Category
Learning and teaching process	Teacher	· Reinforcement in education
		· Difficulties
		· Activities
		· Macro-skills
		· Time
	Learner	· Rating of the learner process
		· Help through virtual practices

· Macro-skills developed

· Knowledge of Laboratory

elements

Source: Own elaboration.

At the same time, this information is represented in the Figure 3.

Figure 3

Categorical Research System


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┌─────────────────────────────────────────┐
│        Learning and teaching process     │
└─────────────────────────────────────────┘
        ┌───────────────┴───────────────┐
┌─────────────────┐            ┌─────────────────┐
│     Teacher     │            │     Learner     │
└─────────────────┘            └─────────────────┘
    ┌─────────────────┐            ┌─────────────────┐
    │ Reinforcement in │            │  Rating of the   │
    │    education     │            │ learner process  │
    └─────────────────┘            └─────────────────┘

    ┌─────────────────┐            ┌─────────────────┐
    │   Difficulties   │            │   Help through   │
    │                  │            │ virtual practices│
    └─────────────────┘            └─────────────────┘

    ┌─────────────────┐            ┌─────────────────┐
    │    Activities    │            │   Macro-skills   │
    │                  │            │    developed     │
    └─────────────────┘            └─────────────────┘

    ┌─────────────────┐            ┌─────────────────┐
    │   Macro-skills   │            │  Knowledge of    │
    │                  │            │   Laboratory     │
    └─────────────────┘            └─────────────────┘

    ┌─────────────────┐
    │      Time        │
    └─────────────────┘
```
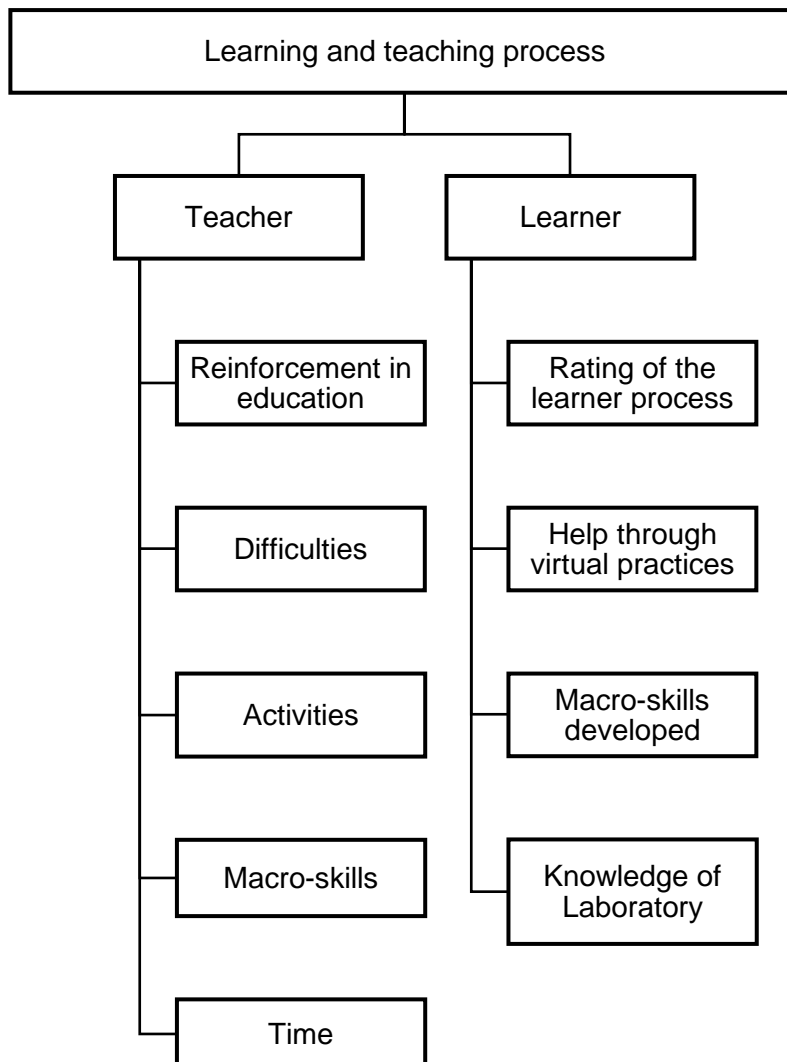
Source: Own elaboration

CHAPTER 3: METHODOLOGY DESIGN

Methodology Aspects

Method

It was possible to determine the qualitative method, relying primarily on the collection of nonnumeric data, is the one that allows one to work on opinions and different thoughts of teachers and to identify in a general way the use that teachers have of New Technologies in a Language Laboratory (Johnson & Christensen, 2014).

Methodology

Transformational research.

Vision

The vision of the research was to find the key points that have become problems in the use of New Technologies in the teaching and learning process of languages to be able to change them in the future and improve the quality of study among the students and teachers of the University of El Salvador, Eastern Campus (Jones, 2009).

Paradigm/Approach

With the realization of the present investigation, regarding the nature of the problem and its objectives, it was possible to arrive at the determination that it falls within the socio-critical approach whose objective is to analyze social transformations and respond to certain problems generated by them (Ocaña, 2015).

Design

The design selected for this research was the descriptive design, since its main focus is the description of the subject's behavior without influencing it in any way at the time of data collection (Kumar, 2019).

Type of research by time

This was descriptive cross-sectional research that involved looking at data from a population at one specific point in time (Cohen, 2007). This point in time is taken from

the first week of March 2020 to the fourth week of October 2020 where the research protocol was developed and the final research report was delivered.

Techniques

The techniques selected for the researchers are the Survey and interview. The interview was implemented through a conversation between the researcher and the interviewee, where a series of predetermined questions were formulated about the different points that were being investigated, and in turn the interviewed teacher provided verbally the answers to the questions asked. The data of the survey was obtained through the use of standardized procedures with the purpose that each person surveyed answers the questions under equal conditions. The previous for avoiding biased opinions that could influence the result of the research. The survey involved asking people for information through a questionnaire, which was distributed virtually.

Scenario

The research was made in the installations of the University of El Salvador, Eastern Campus, from February to November of the year 2020.

Social Group

The target population of this research was 20 junior students of foreign languages degrees, and four teachers of the School of Arts and Sciences, Foreign Languages School at the University of El Salvador, Eastern Campus.

Researcher role

As evaluators, the researchers contributed and valued the use of the ICT in the educational environment. The researcher was part of reality taking subjectivity as a starting point to arrive at social meaning. Moreover, the researcher did not interfere while the interviewees were taking the survey and the interview.

Sample strategies

The sample selected was the homogeneous sample were the participants to be selected have the same profile or characteristic (Sampieri, 2014). The features for teachers were, first, being part of the School of Arts and Sciences, Languages School of the University of El Salvador, Eastern Campus; second, being teachers in charge of junior students of the Modern Languages and English Teaching Degrees. So that the number of teachers that filled these features was four. As for the students, the feature that they have to share was just being junior students of Modern Languages and English Teaching Degrees of the University of El Salvador, Eastern Campus. The number of students who met this requirement between the two university careers involved was twenty.

Inclusion criteria

There was no distinction between genders, age, or ethnicity among the population. The profile of the person involved in the investigation was defined in two groups. For the teachers involved it was to be part of the School of Arts and Sciences, Languages School of the University of El Salvador, Eastern Campus; as well as to be teachers in charge of junior students of the Modern Languages and English Teaching Degrees. For students, the only requirement they had to meet was to be junior students of Modern Languages and English Teaching Degrees of the University of El Salvador, Eastern Campus.

Ethic aspects

Since this was an open research, each of the participants knew who the investigators were and the institution that was conducting it (Dawson, 2002). The ethical code of the investigation was orally expressed to each of them, so they knew that they had the rights of anonymity, confidentiality, right to comment, access to the final report, and data protection.

Data collection plan

Both instruments were collected in a virtual way. First, students were submitted in a training in which they had to interact with a series of exercises. Having done this, students were asked to complete the questionnaire on their own. Then, teachers were interviewed in a virtual conference. In some cases, due to the lack of time availability on the part of the teachers involved in the investigation, it was necessary to facilitate the interview digitally so that each of them could provide their answers in their own time.

Instruments

Due to the coronavirus pandemic, face-to-face classes were suspended at the national level to protect the health of each person. So, the instrumentation selected was administered virtually. The first instrument was a structured interview of 7 items made with teachers of the Foreign Languages School and students that carried out training sessions. The purpose of the interview question was to know the benefits that teachers saw in a Language Laboratory and also the experiences students had in their training process. Furthermore, if they had problems managing that specific technology. Finally, teachers gave their points of view about the advantages of having such a technology in their hands. The second instrument was a questionnaire of 8 items. An open-ended questionnaire administered to the selected junior students from Modern Languages and English Teaching degrees. Some of the questions were created according to their experiences using the New Technologies and others asked the students to answer were related to the training submitted.

Inductive analysis

In the analysis of data, the answers of the two techniques were divided into 3 categories. The first category was Learning and Teaching process, the second one was Teacher and Learner and the third category was Reinforcement in education, difficulties, activities, macro-skills, time, rating of the learner process, help through

virtual practices, macro-skills developed, and knowledge of Laboratory. For the interviews applied, the most important points on the topic raised in the research were chosen from the teacher's point of view. From this, the questions were categorized as the reinforcement in education, the difficulties found, the activities that can be developed, the macro-skills that can be worked and the time teachers would use into a language laboratory. Subsequently, the response of the questionnaires provided data for their own categorization: Rating of the learning process, Help through virtual practices, Experience rating of virtual practices, Macro-skills developed, and Knowledge of laboratory elements.

Limitations

The research was carried out in the time when the pandemic of covid-19 was starting in the country and a lockdown was imposed. That led to several limitations such as the communication. First, the researchers had troubles when elaborating the instruments to be used. Second, by the time of interviewing the teachers, the researchers found it difficult to communicate with them. It was necessary to find an adequate platform to manage the indispensable tools needed to save the data collected; so, Google Drive was used as the tool needed due to its free storage capacity and online accessibility to a large number of users at the same time. Third, it was arduous to contact all the student participants individually to explain to them the guidelines for the research. Finally, the students had network errors when trying to send the responses of the questionnaires which delayed some students in their participation in the research.

CHAPTER 4: DATA ANALYSIS

Analysis and Interpretation of Data

In order to proceed in a logical and systematic way with the analysis and interpretation of the data, the research was carried out using interviews and questionnaires. In the following paragraphs the most important points of the interviews made to teachers involved in the research are presented:

Interview one: I am a teacher at the University of El Salvador, in San Miguel. The first question is if I consider that the equipment of the Language Laboratory would strengthen the process of teaching and learning a foreign language. Of course, that is a basis that we are supposed to have in a School of languages. We are supposed to have a laboratory of languages where the students can have access in a language in a better way. Question number two asks about the benefits that I as a teacher would have in the teaching process with the use of a Language Laboratory. First of all, as a teacher, the opportunities that I could have are many possibilities for more activities, for more things to do with the students that may have a higher impact in their language learning. It enables a lot of possibilities to do a lot of many things that we can, as teachers, do due to the fact that we would have access to that technology in the Language Lab. The next question says "Do you think you would have any difficulty operating the Language Laboratory?" No, of course no. Actually, I remember when I was a student at the Central University of El Salvador. There, we used to have a Language Laboratory which was a little archaic, but it worked. I guess this would be different. The technology would not be hard to operate. Probably, for some other teachers that are not that tech added that would be complicated to operate. In my opinion, with proper training it is possible. For question number four, "what kind of activities would you develop within the Language Laboratory?" The things that I would like the most would be to provide students with audio-visual materials that would help them improve their language learning. For example, movies, podcasts, Audio-files and stuff like that which they can later on work within guides. Mainly, what I would like to do

is to show movies in the goal language. I think that one of the best ways to learn is watching things that you like in the languages rather than things about that language. For example, if they like to watch superhero movies so the teacher could work with a superhero movie in French or English with or without subtitles, they can watch over there. There are many students who do not have any access to the internet at their homes, so it would be a very good alternative to them. Next, "which of the macro-skills would you work the most to take advantage of the hours of practice within the Language Lab?" The main macro-skill that I would like to make my students improve is listening, of course. If they are able to have their headphones on, they can watch videos or listen to audios that are going to help them. Question six, "How many sessions per week do you think it would be convenient to have within the Language Lab?" I would say that it depends on the level of the students and the subject that they are working on. For example, for a French III level, the most appropriate thing is to have two sessions a week of two hours each session. Number seven, "How many hours do you consider convenient for each session to achieve a complete handling on your part of the Language Laboratory?" My answer is two sessions a week of two hours each session for making eight hours in the week. That would be the minimum that they would have. Remember that it is the only way that students are going to have access to the target language in a natural or semi natural way. Of course, they can listen to their teachers in English of French but it is not the same as listening to a spontaneous conversation in the language that they would like to learn. Thank you for taking me in account, guys.

Interviews two and three were responded in Spanish and the transcript has been translated to English.

Transcript two: Good afternoon. To question number one, I would answer yes. The laboratory team should reinforce the teaching / learning process because all the resources encourage students to practice what they have been taught, what they have

reviewed in class, and what they have reviewed in textbooks. All this comes to favor the learning of the students; therefore, it would benefit the students and teachers. In question two, regarding the benefits of having a language lab. There are many benefits, both for the young student and for the teacher. The teacher would have appropriate technology to enhance the transmission of knowledge, which search to improve all the student's skills. Regarding question three, which asks about the difficulties that the teacher would have. That depends on the type of equipment the lab will have. For example, if the equipment is very up-to-date, there could be difficulties at the beginning, but everything is in the institution providing training to be able to operate the equipment. Perhaps undergoing a selection process, it would be worth having it. In question four, mention is made of the type of activities that could be carried out within the language laboratory. If the place were made up of the basic equipment that are computers and the internet, there is a wide variety of activities that could be achieved online. I also think that an English class could be better developed, the reinforcement that could be given to content that is difficult for students. Regarding question five about the macro skills that I would work more on. In my opinion, it would be worthwhile to work all the macro skills but with greater emphasis on "listenings". For example, you could hear from the mouth of a native, his accent, the correct pronunciation of words. Even the teacher could learn more about the culture, customs, traditions, seeing the gestures and words they use while having a conversation. But even so, the macro skill that I would work the most would be listening comprehension, as a second point oral production, third, written comprehension, which is very important, and finally written production. Regarding question six "how many sessions per week ...?" I consider it convenient to have at least two sessions per week, depending on how many assessment hours each subject has. For example, if we are talking about a subject that requires ten hours of class per week, at least two sessions per week. This is related to the following question, "how many hours per session ...? I would say two hours per session. In this way, for example, six hours would be had in a conventional classroom

and four hours in the laboratory using all of them very well. In addition, the teacher must have very well programmed all the activities, what is intended to be developed, being clear about achieving the objectives. This would be all, thank you very much.

Transcription three: Hello, I am a teacher at the University of El Salvador, Eastern Campus. I want to answer some questions from an interview that Modern Languages students are doing, related to the use of the laboratory. One of them has to do with the strengths that a well-equipped language laboratory has. The strength that a laboratory could have, logically has to do with the improvements in the learning of the English language since there would be more practice by the students and also the assignment of tasks by the teacher. This already has to do with question two about benefits. The main benefit will be that learning will be improved in terms of macro skills, as well as some level of research could be strengthened. The use of some audiovisual material could also be facilitated by having a well-equipped language laboratory. The difficulties that this could have, have to do with the training of the personnel to use the laboratory, in the first place; or assign a person who knows computer science who can provide maintenance and who can also operate the laboratory, for this a laboratory worker must be appointed. In the activities that can be carried out, it would be mainly activities for the development of the macro skills of English, which is, "listening". Mainly listening comprehension, since this equipment would have microphones and headphones with which students can make recordings and can also listen to some type of audios that allow them to become familiar with pronunciation and listening comprehension in general terms. They can also do reading, writing, grammar activities, since micro skills can also be improved through that. Sessions per week may depend on the number of students you have. Possibly the frequency could be one or two sessions per week. Days of perhaps one hour or forty minutes, depending on the availability of the space, the use, the schedule and the number of students. Thank you.

Categorization of Data Collected from the Interview

For the development of qualitative analysis, it was considered the use of the interview as an instrument; based on this, there were chosen the most important points on the topic raised in the research seen from the teacher's point of view. From this, the questions were categorized in the Table 5 as follows:

Table 5

Categorization of Interview Data

Category	Question
I. Reinforcement in education	· Do you consider that equipment of the Language Laboratory would strengthen the process of teaching/learning a foreign language?
	· What benefits would you have in the teaching process with the use of a Language Laboratory?
II. Difficulties	· Do you think you would have any difficulty operating the Language Laboratory?
III. Activities	· What kind of activities could you develop within the Language Laboratory?
IV. Macro-skills	· Which of the macro-skills would you work the most to take advantage of the hours of practice within the Language Lab?
V. Time	· How many hours do you consider convenient for each session to achieve a complete handling on your part of the Language Laboratory?

Source: Own elaboration.

Analysis and Interpretation of Data by Category

Category I: Reinforcement in Education. Two of the interview questions made to the professors of the language section of the Eastern Campus of the University of El Salvador fall into this category. According to these teachers, in the inquiry "Do you consider that equipment of the Language Laboratory would strengthen the process of teaching/learning a foreign language?" most of the interviewees agreed the laboratory would strengthen the process of teaching/learning a foreign language.

It would not only help students who could carry out more practices and do what they learn in their books, but also it would expand the possibilities for teachers to evaluate them and assign different, more productive, and practicable tasks.

One of the interviewed states: "That is a basis that we are supposed to have in a School of languages. We are supposed to have a laboratory of languages where the students can have any access in a language in a better way." (Page 60).

The second question that falls into this category asks "What benefits would you have in the teaching process with the use of a Language Laboratory?" and regarding this question, all the interviews agreed on several points. First, it would improve the learning/teaching process. Second, more focus and improvement could be given to each and every student's macro and micro skills. Third, including audiovisual materials would increase the variety of activities with which teachers could render their knowledge to their students. Finally, having a laboratory could strengthen the level of Research done by students. As one of the interviewed mentions: "... some level of research could be strengthened with a Language Laboratory." (Page 60)

Category II: Difficulties. Within the category of difficulties that teachers might encounter when exercising their classes in a language laboratory, only one question falls, which asks "Do you think you would have any difficulty operating the Language Laboratory?" The interviewees presented possible difficulties that could appear in the

first moments when including a laboratory. However, with each difficulty that shows up, they also presented a possible solution. The essential problem that all those interviewed saw was the appropriate management of a laboratory that may be equipped with extremely innovative technology. One teacher expresses: "It depends on how the equipment is." There are two possible solutions. On one hand, the possible solution to the problem is to name a laboratory worker who would be exclusively in charge of the care and maintenance of the laboratory. On the other hand, the solution that everyone agreed with for this difficulty is the training of each and every one of the teachers; so that they can be skilled to defend themselves when using the laboratory equipment. The teacher mentioned continues expressing: "If it is updated, it can be challenging at first, but that is when the institution can provide training to handle it."

Category III: Activities. Within category number three, established as "Activities", only one question also enters, which asks "What kind of activities could you develop within the Language Laboratory?" For this question each of the teachers considered diverse points of view about which activities each one of them would like to do with their students. For example, one teacher expresses: "it would depend on how the laboratory is formed. If it were with basic equipment, I could focus on listening activities." (Page 60). Notwithstanding, some of the teachers maintain that the activities that can be carried out would be predominantly activities to develop the macro skills of English, for example: listening. There are additionally teachers who would prefer to present materials that are not purely educational for students but also entertaining. One among them raises: "I think that one of the best ways to learn is watching things that you enjoy in the languages rather than things about that [added emphasis] language. For example: superhero movies". (Page 60) In addition, it must also be taken into account that many students do not have access to the internet and therefore this type of audiovisual material could mean a lot in their learning process. "Many students do not have any access to the internet at their homes, so it would be a very good alternative to them," (Page 60) he continues affirming.

Category IV: Macro-skills. Continuing with category number IV, called "Macro skills" the following question enters the debate: "Which of the macro-skills would you work the most to take advantage of the hours of practice within the Language Lab?" In this question a common answer from the interviewees stated the main skill they would work on is "listening". One of them emphasizes: "Since this equipment would contain microphones and headphones that students can use to record or listen to any type of audio, this will allow them to become familiar with the pronunciation and understanding of audio in general terms." (Page 60).

Category V: Time. Within the last category of this analysis, the following question enters: "How many hours do you consider convenient for each session to achieve a complete handling on your part of the Language Laboratory?" Regarding this question almost all of the interviewees agreed the appropriate time could be two or four hours per week; but it is worth highlighting one opinion among all the answers, which reads "The time will depend on the units of value that every course has."

Categorization of Data Collected from the Questionnaire

For the development of the qualitative analysis of the questionnaire, a categorization was also developed in order to separate relevant information without diminishing the importance of each of the mentioned aspects. These categories are reflected in the Table 6:

Table 6

Categorization of Questionnaires Data

Category	Question
I. Rating of the learning process	· How do you rate the learning process through ICT? · Do you think that applying these practices at the University through a Language Lab would help you develop your language skills?
II. Help through virtual practices	· Do you think that the practices carried out by virtual resources could help you in your learning process?
III. Experience rating of virtual practices	· How do you rate your experience of virtual practices done using the given study guide?
IV. Macro-skills developed	· What macro-skill do you think you could best develop using digital media practices? · How many sessions per week do you think would be convenient to develop your macro-skills within a Language Lab?

Category	Question
V. Knowledge of laboratory elements	· Do you know what would be the elements that make up a properly equipped Language Laboratory? · Do you consider that you would have any problem using the equipment that composes a Language Laboratory?

Source: Own elaboration.

Analysis and Interpretation of Data by Category

Category I. Rating of the Learning Process. Under the category of rating of the learning process, one of the questions that students were asked to answer is how they rate the equipment that they have in the language laboratory. Giving a rating range between "Excellent", "Good", "Fair" and "Bad". What can be seen reflected is that 52.6% of the students considered that the language laboratory equipment is in the "Good" range. 31.5% of them consider it is "Excellent" and only 15.7% of them consider that the range in which the equipment of the Language laboratory falls is "Regular". Noting none of them consider it to be "Bad."

The above is represented in the Table 7 to have a better understanding of the data.

Table 7

Representation of Data under the Category of the Learning Process Rating.

Options	Percentage
Excellent	31.5%
Good	52.6%
Regular	15.7%

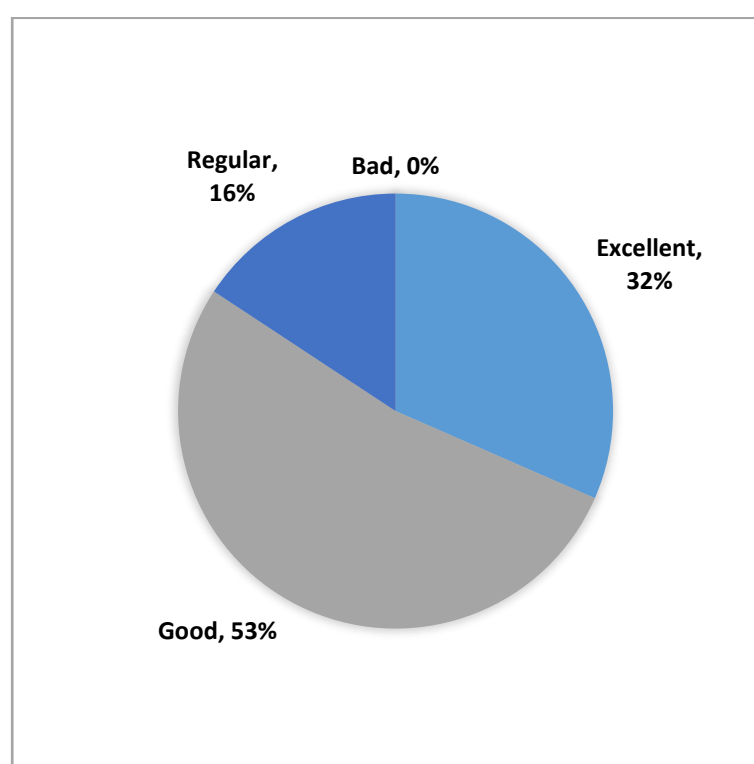|	
Bad	0%
Total	100%

Source: Own elaboration.

At the same time the data is presented in the Figure 4 as a circular graph to represent the proportion of elements of each of the values.

Figure 4

Representation of Data under the Category of the Learning Process Rating

Source: Own elaboration

Notwithstanding, the results of the question of whether it is considered that applying internships at the University through a Language Laboratory would help to develop their skills in the target language were measured in a binary classification of "Yes" and "No". These results reported that 94.7% of the respondents considered that this would contribute to support individual differences since they work on all macro skills. Evenly, it helps to locate these difficulties the students present in a real way, which would allow the teacher to work on these areas.

Also, the actual contact that one as student would have with the language would decrease the transfer in learning that a traditional classroom offers in the study of foreign languages. The activities to be carried out can vary from listening to an audio to a video call in real time with native speakers. As the ultimate positive point in the result among the respondents, it is maintained that this would be an advance in the process of teaching / learning foreign languages, expressing a clear comparison, since it would raise the process to the level of learning languages in the most developed countries.

This is contrasted with 5.26% of those surveyed who maintain that applying these practices at the University of El Salvador through a language laboratory does not help to develop the skills in the foreign language they are learning. Relying on the fact that a language laboratory equipped with New Technologies equipment is not enough, but the teaching methodology must also be updated and the teaching staff must be monitored in the same way.

The previous information is equally represented in the Table 8 for a more proper understanding of data.

Table 8

Representation of the Data Obtained under Binary Classification.
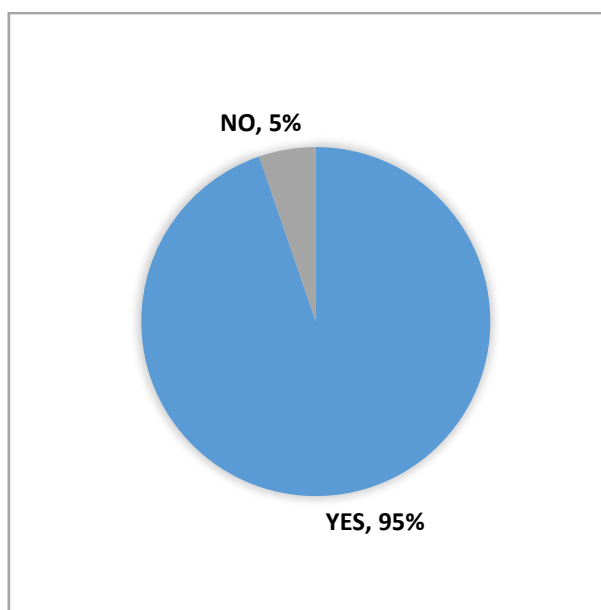
Options	Percentage
YES	94.7%
NO	5.26%
Total	100%

Source: Own elaboration.

This information is also represented in the Figure 5 as a pie chart for a global view of the data.

Figure 5

Representation of the Data Obtained under Binary Classification

Source: Own elaboration

Category II. Help through Virtual Practices. The analysis of results under the category of help of virtual practices, classified binary between "Yes" and "No", reported that when asked whether they considered that the practices carried out by virtual means would benefit them or not in the learning process, 89.1% of them answered affirmatively. Noting that for the learning of a language constant practice is necessary to improve skills and that the use of technology is essential because it offers tools for the development of classes, for the investigation of vocabulary in contexts, being familiar with the target language. As well as collaborating with direct relationships with natives where theoretical learning is put into practice. However, in the responses it could also be perceived that 10.5% of the participants considered that New Technologies are important in the classroom but without neglecting personal and individualized support, something that the total use of the virtual way would do in a standardized way. This information is represented in the Table 9:

Table 9

Representation of Data under the Category of the Help through Virtual Practices

Options	Percentage
YES	89.1%
NO	10.5%
Total	100%

Source: Own elaboration.

In the same way it is represented in the Figure 6 as a graph for a global vision of the data:

Figure 6

Representation of Data under the Category of the Help through Virtual Practices
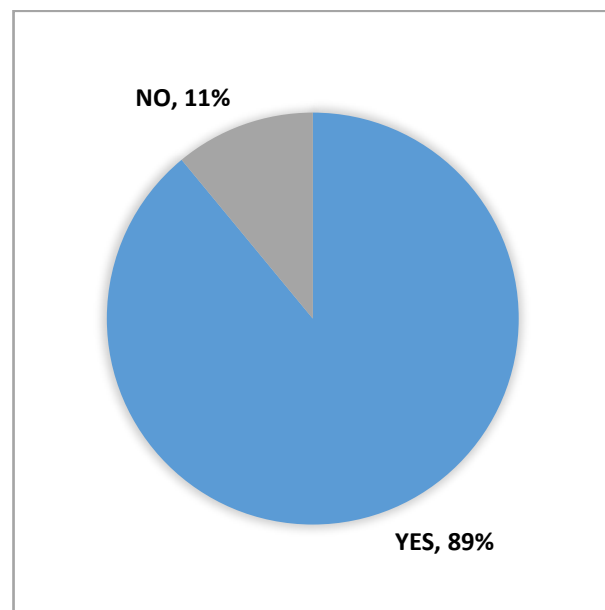
Source: Own elaboration

Category III. Experience Rating of Virtual Practices. In the category of how respondents rate the experience of having worked with innovative technologies as a practice of different skills, responses classified into four ranges were obtained, an

"Excellent" experience, a "Good" experience, "Average" experience and a "Bad" experience. Being 52.6% of those surveyed, the majority answered that the experience was in the "Good" experience range, showing all of them already had experience working with these tools and that they have benefited from their use. However, there have been comments related to the teacher, that the use of New Technologies must go hand in hand with a teacher guide at all times or at least at the beginning of each session.

The rank that obtained the second place according to the respondents was "Excellent" with 42.1%. However, some of the respondents who responded in this range showed they had rarely worked in this way, that is, hand in hand with New Technologies, but that they consider it a crucial resource in foreign language learning due to the facilities of learning and practice. The third place if for the "Regular" rank that obtained 5.2% among those surveyed, one of the remarkable reasons being that the use of New Technologies must be assisted by teachers and the planning of virtual classes must go hand in hand with time with face-to-face classes. The information is revealed in the Table 10:

Table 10

Representation of Data under the Category of the Experience rating of virtual practices
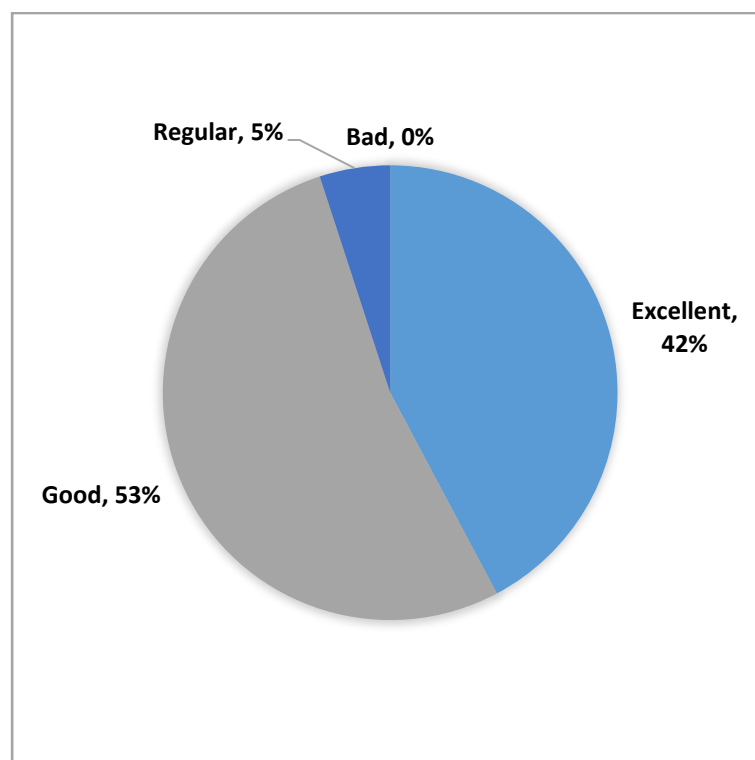
Options	Percentage
Excellent	42.1%
Good	52.6%
Regular	5.2%
Bad	0%

Source: Own elaboration.

At the same time the information is shown in the Figure 7 as a circular graph:

Figure 7

Representation of Data under the Category of the Experience rating of virtual practices

Source: Own elaboration

Category IV. Macro-Skills Developed. Based on the questionnaire of the students, where they were asked which macro-skill (Reading, Listening, Speaking, Writing, or All of them) they think they could best develop using digital media practices, it was found that 45% consider it is important to develop not only one or two macro-skills but also "All" macro-skills; 40% of the students consider Listening" would be convenient to develop using digital media; 10% of students responded that "Reading", 5% said "Speaking"; while 0% "Writing". These data are reflected in the Table 11:

Table 11

Representation of Data under the Category of the Macro-skills development

Description	Number	Percentage
Reading	2	10%

Listening	8	40%
Speaking	1	5%
Writing	0	0%
All	9	45%
Total	**20**	**100%**

Source: Own elaboration.

At the same time the data is graphed in the Figure 8:

Figure 8

Representation of Data under the Category of the Macro-skills development
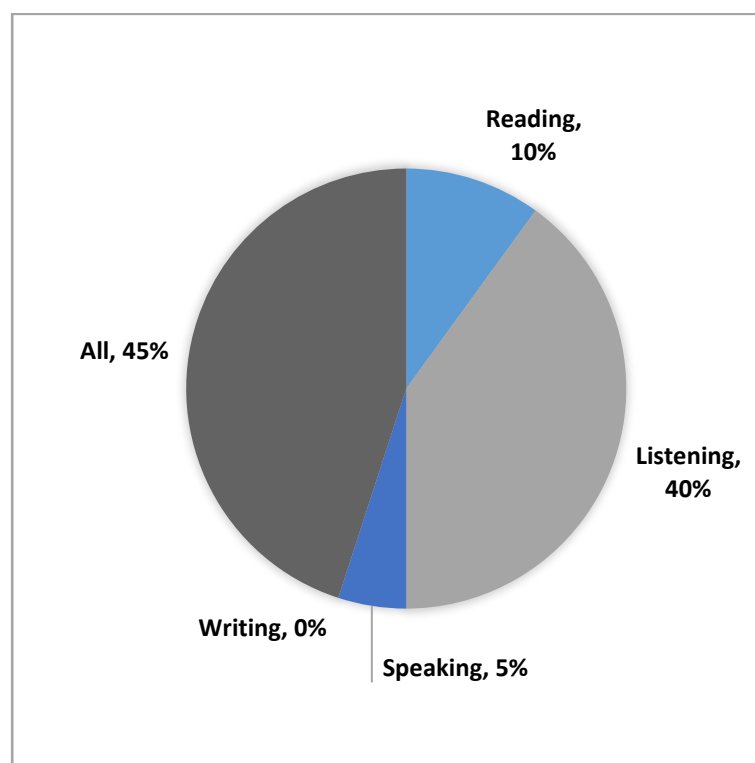
Source: Own elaboration

When asked how many sessions per week they thought would be convenient to be able to develop your macro-skills within a Language Laboratory, 75% of students considered that three times per week is the best option to develop their macro-skills;

20% consider that using twice a week will be convenient to develop macro-skills, while 5% did not respond. This is indicated in the Table 12.

Table 12

Representation of Data under the Category of the Macro-skills development – Number of Sessions per week

Options	Number	Percentage
1 per week	0	0%
2 per week	4	20%
3 per week	15	75%
Did not respond	1	5%
Total	20	100%

Source: Own elaboration.

At the same time the data is graphed in the Figure 9:

Figure 9

Representation of Data under the Category of the Macro-skills development – Number of Sessions per week
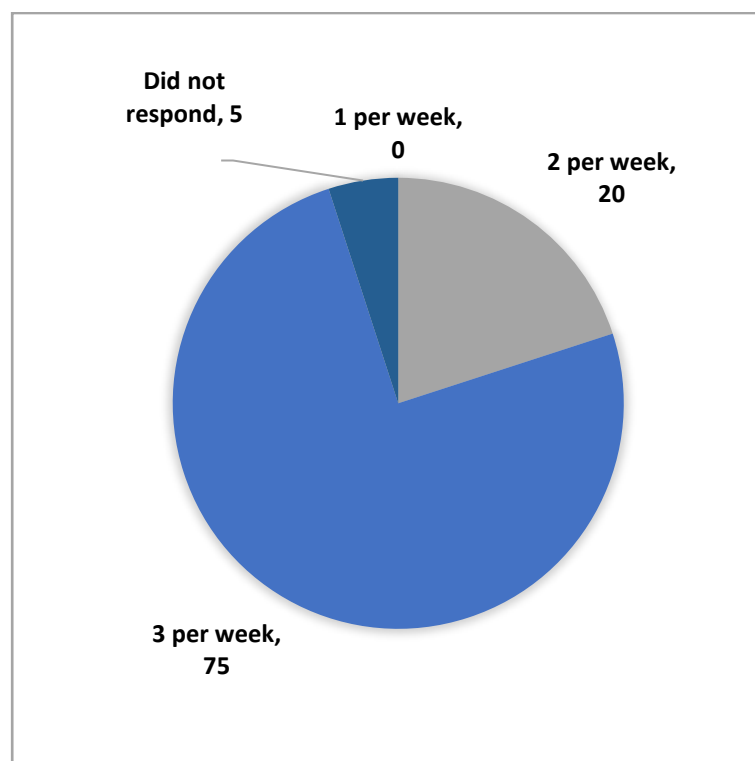
Source: Own elaboration

Category V. Knowledge of Laboratory Elements. As the last category found within the data collected with the questionnaire, when respondents were asked if they had knowledge of what would comprise the elements that make up a properly equipped Language Laboratory, 80% of the students responded that they do have the knowledge of the elements that make up the language laboratory, they also had the opportunity to mention one of them and among the most outstanding are digital whiteboards, hearing aids computers, speakers, projector, Smart TV, the internet and a suitable software, while 20% expressed not having any knowledge of the elements that make up a properly equipped laboratory. Data expressed in the Table 13.

Table 13

Representation of Data under the Category of the Knowledge of Laboratory Elements

Options	Number	Percentage
YES	16	80%

NO	4	20%
Total	20	100%

Source: Own elaboration.

At the same time the data is graphed in the Figure 10:

Figure 10

Representation of Data under the Category of the Knowledge of Laboratory Elements
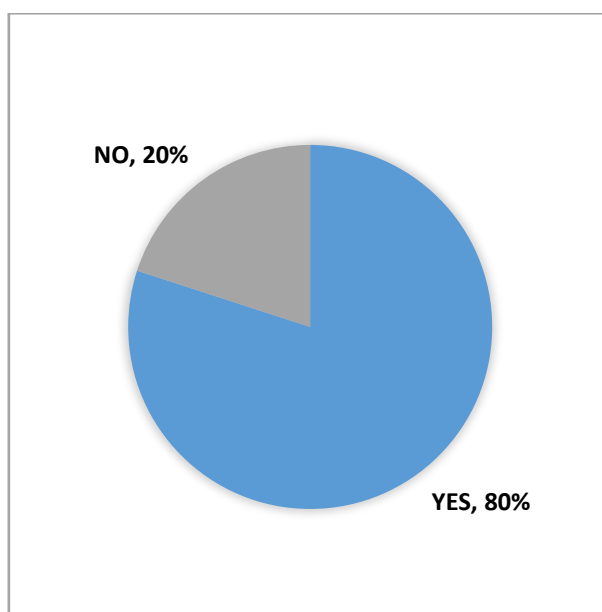
Source: Own elaboration

Finally, when the respondents were asked if they considered they would have a problem utilizing the equipment that makes up a Language Laboratory, 90% said they would have no problem using the equipment of the language laboratory because they said that they have previously used equipment like those that make up a language laboratory, In the same way they expressed that this generation in a certain way they have had the opportunity to know the technology and some of its tools from an early age and 5% shows that they would have problems given that they do not have any knowledge of what a laboratory is languages. These data are reflected as follows in table 14.

Table 14

Representation of Data under the Category of the Knowledge of Laboratory Elements –

Using the Elements that Make Up the Language Lab

Options	Number	Percentage
YES	1	5%
NO	18	90%
Did not respond	1	5%
Total	20	100%

Source: Own elaboration.

In the same way it is expressed in the Figure 11 as a graph to represent their

proportions in relation to the total.

Figure 11

Representation of Data under the Category of the Knowledge of Laboratory Elements –

Using the Elements that Make Up the Language Lab
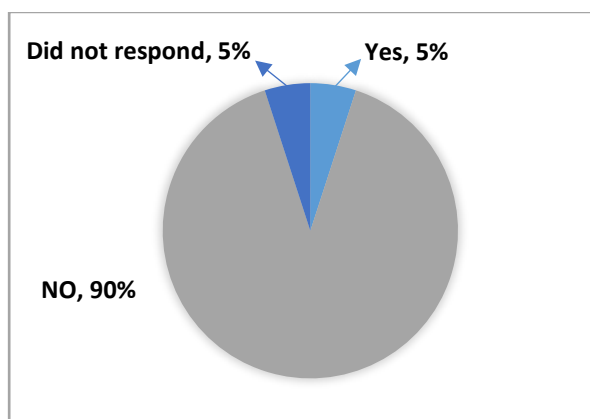
Source: Own elaboration

CHAPTER 5: PLAN PRESENTATION

According to the results of interviews and questionnaires, teachers and students agree that the use of Information and Communication Technology in the teaching and learning a foreign language process is an important tool, therefore, it is necessary to have a language laboratory appropriate for the use of them.

In order to give an answer to this problematic, the following language laboratory proposal was designed. In which it is detailed the Architectural Plans, Network Structure, Projection Equipment and Accessories, Backup Devices and Specific Functions.

TECHNICAL PROPOSAL FOR ICT EQUIPMENT FOR THE LANGUAGE LABORATORY OF THE UNIVERSITY OF EL SALVADOR, EASTERN CAMPUS AND NETWORK INFRASTRUCTURE IMPLEMENTATION

Contents

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Backup devices for network equipment

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Economical Offer

Economic offer detail

Annexes

Price Quote in Valdéz Store

Introduction

This Offer was prepared in accordance with the Terms of Reference defined by a professional in the area of information technology, to carry out the project called "Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages, English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus", during a period from July to August 2019, in the City of San Miguel, El Salvador C.A.

Objectives

● Design the network infrastructure according to the Regulations and Standards for Structured Cabling.

● Guarantee the correct design and structuring of the Plans, Proposal Plan, Specifications, Regulations and Standards that are part of the Contract documents.

● Implement the distribution of the equipment in the assigned space respecting the standards, which allows a better visualization between the computers and the multimedia projector.

Project scope

The purpose of the project is to make a proposal for the ICT equipment for a language laboratory and implementation of the data network structure. It will be presented from the proposal of plans for the physical infrastructure of the language laboratory, as well as the installation of sockets or ports for data, channeling, cabling and accessories, as well as the certification of the data network, material equipment and implements necessary to guarantee the project can be launched in excellent condition, regulations for structured cabling will be used, and present in each equipment or implement its respective description of efficiency and warranty.

Technical proposal

Architectural Plans

The complex consists of a main physical space and a secondary one attached to it. The main room will be destined to the location of some computer equipment, while the secondary room will be destined to protect the equipment that works as a server and the network cabinet, which is where the equipment responsible for all the network connectivity is housed. The main access to the language lab is from the only door located in the west part of the classroom.

Plant.
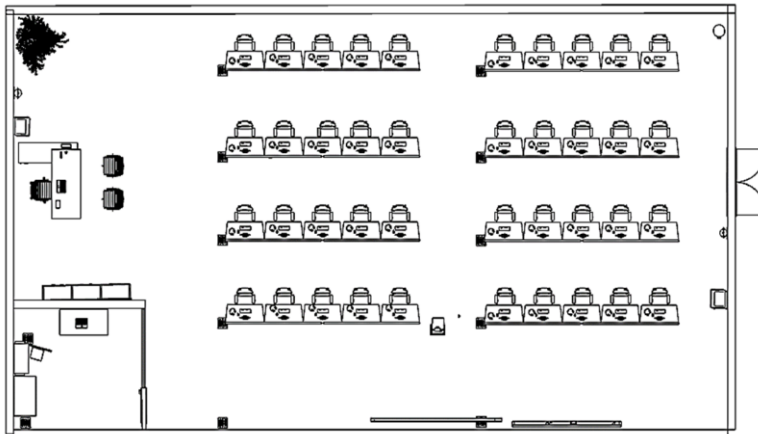
Equipment Distribution.
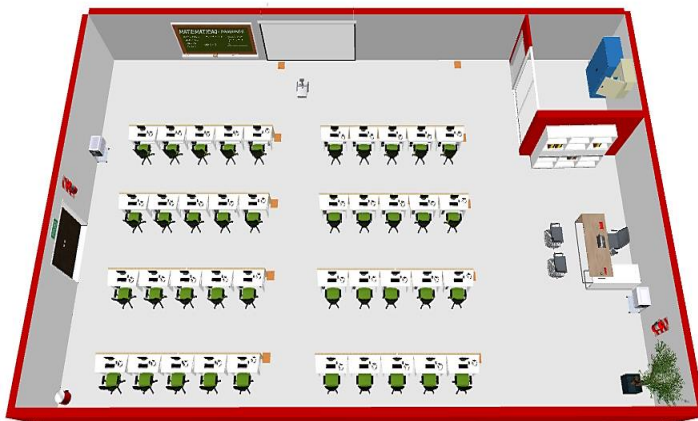
Network Distribution. The telecommunications system in the proposed administrative area was designed to underestimate the services that would be operated within them. Various cable standards were used to meet the demands of the facility, and there was coordination among the material suppliers, between the quotation and the delivery of the materials.

A design based on a Local Area Network (LAN) has been embodied, which is one of the most frequently used. Same that will treat the 40 interconnected machines, located in relatively small extensions with their respective connection accessories. From the fiber optic connection to the area where the network will be managed, passing through the respective Firewall security controls. The designed LAN will allow interaction between teams to share data and resources. Many computers accessing the same printer, the same server, the same Internet connection. All of them sharing data at high speed.

In local area networks the distance between one machine and another is usually not very great. Below 100 meters is normal. However, with special configurations, LAN networks can exist with computers within 5 km of each other. Hence the idea of implementing it with a special configuration of the star type, which will allow the fiber optic link from the Data Center to be carried out at 500m.

On the other hand, the data transmission speed in this type of network is very high. The most common interconnect protocol is Ethernet. Over interlaced cable, it can reach 100 million bits per second (100 Mbps). By fiber optic it could reach 1000 Mbps, but for considerations it will be left of the Ethernet type with patch cords and UTP cat 6. Theoretically no limit of computers can be connected to a LAN. However, with the use of very good equipment and excellent organization of the network, from 400 or 500 equipment degradation in the performance of the network is perceived according to the standard, so that the proposed distribution is the star.

The total structure is divided into three sections adjacent to each other, where in general the main entrance of two meters leads to the room where the computer center is located, then on the right side there is a section with three spaces, divided into bathrooms, living room boards and the network or cabinet administration room where the network is distributed in a fully manageable 19 '12U cabinet whose structure will be assembled as the following illustration. In turn, it will have the redistribution to each terminal in the following more detailed way in the distribution of the network points.
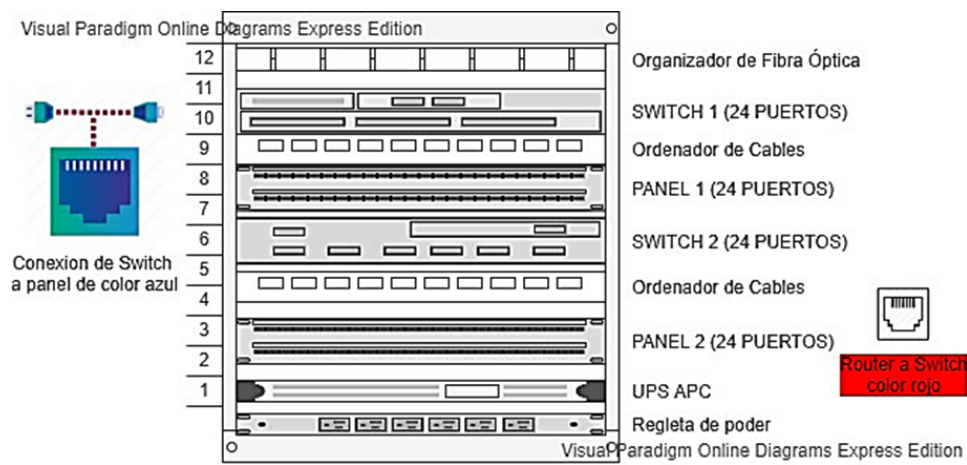
Network Distribution Illustrated.
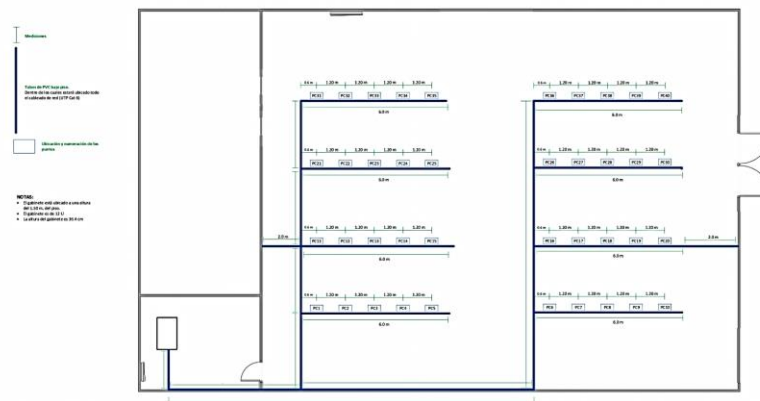
Network Structure

In this section the element that makes up the network structure is detailed. This is made up of the Gabinete.

GABINETE

Name: NEXXT PCRWESKD06U55BK Cabinet

Image:

Key features: ·   Available to accommodate 19-inch panels, manufactured to the EIA industry standard.

·   Meets ANSI / TIA / EIA-568 C.2 and ANSI / EIA RS-310-D standards. Compatible with IEC297-2 standards; DIN41491: SECTION 1 DIN41494: SECTION 7; GB / t3047.2-92.

·   Two structures, a main one with an opening angle of 120 degrees and a front door with an opening angle greater than 180.

·   Compact design with welded frame and perforated top panel for ventilation.

·   Standard 19-inch installation allows easy access for cable management and maintenance

·   Electrostatic coating to protect against moisture, oxidation, scratches, flaking, strong acids and alkaline erosion.

·   Powder-coated, black, hybrid epoxy polyester.

· For use indoors and in areas with controlled environments.

· Not suitable for outdoor use, in industrial, abrasive environments or air distribution chambers.

· Allows you to include shelves or rails to accommodate modular network and voice switches, routers, and other network equipment.

· Universal horizontal cable organizer.

· Allows you to install strips in a horizontal position.

· Tempered glass door and rear panel with lock and key.

· Gutters to guide the cables in the upper and lower panels.

· Adjustable vertical rails.

· Integrated grounding screws.

· Protection level: IP20. Maximum stationary load: 60kg.

Price: $300

Source: Own elaboration.

Communication Equipment. This section details the elements that make up the communication equipment. This is made up of the Switch, the Patch Pan, and the Firewall.

SWITCH

Name: Nexxt ASFRM244U2 Switch

Image:

Key features:

· Complies with IEEE802.3 10 Base-T Ethernet, IEEE802.3u 100Base-TX fast Ethernet standards.

· It supports IEEE802.3x flow control for full duplex mode and back pressure flow control for half duplex mode.

· 24 RJ-45 ports, supporting 802.1 Q VLAN auto-negotiation capabilities.

· Each RJ-45 port supports automatic MDI / MDIX selection for easy integration into a network.

· Supports MAC address auto-learning and auto-aging functions.

· It has store-and-forward switching method.

· Supports up to 4.8 Gbps of backplane bandwidth.

· Each port supports transmission speeds of up to 148800pps.

· 8000 MAC address table to meet diversified applications.

· The dynamic buffer optimizes and balances the network load automatically.

· Built-in power supply for 100-240 volts for worldwide compatibility.

· 6Kv lightning-proof power supply protection

Price: $70

PATCH PANEL

Name: Patch Panel Nexxt Aw191nxt06

Image:

Key features: ·   Comply with IEEE802.3 10 Base-T Ethernet, IEEE802.3u

100Base-TX fast Ethernet standards.

·   Supports IEEE802.3x flow control for full duplex mode and

back pressure flow control for semi-duplex mode.

·   24 RJ-45 ports, which support 802.1 Q VLAN automatic

trading capabilities.

·   Each RJ-45 port supports automatic selection of MDI / MDIX

for easy integration into a network.

·   Supports auto-learning and automatic aging of MAC

addresses.

·   It has storage and forwarding switching method.

·   Supports up to 4.8 Gbps rear plane bandwidth.

·   Each port supports transmission speeds up to 148800pps.

·   MAC 8000 address table to meet diversified applications.

·   Dynamic buffer optimizes and balances network load

automatically.

·   Built-in power supply for 100-240 volts for worldwide

compatibility.

· 6Kv lightning-proof power supply protection.

Price:	$103.88

FIREWALL

Name:	UniFi Security Gateway Pro 4

Image:

Key features: · The UniFi Security Gateway Pro extends the UniFi Enterprise System to provide cost-effective, reliable routing and advanced security for your network. (2) Ports 10/100/1000 RJ45 (2) Combined ports 10/100/1000 RJ45 / SFP Advanced security, monitoring and management Sophisticated routing features Integrated with UniFi driver software

Price:	$344

Source: Own elaboration.

Materials. This section details the elements that make up the equipment of materials necessary for the proper functioning of a language laboratory. These are the Cable Patch, the Cable UTP, the Dual Data Transmission Jack, and a multiple connector.

CABLE PATCH

Name:	Nexxt Solutions Cable Patch Cat6 UTP RJ-45

Image:

Key features:
- · Cable length 3 m

- · Connector 2 RJ-45

- · Connector 1 RJ-45

- · Cabling Technology 10/100/1000Base-T(X) AWG Cable Caliber 24

- · Jacket Material Nylon/Polyvinyl chloride (PVC)

- · Frequency 250 MHz

- · Male/Male Gender Connector

- · Input impedance 100 Ω

- · Gold plated connector contacts

- · Category of cable 6

- · U/UTP cable shield (UTP)

Price: $3.25

CABLE UTP

Name: UTP cable coil CAT 6 325m

Image:

Key features: It consists of 325 meters. 100% copper, not aluminum alloy.

Certified for testing the 100 meters under standard, UL, ETL. Which

will be delivered to each terminal.

Price: $150

DUAL DATA TRANSMISSION JACK

Name: Dual data transmission jack

Image:

Key features: · Cable of 4 pairs of 100 ohms without shielding. For networks

of up to one gigabyte 8 data pins and will be used for the

management of access points to each terminal within the

computer center.

Price: $6.30

MULTIPLE CONNECTOR

Name: AP9562 Multioutlet strip P/ rack (pdu) hor10 outlet 15 A 120V

Image:

Key features:	· Multioutlet strip pdu for basic rack mounting 1ru, 15a, 120v, 10 sockets nema 5-15, Espica nema 5-15p. Cable 3.66 meters. Load capacity 1800va. Will be installed inside the cabinet with recommended polarization.
Price:	$95.31

Source: Own elaboration.

Network accessories. This section details the elements that make up the network accessories kit. These are the Optical Fiber Organizer, the RJ45 Connectors, and Optical Fiber.

OPTICAL FIBER ORGANIZER

Name:	16-fiber optical B-fiber organizing cassette
Image:	
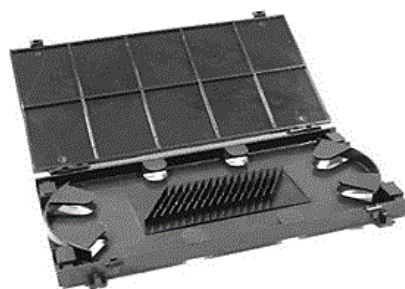
Key features:	· Black plastic cassette or carousel used to organize fiber optic cables. The fiber optic cable is wound inside the cassette in an orderly manner without pinching. It is supplied with a lid. Fixed with four screws at the bottom. Ready to arrange 16 fibers.

Price:	$3.12

RJ45 CONNECTORS

Name:	RJ-45 connector box
Image:	

Key features:	· Consists of 100 connector units that will be distributed by each computer so that the link between the terminals is more stable and constant.
Price:	$20

OPTICAL FIBER

Name:	Optical Fiber
Image:	

Key features:	· Choice of fiber types. Color-coded fibers. E glass reinforcing element, resistant against rodents or pests. LSZH option for improved reaction to fire.
Price:	$5.00 (meter)

Source: Own elaboration.

Distribution of Network Points. With the interactive projectors a high concentration is obtained by the people that will be trained since while they are

concentrated and following the steps of the projected image, they will continue to learn. In addition to this, they can count on some extra benefits that will help them experience better applied and developed tutorials.
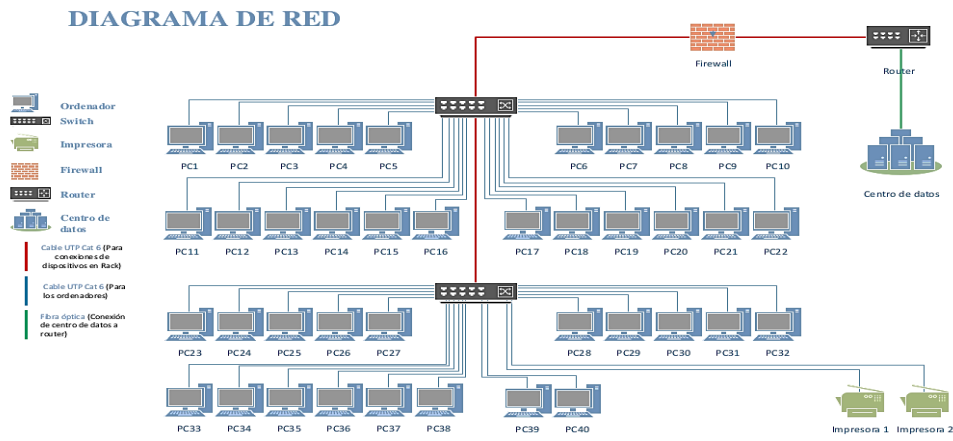
DIAGRAMA DE RED

Projection Equipment and Accessories

Projection Equipment. This section provides detailed information on the element that makes up the digital projection equipment. This being a projector EPSON.

PROJECTOR

Name:	EPSON projector Powerlite Laser L500W

Image:

Key features:	· Resolution: WXGA 1280 x 800
	· Native Aspect 16:10
	· 5000 lumens
	· Contrast 2,500,000:1
	· Useful life light source: 20,000 hours (normal), 30,000 hours (extended)
	· Weight: 7.4 Kg
	· Connectivity: 2 HDMI (1 MHL), 2 VGA, 1 RJ45 LAN
	· CARRYING CASE NOT INCLUDED
	· Warranty: 3 years or 20,000 hours whichever comes first.
Price:	$2,243.33

Source: Own elaboration.

Accessories for Projection. This section gives detailed information about the items necessary for the projector's operation. These elements are a HDMI Cable, a Laser Pointer, a Projector Remote Control, and a Projection Screen.

HDMI CABLE

Name:	HDMI ETOUCH Cable

Image:

Key features: · 6-foot extension with special coating to prevent cuts and failures.

Price: $10

LASER POINTER

Name:	Laser pointer

Image:

Key features: · 2in1 green laser pointer and projector star pen 5MW

      · Maximum laser output: 5mW

      · Laser wavelength: 532nm

      · With clip for easy transport

      · Powered by 2 AAA 1.5V batteries (not included)

·   Color: BlackItem

·   Size: about 167 * 14m m

·   Net weight: 33 g

·   Packaging Content: Star Projector Pen x 1

Price: Included in the multimedia projector

PROJECTOR REMOTE CONTROL

Name: Remote Control

Image:

Key features: ·   Wireless communication: IR Requires: 2 AA batteries (not

included) Compatible Model: For EMP-7800 EMP-7850 EMP-

7900 EMP-7950 EMP-8300 EMP-830 EMP-835 EMP-1830

EMP-1815

·   Color white Material: PC Size: approximately

140*50*20mm/5,51*1,96*0,78 inches Package content: 1 *

Remote control Only the contents of the previous package, other

products are not included.

Price: Included in the multimedia projector

PROJECTION SCREEN

Name: Luxscreen 150 Inch Manual Projection Screen

Image:

Key features: · An embeddable screen is the ideal solution for rooms with a false ceiling as it allows the housing to be hidden inside a gap created between the ceiling and the false ceiling. As a result, the screen is hardly noticeable as only one part is seen. It is operated through a switch, remote control or trigger.

Price: $201.07

Source: Own elaboration.

Computer Equipment

This section provides detailed information about the item that makes up the computer equipment. This being a DELL brand computer.

COMPUTER

Name: Dell OptiPlex 9020

Image:

Key features:

· Processor: Intel core i5

· Performance: 8 Gb ram memory

· Storage: 500 hdd

· Display: 14 inches

· Audiphones, usb, bga, disk reader, microphone, hdmi, usb 2.0 ports

· 1 month free warranty for being low prices to the settlement, but it has with consumer law. It excludes battery, charger, or hard drive.

Price	$600

Source: Own elaboration.

Operating System. This section details the operating system that will launch the computers in this new lab design. The following table details the Server Operating System and the Firewall.

OPERATING SYSTEM COMPUTER CENTER

Name:	Debian 10 "Buster"
Image:	
Description:	The operating system that the machines bring by default is Windows 10, for reasons of maximizing the potential of these has been chosen to change it to the Linux operating system Debian 10 (codename "buster")
Installation Requirements:	· Processor x86 to 700 MHz · RAM of 512 Mb.

· GB hard drive storage.

· A graphics card and monitor that can support a resolution of 1024 x 768.

· DVD player and/or USB port.

· A good internet connection.

License price:	As DEBIAN is a free software based on community contributions, they did not require license payments for commercial use.

SERVER OPERATING SYSTEM

Name:	CentOS 8
Image:	

Description:	CentOS (Community Enterprise Operating System) arises as a branch of Red Hat Enterprise Linux (RHEL), compiled by developers from Red Hat source code.
Installation Requirements	· RAM memory: 192 MB (Minimum). · Hard Disk Space: 850 MB (Minimum) - 2 GB (Recommended). · Processor: Intel Pentium I/II/III/IV/Celeron, AMD K6/II/III, AMD Duron, AMD Athlon/XP/MP
License Price:	CentOS being free software based on community contributions, does not require license payments for commercial use.

FIREWALL

Name: UniFi Security Gateway Pro 4

Image:

Description: For this case, the most convenient firewall has been chosen,

based on the price characteristics and additional benefits when

hiring the business subscription.

Key   ·   No artificial limits or plugins are required to make your

characteristics: system fully functional.

·   No additional usage or feature-based pricing. Enjoy

unlimited users, unlimited firewall rules, unlimited IPsec

tunnels, dual WAN, etc.

·   Standard configuration with 8 GB of RAM and 32 GB of

storage.

·   Low power requirements to help you save money.

·   This system is designed for a long deployment life.

·   From firewall to Unified Threat Management, get all the

security features you need to protect your home or business.

·   Flexible configuration and support for multiple WAN, high

availability, VPN, load balancing, reporting and monitoring,

etc.

·   Add optional packages like Snort or Suricata for IDS / IPS

and network security monitoring, Squid for optimized content

delivery, and SquidGuard for anti-spam / anti-phishing and URL filtering. one

·   Maximum active connections: 8,000,000 (more with additional RAM).

License price + 3-year warranty:	The unit price per Firewall is $ 344.

Source: Own elaboration.

Utility Software. This section is destined to describe the utility software to be used in the design. These are the Office Software, the Internet Browser Software, and the Antivirus Software.

OFFICE SOFTWARE

Name:	WPS Office
Image:	

Description:	WPS Office is an office suite with very complete tools that are very similar to Office, it is compatible with Linux and offers a variety of facilities for the user.
Key characteristics:	· It allows to connect up to 9 PC and Android devices.
	· Text editor, Presentations and Spreadsheets with advanced functions.
	· No advertisements on all devices.
	· PDF to text file conversion.
	· Wide variety of free online templates.

- · Free WPS Cloud storage.

- · The special PDF to text sheet feature contains several functionalities:

- · Instantly convert PDF files to editable documents and docx formats.

- · Split or merge pages for PDF conversion.

- · Mass output and more text formats: RTF, native DOC, MS Word-DOC, MS Word-DOCX.

License price: With a subscription of $ 9.99 per year

INTERNET BROWSER SOFTWARE

Name: Mozilla Firefox ESR (Extended Support Release)

Image:

Description: This browser is designed specifically for business use, contains administrative policies, as well as tools for comprehensive security and data protection.

Key characteristics:

- · The Firefox browser is open source, provides enhanced trace protection, and will soon support DNS over HTTPS as the company maintains a strong commitment to data protection.

- · It contains installation packages and extensive expansion of group policies and features, deployment is faster and more flexible than with other browsers, and it is very easy to use in Linux environments.

· It offers different tools related to the management of personal data and passwords:

  → Firefox Lockwise: manages the passwords that are saved on all devices linked to the user's Firefox account.

  → Firefox Monitor - Manage whether personal information has been leaked online, check for non-compliance violations.

  → Firefox Send: tool that allows you to share files safely with links that "self-destruct".

License price: Mozilla Firefox is free software and the installation is completely free.

ANTIVIRUS SOFTWARE
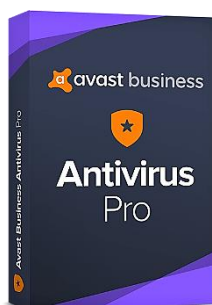

Name: Avast Business Antivirus

Image:

Description: The antivirus that the development team has selected for the data center is Avast Business Antivirus for Linux, which has multiple benefits as it is specifically designed for the protection of companies.

Key characteristics: · Virus scan output format: all detected malicious files are indicated on a new line.

· Virus definition update - The virus definition database (VPS) needs to be updated regularly to keep virus protection up to date.

· Streaming updates - Streaming updates supplement regular virus definition updates so you're always protected.

· Distribution packages: Linux antivirus software components include DEB for Debian (Ubuntu) systems and RPM for RedHat / SUSE systems, which are distributed as standard software packages. Software repositories are also provided

License price: The price is $ 239.99 per year.

Source: Own elaboration.

Backup Devices

Computer Equipment Backup Devices*.* This section details the elements that make up the Computer Equipment Backup Devices. These are the UPS, the batteries, and the Hardware.

UPS

APC Back-Ups 800VA, 120V, AVR, LAM

Technical specifications

Output

Output power capacity	400 Watts / 800 Watts
Maximum configurable power (watts)	400 Watts / 800 Watts

Rated output voltage	120 Watts

Input

Voltage input	120 Watts
Cable length	1.22 meters

Batteries and autonomy

Battery Type:	Maintenance free sealed lead acid battery with suspended electrolyte - leak proof
Typical recharge time	6 hours
Expected Battery Life (years)	2 – 4
Battery capacity VA / hour	83

Hardware

Maximum height dimensions	141 mm, 14.1 cm
Maximum width dimensions	101 mm, 10.1 cm
Maximum depth dimensions	300 mm, 30.0 cm
Net weight	4.9 kg
Color	Black

Source: Own elaboration.

Backup devices for network equipment. This section details the elements that make up the Backup devices for network equipment. These are the Smart UPS, the Batteries, and the Hardware.

SMART - UPS

Unidad Smart-UPS de APC, 3000 VA, con pantalla LCD, para rack, 2 U, 120 V

Technical specifications

Output

Output power capacity	2.7kWatts / 2.88kWatts
Rated output voltage	120W

Input

Voltage input	120W
Cable length	2.44 meters

Batteries and autonomy

Battery Type:	Maintenance free sealed lead acid battery with suspended electrolyte - leak proof
Typical recharge time	3 hours
Expected Battery Life (years)	3-5
Battery capacity Watts / hour	336

Hardware

Maximum height dimensions	86mm, 8.6cm
Maximum width dimensions	480mm, 48.0cm
Maximum depth dimensions	683mm, 68.3cm
Rack height	2U

Net weight	44.28kg
Color	Black

Source: Own elaboration.

Specific Functions

Section where the different functions that are expected to be developed with the equipment are detailed.

WORK TO BE DONE

1   Supply and Assembly of 19-inch Cabinet, wall, minimum capacity 12UR, includes Rack.

2   Supply and Assembly of Switch in Cabinet.

3   Supply and Assembly of Data Distribution Panels (Patch Panel), in Cabinet.

4   Supply and Assembly of Cable Organizer in Cabinet.

5   Supply and Assembly of Router.

6   Supply and Assembly of Electrical Strip for horizontal mounting in Cabinet.

7   Supply and Assembly of Patch cords in Cabinet.

8   Supply and Assembly of Sockets for Data Transmission.

9   Supply and Installation of structured cabling UTP-CAT 6 in conduit.

10   Supply and Installation of Interlink type plastic gutter with its accessories.

11   Supply of Patch cords for the output of each workstation (Data).

12   Supply and Assembly of Registration Box to house voice wiring.

13   Network Certification.

14   Port link.

15	A fiber optic link from Datacenter located in a building 500 meters away.
16	Distribution of computer equipment.
17	Configuration of workstations with Internet access.
18	Firewall settings to protect incoming data.

Source: Own elaboration.

Economical Offer. Section where the budget offers for the equipment of this language laboratory are detailed specifically.

HEADING	TOTAL (VAT INCLUDED)
Computer equipment	$24,804.84
Network equipment	$7,484.02
Projection equipment	$2,440.40
Backup equipment	$4,917.58
Software and Licensing (Optional)	$24,359.60
Total, Licensed	$64,006.44
Total, No Licensing	$39,646.84

Source: Own elaboration.

Economic Offer Detail. Section where the previous budget offers for the equipment of this language laboratory is detailed per element.

COMPUTER EQUIPMENT	
Name	Price
Dell OptiPlex 9020 computers	$24,000
HP LaserJet Pro printers	$804.84
Total	$24,804.84

Source: Own elaboration.

Annexes

VALDEZ STORE
VIVE LA EXPERIENCIA

Price Quote in Valdéz Store.

Dear Customer   **Date** July 25, 2020

Cordial greetings

The company of Valdez Store presents you the following quotation, according to your requirement.

Quantity	Product	Description	Unit price	Total Price
Total 40	Dell OptiPlex 9020	PROCESSOR Intel core i5 performance 8 gb ram memory storage 500 hdd display: 14 inches audiphones, USB, BGA, disc reader, microphone, HDMI, usb 2.0 ports 1-year free warranty and subsequent 2 years of maintenance and guarantee included in the total payment.	**$600.00**	**$24,000**
Total				$24,000.00

Payment method Cash, Credit Card, Credit or Debit Cards and Interest-free Months with Bank (Agricola, Promerica, Davivienda and Credomatic) Check (Products are delivered 48 business hours after receipt of check) Payment with miles with credit cards (Agricultural, Promerica and Davivienda) This quote is valid for 24 hours, products and promotion subject to stock. Restrictions apply*

Jardines de Cuscatlán, Av. L-A Calle L-4, Polígono D, Edificio VALDEZ - Merliot, Antiguo Cuscatlán, La Libertad, El Salvador, C.A. CP Tel. 2201-3004 / 7601-2246

Quantity	Product	Description	Total Price
Total 1	Cabinet NEXXT PCRWESKD06U55BK	• Available to accommodate 19-inch panels, manufactured according to industry standard EIA • Complies with ANSI/TIA/EIA-568 C.2 and ANSI/EIA RS-310-D. Compatible with IEC297-2 standards; DIN41491: CLAUSE 1 DIN41494: CLAUSE 7; GB/t3047.2-92. • Two structures, one main with 120-degree opening angle and front door with opening angle greater than 180° • Compact design with welded frame and perforated upper panel for ventilation. • 19-inch standard installation allows easy access for cable management and maintenance • Electrostatic layer to protect against moisture, oxidation, scratches, peeling, strong acids and alkaline erosion. • Powder coated, of hybrid epoxy polyester, black • For use indoors and in areas with controlled environments. No • suitable for use outdoors, in industrial environments, abrasives • nor air distribution chambers • Allows to include shelves or rails to place switches • voice and network modules, routers and other network equipment • Universal organizer for horizontal wiring • Allows to install strips in horizontal position • Tempered glass door and back panel with lock and key. • Conduits for guiding cables in the upper and lower panels • Note: 6 to 8 weeks per import Warranty 5 years.	**$300.00**

Quantity	Product	Description	Unit Price
Total 2	Nexxt ASFRM244U2	• Compliant with IEEE802.3 10 Base-T Ethernet, IEEE802.3u 100Base-TX fast Ethernet standards • Supports IEEE802.3x flow control for full duplex mode and back pressure flow control for semi-duplex mode. • 24 RJ-45 ports, which support 802.1 Q VLAN automatic trading capabilities. • Each RJ-45 port supports automatic selection of MDI / MDIX for easy integration into a network. • Supports auto-learning functions and automatic aging of MAC addresses. • Has storage and forwarding switching method. • Supports up to 4.8 Gbps backplane bandwidth. • Each port supports transmission speeds up to 148800pps. . • MAC 8000 address table to meet diversified applications. • Dynamic buffer optimizes and balances network load automatically. • Built-in power supply for 100-240 volts for worldwide compatibility. • 6Kv lightning-proof power supply protection	**$70.00**
Total			$140

Quantity	Product	Description	Unit Price	Total Price
Total **40**	Bticino Horizontal Cable Organizer with Rings, 2U, Bla	• Horizontal and triple • For standard 19-inch-wide cabinet mounting. • With brackets and four-ring fixing kit	**$20.00**	**$40.00**
40	Nexxt Solutions Cable Patch Cat6	· Cable length 3 feet · Connector 2 RJ-45 · Connector 1 RJ-45 · Cabling technology 10/100/1000Base T(X) · AWG cable caliber 24 · Jacket Material Nylon/Polyvinyl chloride (PVC) · Frequency 250 MHz · Male/Male Gender Connector · Input impedance 100 Ω · Gold plated connector contacts · Category of cable 6	**$4.75**	**$190.00**
42	Nexxt Solutions Cable Patch Cat6	· Cable length 5 feet · Connector 2 RJ-45 · Connector 1 RJ-45 · Cabling technology 10/100/1000Base-T(X) · AWG cable caliber 24	**$5.75**	**$241.50**

![VALDEZ STORE - VIVE LA EXPERIENCIA]

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· Jacket material Nylon/Polyvinyl chloride (PVC)
· Frequency 250 MHz
· Male/Male Gender Connector
· Input impedance 100 Ω
· Gold plated connector contacts
· Category of cable 6
· U/UTP cable shield (UTP)

42	Dual data transmission jack	· 4-pair cable with 100 ohms without shielding · For networks up to one gigabyte · 8 data pins	$6.30	$264.60

1	AP9562 MULTIJACK P/ RACK STRIP (PDU) HOR10 OUTLET 15A 120V	· pdu multitap strip for basic rack mounting · 1ru, 15a, 120v, 10 shots nema 5-15, · Espica nema 5-15p. · 3.66-meter cable. · Load capacity 1800va	$95.31	$95.31

VALDEZ STORE
VIVE LA EXPERIENCIA

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3	16-fiber B-fiber organizing cassette	· Cassette or carousel made of black plastic used to organize fiber optic cables. · The fiber optic cable is wound inside the cassette in an orderly manner without pinching. · Supplied with lid. · Fixed with four screws at the bottom. · Prepared to organize 16 fibers.	$3.12	$9.36
4	Router nexxt acrux1200-AC	· The Acrux1200-AC is the next generation of dual-band gigabit AC wireless multimedia routers that is incorporated into the Nexxt Solutions family. Transmission speeds up to 1200Mbps, 867Mbps in the 5.0GHz band and 300Mbps in the 2.4GHz band,	$67.99	$67.99
1	UTP cable coil CAT 6 325 m	· Consists of 325 meters. 100% copper, not aluminum alloy. · Certified for testing the 100 meters under standard, UL, ETL.	$150	$150.00

![VALDEZ STORE - VIVE LA EXPERIENCIA]

Jardines de Cuscatlán, Av. L-A Calle L-4, Polígono D, Edificio VALDEZ - Merliot, Antiguo Cuscatlán, La Libertad, El Salvador, C.A. CP Tel. 2201-3004 / 7601-2246

100	RJ-45 connector box	· Nexxt Cat6 Unshielded Keystone Jack · 110 type GR · female RJ-45 connector	$5.23	$523.00
1	Firewall management device	· The UniFi Security Gateway Pro extends the UniFi Enterprise system to provide reliable and cost-effective routing and advanced security for your network. · (2) Ports 10/100/1000 RJ45 · (2) Combined ports 10/100/1000 RJ45 / SFP · Advanced security, monitoring and management · Sophisticated routing functions · Integrated with UniFi driver software	$344.00	$344.00
2	HP Neverstop Laser MFP 1200w	· First HP laser printer with toner tank prints up to 5000 pages before having to recharge easy mobile printing with HP Smart. · Scanning, copying and printing. USB and wireless connectivity Cost of duo toner pack ($25+VAT) for 5000 pages c/u 1 year warranty.	$402.42	$804.84

Jardines de Cuscatlán, Av. L-A Calle L-4, Polígono D, Edificio VALDEZ - Merliot, Antiguo Cuscatlán, La Libertad, El Salvador, C.A. CP Tel. 2201-3004 / 7601-2246

| 1 | Projector EPSON Powerlite Laser L500W | · Resolution: WXGA 1280 x 800
· Native Aspect 16:10
· 5000 lumens
· Contrast 2,500,000: 1
· Light source lifespan: 20,000 hours (typical), 30,000 hours (extended)
· Weight: 7.4 kg
· Connectivity: 2 HDMI (1 MHL), 2 VGA, 1 LAN RJ45
· Carrying case NOT INCLUDED
· Warranty: 3 years or 20,000 hours, whichever comes first | **$2,243.33** | **$2,243.33** |
| 1 | MUSTANG Wall Display | · MUSTANG display – 16:9 – 96″x64″ – 106″ Diag. – Viewing 3 mx1.5 m – wall | **$201.07** | **$201.07** |

![VALDEZ STORE - VIVE LA EXPERIENCIA]

Jardines de Cuscatlán, Av. L-A Calle L-4, Polígono D, Edificio VALDEZ - Merliot, Antiguo Cuscatlán, La Libertad, El Salvador, C.A. CP Tel. 2201-3004 / 7601-2246

40	APC Back-UPS 800VA 120V AVR LAM	· Rated output power capacity · 120VFreq output synchronized with the · 60Hz +/- 3Hz network · Output connections 4) NEMA 5-15R · (Battery Backup) · 2-year warranty (On the way to a week)	$99.42	$3976.80
1	APC Smart-UPS 3000VA LCD Rack 2U 120V	· Maintenance-free sealed lead acid battery with suspended electrolyte: leak proof 3 hour (s).	$15,000	$15,000
15	160 PSI, 1.1 / 4 INCH PVC TUBE.	· LENGTH 6 METERS · DIAMETER OF 1.1 / 4 INCHES · HIGH PRESSURE RESISTANCE OF 160 PSI	$4.20	$63.00

500 Meters	FIBER OPTIC NEXXT	· Best proven quality.	$5.00	$2,500

Jardines de Cuscatlán, Av. L-A Calle L-4, Polígono D, Edificio VALDEZ - Merliot, Antiguo Cuscatlán, La Libertad, El Salvador, C.A. CP Tel. 2201-3004 / 7601-2246

Date	**26/08//2029 13:21:10**
Client	**MISAEL JUAREZ**
NRF	**Client**
Attention to	**MISAEL JUAREZ**
Seller	**0004158 – JOSE MIGUEL MELARA RAMOS**
Observations	**CASH**
Paying conditions	

Code	Description	U.M	Quantity	Cost	Total
54060	PVC TUBE DE 160 PSI, 2 INCHES.	PZA	12.00	$8.75	$105.000
33553	NYLON BELT BL 7 INCH 4.8MM 50LBS WHITE	PZA	100.00	$0.1000	$10.0000
63840	WIRE UTP CAT 6 INTERIOR NEW-9806342	RLL	2.00	$180.3300	$376.6600
4252	MODULAR CONNECTOR PARA EXTENSION RJ 11 KR-204L	PZA	100	$0.1000	$10.0000
60242	GIVEN SOCKET FOR COMPUTER WHITE NWE-3555008	PZA	50.00	$2.3000	115.0000
119730	VOLTAGE REGULATOR 2400VA/1200W 8 CENTRA EXITS CR2400	PZA	1.00	$24.5000	$24.5000
553855	VELCRO BELT 20 CM NEGRO	PZA	50.00	$6.5000	$325.0000
TOTAL:					**$966.6**

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The conclusions of the research "Study of the New Technologies in the Process of Learning and Teaching Foreign Languages Degrees in Junior Students of Modern Languages, English Teaching Degrees, and English Teachers at the University of El Salvador, Eastern Campus" have shown that a Foreign Language Laboratory is well seen as a tool to develop the macro-skills according to teachers and students because there exists a range of advantages that the use of ICT provide in the learning and teaching process.

Also, the results have shown that ICT make teacher's work simpler in light of the fact that they have an assortment of exercises to do so, it is important that ICT's teachers have to be well instructed for a professional in the area of technology before using the Foreign Language Laboratory.

Additionally, the research demonstrates that the utilization of ICT offers the chance to instruct all the abilities while choosing them carefully according to the students' necessities. Therefore, ICT help students to practice and develop the four macro skills and the responses of this research show that Listening and Speaking are the abilities to be more developed in a Foreign Language Laboratory due to the interaction that students can have with each other.

Besides, the practices in the Foreign Language Laboratory should be more frequent from one to two sessions per week depending on the numbers of students according to what teachers said and in order to cover these needs it is important to have the adequate technological equipment like computers, projectors, internet, etc.

Recommendations

●   It is important that the language laboratory should have equipment for students to practice their language skills. The materials that can be used for activities are: material created by teachers, Book material or internet in these students and teacher have a lot of variety of resources, tools for the development of macro skills.

●   Further empower teachers with specialized workshops, these workshops led by subject educators in the management of technology, so that they can develop the deep and relevant technological knowledge about the Foreign Languages laboratory.

●   Use the existing interpretation of a character and recording the conversations, but with a greater emphasis focusing on interacting with different students, professionals who support the language. This will benefit the development of activities.

●   Offer and generate spaces in the practices where students can develop their macro skills that will allow them to solve their doubts about the language. These spaces should approach the laboratory, and students can be motivated by participation and gain greater learning.

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ANNEXES

UNIVERSITY OF EL SALVADOR
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Interview

Objective: To identify the teaching opinion on the use of a Language Laboratory as a means to strengthen the teaching and learning process in Foreign Languages students of the University of El Salvador, Eastern Campus.

Instructions: Answer the following questions based on your experience in a Language Laboratory.

1. Do you consider that equipment of the Language Laboratory would strengthen the process of teaching/learning a foreign language?

2. What benefits would you have in the teaching process with the use of a Language Laboratory?

3. Do you think you would have any difficulty operating the Language Laboratory?

4. What kind of activities could you develop within the Language Laboratory?

5. Which of the macro-skills would you work the most to take advantage of the hours of practice within the Language Lab?

6. How many sessions per week do you think it would be convenient to have within the Language Lab?

7. How many hours do you consider convenient for each session to achieve a complete handling on your part of the Language Laboratory?

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Interview Transcriptions

On the following pages are the transcripts of the teachers interviewed in the research as evidence.

Interview one: I am a teacher at the University of El Salvador, in San Miguel. The first question is if I consider that the equipment of the Language Laboratory would strength the process of teaching and learning a foreign language. Yeah, of course. That is a basis that we supposed to have in a School of languages. We supposed to have a laboratory of languages where the students can have any access in a language in a better way. So, yeah. It is the most. The question number two asks about the benefits that I as a teacher would have in the teaching process with the use of a Language Laboratory. First of all, as a teacher, the opportunities that I could have are many possibilities for more activities, for more things to do with the students that may have a higher impact in their language learning. For example, well... I would tell you more about the activities that I would like to do. It enables a lot of possibilities to do a lot of many things that we can, as teachers, do due to the fact that we would have access to that technology in the Language Lab. The next question says "Do you think you would have any difficulty operating the Language Laboratory?" No, of course no. Actually, I remember when I was a student at the Central University of El Salvador. There, we use to have a Language Laboratory which was a little archaic, but it worked. I guess this would be different. The technology would not be hard to operate. Probably, for some other teachers that are not that tech added that would be complicated to operate. In my personal opinion, with proper training it is possible. For the question number four, "what kind of activities would you develop within the Language

Laboratory?" The things that I would like the most would be to provide students with audio-visual materials that would help them improve their language learning. For example, movies, podcasts, Audio-files and stuff like that which they can later on work within guides. Mainly, what I would like to do is to show movies in the goal language. I think that one of the best ways to learn is watching things that you like in the languages rather than things about that language. For example, if they like to watch superhero movies so the teacher could work with a superhero movie in French or English with or without subtitles they can watch over there. There are many students who do not have any access to internet at their homes, so it would be a very good alternative to them. Next, "which of the macro-skills would you work the most to take advantage of the hours of practice within the Language Lab?" The main macro-skill that I would like to make my students improve is listening, of course. If they are able to have their headphones on, they can watch videos or listening to audios that are going to help them. Question six, "How many sessions per week do you think it would be convenient to have within the Language Lab?" I would say that it depends of the level of the students and the subject that they are working on. For example, for a French III level, the most appropriate thing is to have two sessions a week of two hours each session. Number seven, "How many hours do you consider convenient for each session to achieve a complete handling on your part of the Language Laboratory?" My answer is two sessions a week of two hours each session for making eight hours in the week. That would be the minimum that they would have. Remember that it is the only way that students are going to have access to the target language in a natural or semi natural way. Of course, they can listen to their teachers in English of French but it is not the same as listening to a spontaneous conversation on the language that they would like to learn. Thank you for taking me in account, guys.

Transcription two: Buenas tardes. A la pregunta número uno yo respondería que sí. El equipo del laboratorio debería reforzar el proceso de enseñanza/aprendizaje

porque todos los recursos que vengan a incentivar al estudiante para que pueda practicar lo que se le enseña, lo que ha revisado en clases, lo que ha revisado en los libros de texto. Todo eso viene a favorecer en el aprendizaje de los jóvenes, por tanto, vendría a beneficiar a los alumnos y docentes. En la pregunta dos, con respecto a los beneficios de tener un laboratorio de idiomas. Son muchos los beneficios, tanto como para el joven estudiante como para el profesor. El profesor contaría con tecnología apropiada para potenciar la transmisión de conocimientos, esa búsqueda por mejorar todas las habilidades del estudiante. Con respecto a la pregunta tres donde pregunta sobre las dificultades que el docente tendría. Eso depende del tipo de equipo con el que el laboratorio contará. Por ejemplo, si el equipo es muy actualizado si podría haber dificultades al principio, pero todo es que la institución brinde capacitación para poder manejar el equipo. Tal vez sometiéndose a un proceso de selección, pues saldría la pena tenerlo. En la pregunta cuatro se hacen mención al tipo de actividades que se podrían llevar a cabo dentro del laboratorio de idiomas. Si el lugar estuviera conformado por el equipo básico que son computadoras e internet, hay una gran variedad de actividades que se pudieran conseguir en línea. También opino que podría desarrollarse mejor una clase de inglés, el refuerzo que se les pudiera dar a contenidos problemáticos. Con respecto a la pregunta cinco sobre las macro habilidades que yo trabajaría más. En mi opinión, valdría la pena trabajar todas las macro habilidades, pero dando mayor énfasis en el "listening". Por ejemplo, se podría escuchar de la boca de un nativo, su acento, la correcta pronunciación de las palabras. Incluso, el docente podría aprender más sobre la cultura, las costumbres, las tradiciones, viendo los gestos y palabras que usan mientras se mantiene una conversación. Pero, aun así, la macro habilidad que más trabajaría sería el de la comprensión auditiva, luego la producción oral, también la comprensión escrita que es muy importante, finalmente la producción escrita. Con respecto a la pregunta seis "¿cuántas sesiones por semana...?" Yo considero conveniente al menos dos sesiones por semana, dependiendo de cuántas horas valorativas tiene cada materia. Por

ejemplo, si hablamos de una materia que exige diez horas de clase a la semana, al menos dos sesiones por semana. Esto viene de la mano con la siguiente de la mano con la siguiente pregunta, "¿cuántas horas por sesión...? Yo diría que dos horas por sesión. Yo diría que dos horas por sesión. De esta manera se tendrían, por ejemplo, seis horas en un aula convencional y cuatro horas dentro del laboratorio utilizando muy bien todos los recursos. A esto se le agrega que el docente debe tener muy bien programado todas las actividades, qué es lo que se pretende desarrollar, teniendo claro alcanzar los objetivos. Esto sería todo, muchas gracias.

Transcription three: Hola, soy docente en la Universidad de El Salvador, en la Facultad Multidisciplinaria Oriental. Quiero responder algunas preguntas de un cuestionario que están haciendo los estudiantes de Lenguas Modernas, relacionado al uso del laboratorio. Una de ellas tiene que ver con las fortalezas que este tiene. La fortaleza que podría tener un laboratorio, lógicamente tiene que ver con las mejoras en el aprendizaje del idioma inglés puesto que habría mayores prácticas por parte de los estudiantes y también la asignación de tareas por parte del docente. Esto ya tiene que ver con la pregunta dos sobre los beneficios. El beneficio principal va a ser ese, que el aprendizaje va a ser mejorado en tanto a las macro habilidades, así como también algún nivel de investigación podría fortalecerse. El uso de algún material audiovisual también podría ser facilitado al tener un laboratorio de idiomas bien equipado. Las dificultades que este podría tener, tienen que ver con la capacitación del personal para utilizar el laboratorio, en primer lugar; o bien asignar a una persona que conozca de informática que pueda dar el mantenimiento y que pueda también operar el laboratorio, nombrar un laboratorista. En las actividades que se puedan realizar sería mayormente actividades de desarrollo de las macro habilidades del inglés, o sea "listening". Principalmente la comprensión auditiva, puesto que este equipo tendría micrófonos y audífonos con los cuales los estudiantes puedan hacer grabaciones y puedan escuchar también algún tipo de audios que les permitan irse familiarizando con la

pronunciación y la comprensión auditiva en términos generales. También pueden

hacer actividades de lectura, de redacción, de gramática, puesto que las micro

habilidades también pueden ser mejoradas a través de eso. Las sesiones por semana

pueden depender del número de estudiantes que se tengan. Posiblemente podrían ser

una o dos sesiones por semana la frecuencia. Jornadas de quizás una hora o cuarenta

minutos, dependiendo de la disponibilidad del espacio, del uso, del horario y del

número de estudiantes. Muchas gracias.

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Training Guideline

Instructions for reading test:

These reading tests were designed to help students practice English Reading Skills for A2 English Test. You will read a passage. After reading, there are questions for you to answer. Each question has four choices. You should choose the best answer to complete the questions. You have 10 minutes to complete each question. You must do 3 reading tests per day.

Example:

My name is Peter. I am a student. I am 19 years old. I am from London. I have 2 brothers and a sister. My father is a doctor. My mother is a teacher.

Question 1. How old is Peter?

A. He is 19 years old

B. He is 16 years old

C. He is 1 years old.

D. He is 2 years old

Here, the correct answer is A. You should choose "A" then click "Submit" button to answer.

Click in the following link to enter the website:

https://englishteststore.net/index.php?option=com_content&view=article&id=14314&Itemid=362

- ▪ **Instructions for listening test:**

Explanation: conversation Tests were designed to help students practice English Listening Skills for A2 English Test - Conversation. You will hear some conversations between two people. You will be asked to answer questions about what the speakers say in each conversation. Select the best answer to each question and click Submit button to answer. You have 10 minutes to complete 10 questions. After completing, you can review your answers. You must do 10 listening test per day.

Click in the following link to enter the website:

https://englishteststore.net/index.php?option=com_content&view=article&id=14312&Itemid=325

▪ **Instructions for grammar test:**

Grammar Tests were designed to help students practice English Grammar Skills for A2 English Test. You will read a sentence with a blank. There are four choices for you to choose. You should choose the most appropriate answer to complete the question. You have to do 5 grammar test per day.

Example:

They _____ my brothers.

A. is

B. am

C. are

D. be

Here, the correct answer is C. You should choose C then click "Submit" button to answer.

Click in the following link to enter the website:

https://englishteststore.net/index.php?option=com_content&view=article&id=14311&Itemid=384

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Questionnaire

Name:

Career:

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent

   - Good

   - Regular

   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes

   - No

Why?

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent

   - Good

   - Regular

- Bad

Why?

4. What macro-skill do you think you could best develop using practices through digital media?

    - Listening

    - Reading

    - Speaking

    - Writing

    - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

    - Yes

    - No

If yes, what elements?

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

    - Yes

    - No

Why?

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

    - Once a week

    - Twice a week

    - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why?

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Questionnaire Answers

Name: Jose Eduardo Arbaiza Sorto

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

9. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

10. Do you think that the practices carried out by virtual means could help you in your learning process?

    - Yes
    - No

Why? In my opinion, an explanation from a teacher in person is better than receiving a PDF.

11. How do you rate your experience with the practices carried out using the given study guide?

    - Excellent
    - Good

- Regular

- Bad

Why? (No response)

12. What macro-skill do you think you would best develop using practices through digital media?

- Listening

- Reading

- Speaking

- Writing

- All

13. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

- Yes

- No

If yes, what elements? I think it could possibly be laptops, cannons with the use of slides, internet access and a TV in the lab.

14. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

- Yes

- No

Why? In addition to learning more about technological tools, it would serve to view videos with content on extensive topics, practice listening, digitize texts in English or French, etc.

15. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week

- Twice a week

- 3 times per week

16. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? But if there were, I would make an effort to learn to use them in the right way.

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QUESTIONNAIRE ANSWERS

Name: Gabriela María Bautista Fuentes

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Because it would be better learning for students and these practices could provide much more information for them.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? I consider that the information has been learned in a good and understandable way.

4. What macro-skill do you think you would best develop using practices through digital media?

    - Listening

    - Reading

    - Speaking

    - Writing

    - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

    - Yes

    - No

If yes, what elements?

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

    - Yes

    - No

Why? I think it would provide better education for language learners.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

    - Once a week

    - Twice a week

    - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes
- No

Why? Because little by little we will know how to use this material in laboratories.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
ARTS AND SCIENCES DEPARTMENT
FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Anibal Josué Campos Andrade

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? (No response)

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good
   - Regular

- Bad

Why? (No response)

4. What macro-skill do you think you would best develop using practices through digital media?

    - Listening

    - Reading

    - Speaking

    - Writing

    - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

    - Yes

    - No

If yes, what elements?

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

    - Yes

    - No

Why? (No response)

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

    - Once a week

    - Twice a week

    - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

    - Yes

- No

Why? I do not know what the equipment that makes up a language laboratory is.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
ARTS AND SCIENCES DEPARTMENT
FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Bryan Chavarría

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Because personal help is needed for any questions; since virtual, little is understood due to the lack of support from a tutor or teacher.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? Because in some activities it is possible to understand without having to analyze more than once, but in other aspects it is regular since a person is needed to explain so that the information is understandable.

4. What macro-skill do you think you would best develop using practices through digital media?

   - Listening

   - Reading

   - Speaking

   - Writing

   - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

   - Yes

   - No

If yes, what elements?

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

   - Yes

   - No

Why? Because when you have free time, you can go to the laboratory and thus you can practice any of the skills mentioned above.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

   - Once a week

   - Twice a week

- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? Because I do not know any equipment used for the language laboratory and also that I do not have any knowledge about it.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
ARTS AND SCIENCES DEPARTMENT
FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Carlos Miguel Cruz Sánchez

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Regardless of the career, ICT are a tool that can be very profitable, since they are accessible, mostly free, and easy to use. In addition, in the case of languages, it is even more important, since in order to become familiar with the language it is necessary to use it daily as many times as possible, this is easier through virtual means and tools.

3. How do you rate your experience with the practices carried out using the given study guide?

- Excellent
- Good
- Regular
- Bad

Why? Because I arrived at a moment of certain relaxation due to the fact that I already took most of the subjects, and I was leaving aside being constant in the practice of the English language.

4. What macro-skill do you think you would best develop using practices through digital media?

- Listening
- Reading
- Speaking
- Writing
- All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

- Yes
- No

If yes, what elements? Computers sufficiently up-to-date with their appropriate headphones to be able not only to interact with classmates and teachers, but also to take advantage of the internet with tools like the ones in this guide. As regards headphones, it is good for listening practices, and even being a little more optimistic, for making video calls with native speakers of the language.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

- Yes
- No

Why? Because when it comes to learning a new language, the greater the contact with the language, the better. In addition, when talking about a laboratory, it is a specific place to practice the language you want to learn. I think this could reduce the linguistic interference that affects language learners so much.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week
- Twice a week
- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes
- No

Why? Because the current generation of students is technologically advanced enough to be able to use a computer, taking into account that language practice programs do not require great computer skills.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
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FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Gabriela Flores

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Because when training is done on the internet, you have access to various tools to expand knowledge in different areas such as readings and listening.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? It seems to me that you have a well-made plan with which the student is not too overwhelmed; it does not feel tedious to do, so the student does not get overwhelmed and does not create that barrier of not wanting to continue doing it.

4. What macro-skill do you think you would best develop using practices through digital media?

  - Listening

  - Reading

  - Speaking

  - Writing

  - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

  - Yes

  - No

If yes, what elements?

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

  - Yes

  - No

Why? (No response)

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

  - Once a week

  - Twice a week

  - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? (No response)

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
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FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: keiry Raquel Fuentes Cruz

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   ● Excellent
   ● Good
   ● Regular
   ● Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   ● Yes
   ● No

Why? Because audiovisual media are of great help when our goal is to learn another language. On some platforms we can find activities that help us improve the skills that we must master.

3. How do you rate your experience with the practices carried out using the given study guide?

   ● Excellent

- Good

- Regular

- Bad

Why? Because I keep learning and improving in some areas of the language.

4. What macro-skill do you think you would best develop using practices through digital media?

    - Listening

    - Reading

    - Speaking

    - Writing

    - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

    - Yes

    - No

If yes, what elements? I think they would be computers with their programs duly updated and headphones in good condition.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

    - Yes

    - No

Why? Because I have always considered that the more the language is studied, the more it improves.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

    - Once a week

    - Twice a week

- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? Because these days most of the students have knowledge about how to use a computer, and therefore it would not be difficult for us.

UNIVERSITY OF EL SALVADOR
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FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Nelys Lucia Funes Argueta

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   ● Excellent

   ● Good

   ● Regular

   ● Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   ● Yes

   ● No

Why? Because many of the applications or websites in which virtual practices are carried out tell you where you are wrong and also if you did it well, they tell you why. I think that helps a lot in your learning. Personally, I learn a lot from my mistakes, but for this I need to be explained the reason why it is bad and thus not making the same mistake again.

3. How do you rate your experience with the practices carried out using the given study guide?

- Excellent
- Good
- Regular
- Bad

Why? Because the exercises were excellent to practice the language and as I mentioned before. I like that they explain the answers.

4. What macro-skill do you think you would best develop using practices through digital media?

   - Listening
   - Reading
   - Speaking
   - Writing
   - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

   - Yes
   - No

If yes, what elements? I consider it to be computers, headphones, speakers, projector, and internet connection.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

   - Yes
   - No

Why? Because you learn better in practice and many times when there are not the necessary resources, the classes become theoretical. I maintain that learning a second language requires practice, not just theory.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week
- Twice a week
- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes
- No

Why? Because I can properly use the necessary elements for the language laboratory so I don't see that it could cause me any problems.

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QUESTIONNAIRE ANSWERS

Name: Abigail Esperanza Girón Hernández

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Because in them there are many very useful tools for learning the language.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good
   - Regular

- Bad

Why? Because I tested the progress of my knowledge and skills in terms of my learning of the English language.

4. What macro-skill do you think you would best develop using practices through digital media?

    - Listening

    - Reading

    - Speaking

    - Writing

    - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

    - Yes

    - No

If yes, what elements? I consider tape recorders and computers.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

    - Yes

    - No

Why? Because a language laboratory puts traditional teaching aside.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

    - Once a week

    - Twice a week

    - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? Because I have a basic understanding of it. So, I think it can help me.

- Yes

- No

Why? Because I have a basic understanding of it. So, I think it can help me.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
ARTS AND SCIENCES DEPARTMENT
FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Keiry Elizabeth Godoy

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Because there is a wide variety of tools for practicing each skill when learning a language.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? Because I put my grammar, listening and reading skills to the test. I feel like I was able to see how my language learning skills are advancing to this day.

4. What macro-skill do you think you would best develop using practices through digital media?

  - Listening

  - Reading

  - Speaking

  - Writing

  - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

  - Yes

  - No

If yes, what elements? Recorder, TV, computers.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

  - Yes

  - No

Why? Because it is a different methodology and the traditional of just sitting and the teacher writing on the board or talking would be put aside.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

  - Once a week

  - Twice a week

  - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes
- No

Why? I think not but nevertheless, even if I had a deficiency when using one, I could learn to do it better.

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QUESTIONNAIRE ANSWERS

Name: Bessy Lorena Hernández Mendiola

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Because they are an essential tool for the development of classes, the investigation of new words and the obtaining of more effective information.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? Because I have already worked with these tools and it is much easier for me to improve the skills that the language requires. I consider it very easy to use, it does not require much effort or time.

4. What macro-skill do you think you would best develop using practices through digital media?

- Listening

- Reading

- Speaking

- Writing

- All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

- Yes

- No

If yes, what elements? Computers in good condition, speakers, TV, air conditioning, etc.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

- Yes

- No

Why? Because there are many more tools and therefore more opportunities to develop our skills in the language.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week

- Twice a week

- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? Because they are basic tools. That is, I have already had a previous use of them.

UNIVERSITY OF EL SALVADOR
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QUESTIONNAIRE ANSWERS

Name: Jaime Willian Montes Girón

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Yes, because it is always good to have an accessible medium where I can practice my skills in the language.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? Because even though some exercises were easy, others were difficult for me.

4. What macro-skill do you think you would best develop using practices through digital media?

   - Listening

   - Reading

   - Speaking

   - Writing

   - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

   - Yes

   - No

If yes, what elements? (No response)

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

   - Yes

   - No

Why? Because almost all the pillars of learning a language were evaluated except speaking, but that is not assessable as the other skills.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

   - Once a week

   - Twice a week

   - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes
- No

Why? It is a simple and functional equipment; it does not seem complicated to use.

UNIVERSITY OF EL SALVADOR
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QUESTIONNAIRE ANSWERS

Name: Yasely Lisbeth Morales Mejia

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? It is more accessible and much more practical in page exercises directly with native speakers. That is extremely important because you learn real English.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? The page was quite easy to use and does not have much trouble loading.

4. What macro-skill do you think you would best develop using practices through digital media?

- Listening

- Reading

- Speaking

- Writing

- All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

- Yes

- No

If yes, what elements? Digital boards, computers, headphone sets, internet.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

- Yes

- No

Why? Through the platform or websites, you could interact with native English-speaking people. In addition, the relationships between students and familiarization with the language would be improved.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week

- Twice a week

- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? We have grown up with technology in our hands and I think there would be no major problem.

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QUESTIONNAIRE ANSWERS

Name: Donovan Marcell Ortiz Beltrán

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? I believe that these types of exercises help to improve and master a language more when learning.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? It helped me a lot to put into practice different study and learning activities.

4. What macro-skill do you think you would best develop using practices through digital media?

- Listening

- Reading

- Speaking

- Writing

- All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

- Yes

- No

If yes, what elements?

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

- Yes

- No

Why? Because managing to develop all the skills in a language facilitates its study.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week

- Twice a week

- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? I believe that as long as the use is explained there would be no problems.

UNIVERSITY OF EL SALVADOR
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QUESTIONNAIRE ANSWERS

Name: Allison Marcela Panameño Campos

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Because everything is more practical and efficient, and as language students that we are we benefit too much since we use these means to improve our language skills.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular
- Bad

Why? Because you not only work on one area of the language, but you also have the opportunity to work on other important areas such as grammar, in addition to acquiring new vocabulary.

4. What macro-skill do you think you would best develop using practices through digital media?
    - Listening
    - Reading
    - Speaking
    - Writing
    - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?
    - Yes
    - No

If yes, what elements? Computers with excellent software, good quality headphones, a well-functioning TV or projectors, good internet access, speakers in good condition, air conditioning, adequate furniture for each team and student, and a security system.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?
    - Yes
    - No

Why? Because we would have a greater opportunity to improve language skills, since with a properly equipped laboratory we would put into practice, for example, the grammar rules, and we would not simply stay with the theory that the teacher reads from the book.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week

- Twice a week

- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? Because it is equipment that we have already become familiar with.

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QUESTIONNAIRE ANSWERS

Name: Cristian Adonis Sánchez Arévalo

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   ● Excellent

   ● Good

   ● Regular

   ● Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   ● Yes

   ● No

Why? Although the teaching-learning process given in a virtual way will never be the same as in person nor will it be able to equal its effectiveness, I consider that technology is a great resource that promotes learning, since it allows us to access a large amount of information and continue to train even outside from home and the classroom, which facilitates the acquisition of knowledge and strengthening the learning of English.

3. How do you rate your experience with the practices carried out using the given study guide?

- Excellent

- Good

- Regular

- Bad

Why? It is evident that with this guide, it is possible to adopt a study habit, since a certain number of exercises of 3 of the 4 macro skills were performed each day. In addition, you learn new vocabulary and unknown data always related to the language.

4. What macro-skill do you think you would best develop using practices through digital media?

- Listening

- Reading

- Speaking

- Writing

- All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

- Yes

- No

If yes, what elements? Advanced computers of excellent quality, excellent internet capacity (high level), a teacher or highly trained staff to attend said establishment, didactic and physical material, independent power plant (in case of emergency), fire extinguisher, and air conditioning.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

- Yes

- No

Why? Obviously, this means a great advance for the learning of the English language at our academic level, since due to the arrangement of class schedules and the distance from the university to our home, it would allow us to reinforce our learning, either after class, during class (teacher's decision), even on days when English is not scheduled for classes. Sure, classroom learning is more effective than virtual, but the latter works as a necessary complement to our teacher-student training.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

    - Once a week
    - Twice a week
    - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

    - Yes
    - No

Why? As a student, it is our duty to inform ourselves about the proper use of technological instruments in the language laboratory. I believe that we would not have much problem using the equipment, since with the basic knowledge we have, and the help of a person trained in the matter, our performance will improve and it will be easier.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
ARTS AND SCIENCES DEPARTMENT
FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Adriana Lissette Sánchez Marroquín

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

    ● Excellent

    ● Good

    ● Regular

    ● Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

    ● Yes

    ● No

Why? Because in order to learn a language it is essential to practice it daily since the more it is practiced, the more opportunity there is to develop it.

3. How do you rate your experience with the practices carried out using the given study guide?

    ● Excellent

    ● Good

- Regular

- Bad

Why? Because it is not only an experience but it is also an opportunity to practice the language in the learning process, in this case English.

4. What macro-skill do you think you would best develop using practices through digital media?

- Listening

- Reading

- Speaking

- Writing

- All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

- Yes

- No

If yes, what elements? That there is one computer per student so that everyone can have the opportunity to practice the language simultaneously; that said computers have the necessary software for the practices, and also that complementary hardware equipment is available, whether these are microphones for speaking practice, and headphones for listening practice.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

- Yes

- No

Why? Because we have different ways of learning and these practices help in all areas of learning. In addition, applying these practices in a class group would help students

determine in which area they need to practice more and teachers to become more trained in the area that students need.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

   - Once a week

   - Twice a week

   - 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

   - Yes

   - No

Why? Because for the management of a technological team the main thing must be the teacher's training, and if he is properly trained, there would be no problem in the event that there are some students who still need support in that area.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
ARTS AND SCIENCES DEPARTMENT
FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Jonathan Nahum Solorzano Hernandez

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent

   - Good

   - Regular

   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes

   - No

Why? Because I could put into practice what I have learned in class and not only would I stay with theoretical learning, but also with some practice. I think that would help improve my skills in that language.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent

- Good

- Regular

- Bad

Why? Because apart from practicing what I had learned, I was also able to learn more. For example, I can expand my vocabulary a bit and could also handle the use of some grammatical structures better.

4. What macro-skill do you think you would best develop using practices through digital media?

   - Listening

   - Reading

   - Speaking

   - Writing

   - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

   - Yes

   - No

If yes, what elements? Computers in good condition, speakers, visual aids for the whole class which could be screens or projectors.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

   - Yes

   - No

Why? Because many young people could practice their learning and practice is good to be better in the language. In this case, it would be very beneficial if these young people had a laboratory with this method to better practice and develop their skills in the English language.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week
- Twice a week
- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes
- No

Why? Because I think our generation has had the advantage of knowing about technology from an early age, so we are familiar with many of the equipment that a language laboratory has and therefore it would not be difficult to use them.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
ARTS AND SCIENCES DEPARTMENT
FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Jennifer Stephanya Trigueros Portillo

Career: Bachelor of Modern Languages: specialty in French and English, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

    ● Excellent

    ● Good

    ● Regular

    ● Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

    ● Yes

    ● No

Why? Because in that way we put into practice what we know about languages and they help us improve.

3. How do you rate your experience with the practices carried out using the given study guide?

    ● Excellent

    ● Good

- Regular

- Bad

Why? Briefly, I consider that they were very helpful to practice.

4. What macro-skill do you think you would best develop using practices through digital media?

    - Listening

    - Reading

    - Speaking

    - Writing

    - All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

    - Yes

    - No

If yes, what elements? Computers for all students. I believe that that way it will be much easier for teachers to create their classes and their teaching methods can be much more entertaining.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

    - Yes

    - No

Why? Because it will be a way in which all students develop our language skills much easier.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

    - Once a week

    - Twice a week

- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? I consider that it is not that difficult to use.

UNIVERSITY OF EL SALVADOR
EASTERN CAMPUS
ARTS AND SCIENCES DEPARTMENT
FOREIGN LANGUAGES SCHOOL

QUESTIONNAIRE ANSWERS

Name: Jairo Elenilson Umanzor Martínez

Career: Teachers in English Language, 2nd year.

Objective: To know the opinion of the language students about the equipment of the Language Laboratory and to know their experience with the exercise guide to which they were subjected.

Instruction: Answer the following questions based on your opinion of the Language Lab equipment.

1. How do you rate the learning process through ICT?

   - Excellent
   - Good
   - Regular
   - Bad

2. Do you think that the practices carried out by virtual means could help you in your learning process?

   - Yes
   - No

Why? Because with technology it is easier for us to learn the language since there are many pages with exercises that help us practice.

3. How do you rate your experience with the practices carried out using the given study guide?

   - Excellent
   - Good

- Regular

- Bad

Why? Because there was a lot of reading, and new vocabulary.

4. What macro-skill do you think you would best develop using practices through digital media?

- Listening

- Reading

- Speaking

- Writing

- All

5. Do you have knowledge of what would be the elements that make up a properly equipped Language Laboratory?

- Yes

- No

If yes, what elements? Computers, Televisions, Audio, Projectors, Internet Access.

6. Do you think that applying these practices at the University through a Language Laboratory would help you develop your skills in the language?

- Yes

- No

Why? Of course, they would help, since it would help students to facilitate learning.

7. How many sessions per week do you think it would be convenient to develop your macro-skills within a Language Laboratory?

- Once a week

- Twice a week

- 3 times per week

8. Do you think you would have a problem using the equipment that makes up a Language Laboratory?

- Yes

- No

Why? Because as university students we already have the necessary knowledge to be able to handle the equipment that makes up a laboratory.

Timetable

	MONTHS																							
	February 2020				March 2020				April 2020				May 2020				June 2020				July 2020			
	WEEKS																								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
General meetings with the Coordination of the Graduation Process		X	X	X																				
Choice of Topic		X	X	X																				
Registration of the Graduation Process					X	X																		
Approval of the Topic and Appointment of an Advisory Teacher			X	X	X	X																		
Development of Research Protocol				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

	MONTHS																							
	August 2020				September 2020				October 2020				November 2020				December 2020				January 2021			
	WEEKS																								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Final Delivery of Investigation Protocol.	X																							
Execution of the Investigation			X	X	X	X	X	X	X															
Tabulation, Analysis and Interpretation of the data.										X	X	X												
Drafting of the Final Report													X	X	X	X	X	X					X	
Delivery of the Final Report																								X

	MONTHS																							
	February 2021				March 2021				April 2021				May 2021				June 2021				July 2021			
	WEEKS																								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Review of Corrections									X	X	X	X	X	X	X	X	X							

Material Resources and Budget

Materials	Price	TOTAL
HUMAN RESSOURCES		$150
25 participants	$0	
Thesis advisor	$0	
Three researchers	$0	
Coordinator of Foreign Language School	$0	
Laboratory designer	$150	
MATERIALS AND INFORMATIC SUMINISTERS		$1295
Internet	$25 monthly (per researcher) ($325 individually per 13 months. $**975** in total)	
Depreciation of three PCs	$320	
.MATERIALS AND OFFICE SUMINISTERS		$950
Office paper	$5	
Copies	$50	
Prints	$100	
Pencils	$5	
TRANSPORT	$20 monthly (per researcher) ($260 individually per 13 months. $**780** in total)	
TOTAL		**$2395**
UNFORESEEN EXPENSES		$239.5