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SCHOOL OF ARTS AND SCIENCES
FOREIGN LANGUAGE DEPARTMENT**



UNDERGRADUATE RESEARCH:

**THE EFFECTS OF IMPLEMENTING LEARNING MANAGEMENT SYSTEMS AT
COLLEGE LEVEL IN THE TEACHING OF ENGLISH AS A FOREIGN LANGUAGE**

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I. ABSTRACT

This project constitutes bibliographical research, and it is based on compiling, organizing, selecting, and analyzing the information gathered from different academic sources as previously announced. It is worth mentioning that this research has an informative approach because the researchers looked forward to provide the contribution of LMSs in the teaching English field, by revealing all the significant details related to the topic; so, this research project can be used as a milestone in which future researches have a convergence point of different perspectives related to the same topic: The Effects of Implementing Learning Management Systems at college level in the Teaching of English as a Foreign Language.

II. INTRODUCTION

By the end of the XIX, long-distance education started in first-world countries such as The United States of America and all Europe in general. European families living in this North American country expected to preserve their culture through education; for this reason, parents submitted their children to take classes with professors dwelling in their birth countries. Physical correspondence was the communication channel used to employ this innovative methodology.

In the next century, long-distance education advanced to a higher level with the assistance of the radio and television, for sound and audiovisual programs were incorporated into the curriculum. Being aware of the challenge this academic modality represents, these aids turned out to be a great incentive for teachers and students because they facilitated the

comprehension of the topic, and created a more dynamic instructive environment. Eventually, this alternative method became worldwide.

Currently, with the aid of the internet and the creation of Information and Communications Technology, long-distance education has expanded its scope and became two types of education: blended and online education. The first one is a combination of the traditional and online approaches; whereas the second one, classes take place over the internet. Such practices became quite common for universities of developed countries; however, presently more Latin-American institutions of superior education include these modalities in their curricula.

Don Bosco University was the first Salvadoran campus willing to incorporate long-distance education in its academic agenda. Later on, the rest of the higher educational centers gradually included it in their syllabus. In 2016, the University of El Salvador launched this model aiming to enable the access of knowledge to people who cannot study following the traditional scheme. At the moment, the alma mater offers eight professional careers; The Bachelor of English Teaching Language is one of them.

It is a fact that technology is immersed in humankind's everyday life, and the educational field is not the exception. Innovating and effective hardware and software daily emerge and they cause an impact on the teaching and learning process. That being so, through a compressed compilation of four graduation projects, five academic articles, and two books this bibliographic investigation intends to expose The Effects of Implementing Learning Management Systems at college level in the teaching of English as a foreign language.

III. IMPORTANCE

The present research project is a bibliographic review to find out the contribution of LMSs in the teaching English field as well as the relevant information related to them to foster the virtual interaction among teachers and students. Systematizing the scope and sequence of class contents, tasks, and assessments, promoting learner's autonomy in the field of English as a Second Language (ESL). Moreover, this study describes the importance of having LMSs as teaching tools to create a dynamic and interactive class with a meaningful learning environment using the most common mobile devices such as computers, cellphones and tablets.

3.1 JUSTIFICATION

Taking into account the current educational reality in El Salvador, due to the pandemic COVID-19, the potential of virtual education was awakened earlier than expected to cover the curricula of 2020 at all educational levels, from kindergarten to higher education.

Facing this fact, the researchers have considered focusing on how the implementation of Learning Management Systems for teaching English as a foreign language is required everywhere, and how the use of this technology might have been underappreciated as a potential instrument to reach students beyond the physical space and facilitate learning. It is essential to mention that a Learning Management Systems is a "software application or web-

based technology used to plan, implement and assess a specific learning process” (Brush, 2019).

“LMSes are beneficial to a wide range of organizations, including higher education institutions and corporations. The primary use of a Learning Management System is for knowledge management. KM refers to gathering, organizing, sharing and analysis of an organization’s knowledge in terms of resources, documents and people skills. However, the specific role of the LMS will vary according to the organization’s training strategy and goals” (Brush, 2019). “Some popular LMSes used by educational institutions include Moodle, Blackboard Learn and Schoology” (Brush, 2019).

Noticing the previous information, this study is significant for the following reasons:

- To share a compilation of knowledge (related to LMS) based on experiences sustained on academic papers research from different universities of El Salvador.
- To analyze how modern and traditional teaching methods can be combined to foster better teaching-learning environments through the employment of LMSs.

Therefore, educators need to know that they can still make a difference, even when teaching virtually. Since LMSs provide a new line of learning, the advantages of their usage are pretty positive too. For instance, the interaction among teachers and students. Teachers can program online activities about a topic studied where they can function as moderators, such as blogs or forums, where a student provides his point of view to the rest of the class, and they will support or discuss the idea presented.

Flexibility is an essential plus attached to LMSs in superior education because it is linked to place and time. A lot of master's degrees are taught off-campus. This means the academic offer is for students who graduated from the same or different universities. In addition, it can be done from anywhere there is an internet connection. Moreover, the students have freedom to manage their agenda and positively respond to family, work, and academic responsibilities. They can work on an assignment at their own pace since LMSs are always available during the day, and submit it before the cut-off time.

When using LMSs to give and receive classes, the students and institutions save on budgets. Learners spend a lot of money on food and housing when traveling from town to city or abroad to study for a career or a master's degree. Some students decide to apply for a full scholarship, but this one is pretty hard to get; others choose to take a loan that will be difficult to pay. On the other hand, the establishment responsible to teach acquires a substantial cost on administration, maintenance, security, etc. However, thanks to this technology, the students and institutions spare money that can be destined for additional expenditures or resources. Furthermore, simultaneity is a great deal for this kind of learning, as online platforms permit people all over the world to take the same class at the same time.

Therefore, this project has been done to show pertinent material related to LMSs, since most teachers give them limited usages in classes, such as distributing pdf documents or PowerPoint presentations. This action is not completely wrong because it facilitates the learning process. Nevertheless, to get the big picture of the odds LMSs provide, educators should employ them in an everyday work environment, so they can be seen as an educational complement, instead of an alternative way of teaching.

3.2 OBJECTIVES

- **General objective:**

To present relevant information regarding Learning Management Systems in the Teaching of English as a Foreign Language through academic documents.

- **Specific objectives:**

1. To create a compilation that comprises different perspectives of the utilization of LMSs during classes.
2. To describe the importance of having LMSs as teaching tools to create a dynamic and interactive class with a meaningful learning environment.

IV. RESEARCH TOPIC.

The Effects of Implementing Learning Management Systems at college level in the Teaching of English as a Foreign Language.

V. METHODOLOGY

5.1 RESEARCH APPROACH

The approach used by the researchers is based on qualitative research, meaning that the researchers implemented a bibliographic method due to data is not being reflected in numbers. So, this approach established the use of LMSs from academic sources such as books, research projects, and articles respectively. Since LMSs have changed the traditional ways of teaching and learning, they have become the main piece of revolution in education because they facilitate the development of new learning skills.

To know more about what LMSs provide in virtual environments this research exposes The Effects of Learning Management Systems in the Teaching of English as a Foreign Language as well as focus on the history of LMSs usage, and the compilation that comprises different perspectives on the effects obtained of LMSs when using them for the English classes, as part of everyday life.

5.2 TYPE OF STUDY

The following study was developed in a descriptive (Informative) bibliographic research. This type of study is defined as a compilation or the selective list of works compiled, gathered from published research. The researchers limited the investigation in the field of academic sources such as research projects, books as material objects, and articles as supporting material. A descriptive bibliography research includes different aspects to take into consideration to furnish a repertoire of particular characteristics taken from published research that serves as a reliable source or as a medium to bring global knowledge to others.

5.3 RESEARCH DESIGN

The researchers made a bibliographic study design to find out the contribution of LMSs in the teaching English field as well as relevant information related to them. According to “The Merriam Webster dictionary a bibliographical study is a list often with descriptive or critical notes of writings relating to a particular subject, period or author.” <https://www.merriam-webster.com/dictionary/bibliographical>. Since the arrival of technology nowadays wherever a computer, phone line, or network connection is available, LMSs are available to offer a great variety of resources to create an innovative and interactive English class. However, most teachers are giving them limited usage while designing the learning activities. Thus, educators need to examine and analyze the functions that the effects implementing LMSs has inside and outside the classroom to increase students' language learning skills. Due to the Covid-19 pandemic, the researchers conducted a qualitative study, which means that data is not reflected in numbers. Therefore, the research was gathered from

an inquiry and an in-depth selection of printed materials to carry out a compilation regarding the implementation of Learning Management Systems in education as tools that facilitate the learning process. All the material was chosen and collected through an effective reading of bibliographic material, such as research projects from different Salvadoran universities; along with national and international articles and books, in order to describe the importance of having LMSs as teaching tools that provide a meaningful learning environment.

5.4 RESEARCH TECHNIQUES

Bibliographical research has four phases that allow an organized and logical development of it. Several techniques were involved in each phase, intended to acquire and manage information regarding the topic in question.

PHASE	TECHNIQUE
Planning	Creating the research outline
Information gathering	Reading documents, and doing annotated bibliography.
Analysis and interpretation of the information	<ol style="list-style-type: none"> 1. In-depth reading. 2. Summarizing the relevant data. 3. Comparing different uses of LMSs in diverse educational contexts. 4. Identifying the best methodological practices of LMSs in the ESL field. 5. Critical analysis of the benefits and drawbacks of implementing LMSs.
Completion of the bibliographical research	<ol style="list-style-type: none"> 6. Reading, writing and revising the literature review. 7. Generating conclusions and recommendations.

5.5 POPULATION AND SAMPLE:

The researchers performed a thorough search of different articles, books, and graduation works and at the end, they selected 11 academic works including four graduation projects, five academic articles, and two books.

5.5.1 GRADUATION PROJECTS.

5.5.1.1 Benefits of the Integration of Information and Communication Technologies for the Teaching and Learning process, in Intensive French I and Intensive Basic English, in the Bachelor of Modern Languages of the Foreign Language Department at the University of El Salvador, during Semester I – 2017 (Bénéfices de l'intégration des technologies de l'information et de la communication pour l'enseignement (tice), par les professeurs des cours de Français Intensif I et d'Anglais Intensif de base, de la Licence en Langues Modernes du département des Langues étrangères, de l'Université du Salvador, pendant le premier semestre de l'année 2017).

Definition of ICTs

The concepts of "Information and Communication Technologies (ICTs)" include the different tools necessary for the dissemination of information and communication, such as the computer, television, Internet, digital cameras, mobile phones, and radio broadcasting. ICTs are related to the educational utility of technologies (hardware and software) and the way it is used in the field of teaching and learning. An example of could be the use of an

interactive whiteboard, digital workspaces, the MP3 and/or MP4 player, CD, DVD, projector, etc.

Origins of Information and Communication Technologies for education

ICTs have their origins from very remote times by mentioning the invention of writing, three thousand three hundred years before Christ in Mesopotamia, or of the printing by Johannes Gutenberg in 1468 to the present day, including that of the telephone in 1876 by Alexander Graham Bell or the invention of the first computer by Alan Turing in 1943.

In the 1990s, the Internet spread around the world, linking millions of computers together via a computer network, giving a result, millions of homes with the necessity of being equipped with computers. Later, the advances for telephony and the emergence of portable telephony itself. It is possible to trace the main lines of some technologies that have emerged through time with a single objective: to inform and communicate.

Birth of the ICT

ICTs began in the fifties, after the creation of the first computers. In the sixties, computers developed and began to spread. Hence, ICTs take shape as they are introduced into the field of ICTs for an educational purpose, giving rise to the first educational software.

Integration of ICTs in the educational system.

Nowadays, it is possible to have several tools to integrate computing into teaching practices and improve performance. C. Bourguignon (1994): “By integration, we mean any insertion of the technological tool, during one or more sessions, in a general educational sequence, the objectives of which have been determined. For each phase, the implementation

methods are explained in terms of prerequisites, objects, task progress, evaluation, so that the whole constitutes a coherent teaching device.”

For Mangenot (2000), this integration occurs “when the computer tool is efficiently put at the service of learning ". From a system perspective, effectiveness presupposes that there are advantages in terms of learning time, reduction in group size, greater activity of each student, better ownership, and, ultimately, motivation. Thus, Naima Hocine, in his article "Educational interests of the integration of ICT in the teaching of French as a foreign language: the use of the web blog in written production activities", published in 2011, in *Synergies Algérie* N ° 12, p. 219-226, affirms that to highlight the modalities of this integration in language classes, it would be necessary to define a theoretical framework for research on the use of new technologies in the teaching of foreign languages, taking into account the research carried out in disciplines related to the time that justifies this desire to integrate new technologies in language teaching.

ICTs at school: a gradual integration process

The "digital natives" represent more challenges to be carried out by teachers. Because, not only by the use of computers, or other computing devices, students will be more motivated. There is a process proposed by Yves Morin that consists of 6 stages, as set out, based on his own experience, an experimental model for the integration of ICTs. This was published in the article entitled "My little history of integration of ICTs in pedagogy", published in 2010 in the *Revue Pédagogie Collégiale* Vol. 23, proposes from his own experience, a global experimental model for the integration of ICTs in the classroom in 6 different stages:

Step 1: Technological Knowledge

Step 2: ICT for Teaching

Step 3: ICT for Classroom Delivery

Step 4: ICT to Communicate

Step 5: ICT for Collaboration

Step 6: ICT for Learning / Integration.

This process also entails continuous improvement and training of teachers in progressive stages to develop gradual use as they acquire technologies and innovate in their pedagogy.

There is another model of the ICT integration process, according to Raby (2004), who proposes a progression in 4 stages, to use digital tools for teaching:

Stage 1: Awareness (Sensitization).

Stage 2: Personal Use.

Stage 3: Professional Use.

Stage 4: Educational Use.

Relating to the ICTs at College or University level is more than just "gadgets", this means to integrate ICTs in pedagogy for teachers:

“Integration is much more complex than simply inserting certain tools into the classroom by simple means or obligation. Integration comes from more than one articulation of technological skills and conceptual frameworks linked to technologies, on the one hand, with psycho-educational concepts and approaches” (Peraya, Lombard y Bétrancourt).”

“Integrating ICT into your teaching is not asking students to write papers in Word or do an oral presentation with PowerPoint. Integrating ICT in the classroom is not about showing how to use PowerPoint or getting students to use it. The integration of ICT in pedagogy, for a teacher, is not transposing their theoretical presentations in class into PowerPoint. (Morin, 2010)”. Integration of ICT means using technological aids that ease and assure the teaching and learning process; it occurs when the teacher makes digital tools effective at the service of learning, when these allow teachers to accomplish more efficient educational plans.

Model of integration of ICT in education.

According to Morin's model, ICT integration takes place in 3 stages:

In the first stage, the teacher recognizes the importance of their learning of digital tools. He is formed with training or self-taught for personal use and subsequent transmission of his knowledge through the guidance given to his students. Knowing the tools, learning to use them, mastering their context of use are fundamental elements in any process of integrating ICT in the classroom.

The second stage, “allows the teacher to see the usefulness of ICT as a tool to perfect their teaching skills through research and documentation of their lessons. The digital tool should be used to improve the courses and their content. ”

The third stage is finally used to develop activities with students, and to establish learning using ICT to more motivated students by offering meaningful pedagogy. That is why it is stated that "the integration of ICT in the classroom begins from the moment that

technologies support the teacher in their pedagogical relationship and it is situated in a constructive and cognitive perspective."

Aiming to obtain an analysis of the information to answer the thesis question, the research team carried out a qualitative investigation and processed the data in a contrasting and descriptive manner.

For the preliminary study, the research team selected the population, active professors of English and French from the Bachelor in English of the Technological University; English and French professors from the Bachelor in Languages with an emphasis in Tourism of Don Bosco University; and professors of English Language from the Pedagogical University. The laboring professors from the Intensive French I course and Intensive Basic English I course of the Bachelor of Arts in Modern Languages Specialization in French and English of the University of El Salvador were chosen as the sample of the thesis project.

Since the research team worked as the primary media to gather authentic data, they developed documentary research; next, they arranged individual interviews with the professors of the Bachelor of Arts in Modern Languages Specialization in French and English. Afterward, the observation technique was used to process and evaluate the qualitative information.

To gather information, the researchers carried out two data collection instruments, personal interviews with teachers and classroom observation, to analyze the benefits acquired during the use of ICTs. Also, they created a question method which was divided between the ICT staff by the teacher and the direct use that such technology has in the classroom.

The results showed among the students. Moreover, superior performance was observed in their classroom activities. All the collected data highlights the importance of integrating this educational innovation tool in the classroom. In addition, it was emphasized how the use of the computer facilitates the teacher's work by offering a wide network of knowledge, besides imparting more dynamism and improving the education quality.

5.5.1.2 Professors' academic reasoning behind the use and non-use of Educational Technology tools for class development in the Intensive English and French subjects of the Bachelor in Modern Languages with Specialization in French and English, of the Department of Foreign Languages of the School of Arts and Sciences of the University of El Salvador, Semester I-2018.

According to Duque et al.(2018) on “Professors’ academic reasoning behind the use and non-use of Educational Technology tools for class development in the Intensive English and French subjects of the Bachelor in Modern Languages with Specialization in French and English, of the Department of Foreign Languages of the School of Arts and Sciences of the University of El Salvador, Semester I-2018.”, it is noticed that “nowadays, Educational Technology has become very important in teaching and learning foreign languages. That is why people have been interested in researching this topic, to better understand different aspects related to the use of technology in the classroom.”

On this matter, the researchers found that the qualitative study carried out by Miller (2006) entitled “The impact of educational technology on learner interactions: a multiple case study of elementary classrooms”; in which the main objective was to observe a variety of

elementary school classrooms, to describe and analyze any patterns that existed about how the use of educational technology was impacting learners' interactions within the elementary classroom environment. Nevertheless, researchers' emphasized conclusions of the research study were:

1. "The use of educational technology, even when directed toward independent tasks, gave as result an increase in students' motivation and engagement in the learning process." (Duque et al., 2018)

2. "The integration of educational technology into the teaching and learning process contributes to increased communication and collaboration among learners when students can work with one another towards a common goal. In other words, educational technology contributed in a positive way to make students more motivated and engaged in learning, more communicative and able to properly work in teams." (Duque et al., 2018)

Besides these two conclusions, researchers noticed that when referring to the function of technology in education, an important emphasis is made on two main concepts: firstly, the term Education refers to the process of teaching-learning and acquiring information. Since education can be divided into two main types:

1. Formal, which is performed through institutions such as schools, academies, and universities.

2. The self-taught learning or what is known as life experience in which every day human beings acquire knowledge by themselves in many different ways, like searching through reading books, listening to specific material related to a lesson, or going on the Internet.

Secondly, the definition of Educational Technology tools as both “the media born of the communication revolution which can be used for instructional purposes” and as “a systematic way of designing, carrying, and evaluating the total process of learning and teaching”, while today’s educators tend to think of education or instructional technology as equipment-particularly the electronic type.

Researchers also had a question to answer: “What educational technology tools (ET tools) did teachers implement in their classes in the past, and what has changed?” For this, they listed several resources that people have had since tape recorders, television, computers, MP3, MP4, CD players, voice recordings, speakers, projectors, to Smartphones, iPods, iPads (tablet), softwares and interactive whiteboards which have become useful tools for teaching and learning a foreign language. On this matter, researchers emphasized that the role and expertise of teachers are critical, since, making technology available in schools does not mean that teachers will make use of the technology, nor will it necessarily be used effectively, this, according to Peter Hudson, in the book “Learning with technological tools” (2013)

Besides this, researchers commented that according to Atkinson & Shiffrin, in the Multistore Model of Memory (1968) “learning with technological tools gives a perspective on students’ information processing, which considers learning as a change in knowledge in the stored memory. Paying attention to inputs into the sensory register, these inputs (or information) become part of the working (short-term) memory”. Therefore, “teachers can support students to process information by helping them to organize the latest information” constructively so they can associate their previous knowledge and use memory aids to retrieve information; on this matter, ET tools can assist these kinds of processes.

On the other hand, to reinforce this point, researchers included what Mayer in his Cognitive “Theory of Multimedia Learning (2008) stated: “multimedia learning has demonstrated more positive outcomes for students who learn from resources that effectively combine words and pictures, rather than those that include words alone”. So, it can be said that when students meaningfully interact with multimedia information, they encode this information into their long-term memory. For this, a meaningful interaction might involve learning activities within the digital resource itself and/or as a lesson that is created by the teacher; however, not all information presented in multimedia form supports learning.” (Duque et al., 2018)

“For learning to occur, the resources themselves need to be designed using sound educational principles and need to be purposefully integrated into the learning experience by the teacher. An educational theory provides direction for both the effective design of the resources and how a teacher can best use those resources with students. The cognitive load theory, developed by John Sweller (1988), says that learning resources must be designed to reduce the load on our working memory in students to be able to construct schema.” (Duque et al., 2018)

Duque et al., (2018) worked on a descriptive investigation, as its key focus is the academic perceptive behind the use and non-use of LMSs, and in which way their employment impacts the teaching-learning process. The researchers used a quantitative and qualitative approach. To gather the quantitative details, they administered a questionnaire to the students registered in the intensive academic courses in French and English of the Bachelor in Modern Languages with specialization in French and English of the Foreign Language Department of the School of Art and Science of the University of El Salvador.

Furthermore, the researcher team collected the qualitative information, throughout the observation and interviews directed to professors of the same Language Department.

In this investigation, there was no manipulation of variables because the subjects were studied in their reality during the teaching-learning process. Therefore, it had an upper validity level since Duque et al. (2018) remained near the variables in regards to the use and non-use of LMSs in the classroom.

Five academic courses of the odd semester constituted the study population of this investigation: Intensive French I, Intensive Basic English I, Intensive French III, Intensive Intermediate English II, Intensive Advanced English I. Different class groups were presented per course. Rose from the students' opinion, the research team classified the courses into the ones where LMSs were employed or not.

Subsequently, Duque et al., (2018) acquired the research sample from this set of classes. The sample was randomly chosen to guarantee that each class group counted with equal odds of being selected. They wrote down on pieces of paper the name of the five courses with their group class number. Later on, they placed all the paper in a box and blindly picked two class groups per course. Considering this previous action, the sample held ten class groups, two per academic course.

As stated in the analysis, the use of Educational Technology resulted in increased student's motivation and engagement in the learning process. Through the research, Duque et. Al. 2018 emphasized that when students were involved in activities using ET tools, students' participation increased, as well as professors' confidence in using ET tools as supporting material in the classroom. Moreover, it was clear that the implementation of ET

tools in the classroom helped not only to encourage students to be active participants but also to have a better understanding of the topic.

While developing the investigation it was shown that Educational Technology tools were used as an instrument for professors to explain topics in innovative and easy ways by providing students extra material to have a strong understanding of the topics and to acquire a different learning style, as well as implementing ET helps professors to create a link among them and students. Since professors use these ET tools to engage students to participate in the activities rather than force them to do it, creating a friendly environment.

5.5.1.3 Developing a Technological Platform for Blended Learning in the Graduate Department of the University of El Salvador (Western Campus) (Desarrollo de plataforma tecnológica para la implementación de educación en modalidad semipresencial en unidad de posgrados de la facultad multidisciplinaria de occidente Universidad de El Salvador).

The situation of distance education in El Salvador

(Background of distance education)

"Historically distance education (ED) began in Europe and the United States of America (USA) at the end of the 19th century, using traditional postal correspondence systems." According to the authors, these first experiences were given thanks to immigrants from northern Europe who had arrived in the United States of America and who wanted their children to be trained by teachers even if they were in their countries of origin, seeking to maintain their local customs and cultures." Taken from Contreras, 2011. (Pg.11)

“Later, in the mid-twentieth century, thanks to the emergence of the most modern mass communication media, such as radio and television, Distance Education "received a huge boost since it was possible to package training courses in a sound or audiovisual format”. In addition, by having the constant development of digital information systems and technologies, distance education has achieved a relevant role in the training offer of Western countries, also existing in educational institutions that carry out their activity exclusively through the Internet. In the case of Canada, according to the authors, the first formal action to promote distance education occurred in 1938, in the city of Victoria where the First International Conference on Education by Correspondence took place. Similarly, in 1939 the National Center for Distance Learning was founded in France, which initially served by correspondence children who had been able to escape the war and flee to other countries.”

Taken from Contreras, 2011. (Pg.11)

“When the Second World War ended, this teaching modality was used to facilitate access to educational centers at their levels, mainly in western industrialized countries, in Europe and developing nations due to the increase in the demand for skilled labor in a world in need of production.” (Contreras et al., 2011)

“In this way in 1946, the University of South Africa (UNISA) became the first distance university. Meanwhile, in 1947, "through Radio Sorbonne, lectures were broadcast regularly and systematically in almost all literary subjects at the Paris Faculty of Letters and Human Sciences." Later, in 1962, “a radio baccalaureate experience began in the Iberian Peninsula and the University of Delhi organized a department dedicated to correspondence

studies, to serve the population that could not attend university due to obligations, labor or lack of financial resources”. Taken from Contreras, 2011. (Pg.12)

“A year later, in 1969, the Open University of the United Kingdom emerged, taken today as a pioneer in distance higher education. The Open University began its courses in 1971, at the same time, it produced its educational materials in printed and audio material. It later integrated these materials into video and compact discs, with program packages and video broadcasts through the British Broadcasting Corporation (BBC). “In 1970, the Athabasca University of Canada, the National Distance Education University of Spain in 1972, the Everyman's University of Israel in 1973, the Fernuniversität Hagen of Germany in 1974, the Allama Iqbal Open University of Pakistan in 1974, the State Distance University of Costa Rica in 1977, the Open University of Venezuela in 1977, the SukhothaiThammathirat Open University of Thailand in 1978, the China Central Radio and TV University of China in 1978, the Open University of the Netherlands in 1981 and the Japanese Open University in 1984, among others.” Taken from Contreras, 2011. (Pg.12)

According to Mena’s research on distance education, this identifies different stages, based on the work of Garrison (1989) and Taylor (2001) also considering that distance learning has gone through three generations of technology:

1. Printed material (correspondence),
2. Audiovisual media (telecommunications), and
3. Telematics is a fusion between telecommunication and computing.

According to Contreras et. al (2011), if we focus this on El Salvador, we can find antecedents of this modality, having a record of the Educational Television Program, which

the Ministry of Education promoted in the third cycle of the public school of the country in the seventies. TV sets and tv-methodological guides were delivered to institutions to teach basic subjects through telecasts of courses. In 1992, the Ministry of Education started the Radio Interactiva pilot program, to support 1st, 2nd, and 3rd grade through radio and this led to the children “the program The Wonderful World of Numbers. It is estimated that at the time an average of 2,292 schools was attended with an approximate 300,000 students according to data from the 2005 Matricular Census.

Of all these, the advance that is considered the most important in terms of distance education would be that of January 28, 1983, when the National Institute for Distance Education (INED) was created. This was created to "allow continuing studies in the third cycle of basic education and general baccalaureate, to the young and adult population who for various circumstances did not continue their training in the face-to-face system and who do not have the time to attend daily face-to-face classes". Twenty years later, in 2003 "a student population of 23,291 people from the third cycle and general high school was served remotely and for 2004 they projected to serve 26,000 students." Its methodology was blended and included printed material and independent study.

184 distance education centers worked with 800 teachers and tutors. This program was integrated into other flexible education programs in 2007, such as Educación Media para Todos (EDUCAME), in its modalities of accelerated education, blended education, and distance education.

Incorporation of distance education in university education

“Distance education in universities was given thanks to the demand made by society, given the need for better professionals, leading to greater competitiveness in the labor and educational field, it was possible to choose it through two modalities: full distance or blended (mixed).

Distance education has one of the outstanding facets its multidimensional image concerning Information and Communication Technologies (ICT), which enhances its prestige in certain scenarios related to training and higher education, having the concept of permanent education that must be worked on by universities, if the integration into a dynamic and changing society is being required.” Taken from Contreras 2011 (Pg.14)

By having new technological tools, "quality education can be offered to a larger segment of people, universities must be prepared to offer the blended learning modality, with a trained human team and physical infrastructure according to that scenario."

“One of the first universities to have incorporated this modality in El Salvador are: Don Bosco University, which in 2002, “implemented the first educational space, called the Training Course for Animators of Youth Environments (Curso de Formación para Animadores de Ambientes Juveniles) and had 40 participants from all of Central America. In 2003, she implemented the Education with Salesian Style course (Curso de Formación para Animadores de Ambientes Juveniles) aimed at teachers from Colegio San Miguel, Honduras, with 20 participants. In 2004 she implemented the Pedagogical Update Course aimed at teachers from the Fe y Alegría Schools in El Salvador. " Taken from Contreras 2011 (Pg.15)

Higher education institutions must face technological challenges even with a blended education model, as it will require a structural and curricular change, the subjects of the programs since they must be designed for the applicability of digital competence in virtual platforms.

The incorporation of Information and Communication Technologies in distance education

The incorporation of technologies is an essential tool of the teaching-learning process and the teacher-student and student-content relationship (tasks-activities), as a characteristic of this new university scenario.

Hence, the new Information and Communication Technologies are taken as a concern in the developments that the Internet has instilled in today's society, including universities, they allow to present a rethinking of the new didactics that can be developed at all educational levels to be able to achieve the integral formation of the human being, the *raison d'être* of educational work.

"Currently Information and Communication Technologies are called the set of technologies that allow the acquisition, production, storage, treatment, communication, recording and presentation of information, in the form of voice, images, and data contained in signals of an acoustic nature, optical or electromagnetic. ICTs include electronics as the base technology that supports the development of telecommunications, information technology, and audiovisuals; those that are in accelerated development, affecting in practice all fields of society, and education is no exception." Translated from Contreras 2011 (Pg.16-17)

The United Nations Educational, Scientific and Cultural Organization (UNESCO) poses as important to encourage the promotion and consolidation of virtual education, supporting the modernization of higher education, promoting paradigm shifts, and taking action that guarantees greater and better access to knowledge, as well as better coverage, high quality, and social relevance, for the valorization of the potential that the new Information and Communication Technologies have for education.

Universities that offer careers with a blended modality in El Salvador

In 2011, the researcher explained there were several institutions proffering long distance education in our country. The Ministry of education provided the proper accreditations to following ones: Universidad Dr, José Matias Delgado, Universidad Católica de El Salvador, Universidad Salvadoreña Alberto Masferrer, Universidad Francisco Gavidia, Universidad Evangélica de El Salvador, Universidad de Oriente, Universidad Don Bosco and Universidad José Simeón Cañas.

When researching a technological platform to carry out blended learning, Contreras et. al. 2011 chose as a sample of the investigation the universe of Unidad de Posgrado de la UES-FMOcc. Nevertheless, the platform was created only for three of seven existing careers. To obtain details like input, opinions, perspectives, and suggestions to proceed with the research, Contreras et. al. 2011 interviewed the headmaster Mauricio García and the coordinators of the careers; they expressed a positive will regarding the implementation of this tool, as long as it was amiable and manageable.

Moreover, Contreras et. al. 2011 addressed a survey to all active students to know their point of view regarding this kind of learning. Due to the advantages that this technology

represents such as self-taught and time-saving (just to mention some of them), they were in favor of using it. They showed a strong interest in all the features involved in this learning instrument. This showed their optimistic disposition to familiarize themselves with trendy educational systems.

Having in mind all the information gathered from the sample, Contreras et. al. 2011 designed a system with friendly interfaces and a database (superuser, user, video, documents, blog, etc). Therefore, this flexible software was made according to the students 'and teachers' needs, which leads to an efficient and effective blended learning destined to break, but not eliminate the traditional education. This LMS stands for a more complete, innovative, and easygoing route of teaching and learning.

Even though, in the beginning, the use of the platform turned out to be more complicated than expected due to the lack of telematics skills that were shown in the use of the tool. However, creativity and flexibility were shown in solving those difficulties. Therefore, the development and implementation of simple strategies and effective solutions to facilitate speedy access from any internet access point were necessary, motivating the students' participation.

A high percent of the surveyed students had a positive acceptance of the platform. According to the results, students indicated that time-saving, flexibility, usability, and workflow are some of the student's motivations to continue in their blended learning process. Since the terms and conditions of the platform are adaptable not only for students' daily living, working environment, and needs but also for teachers and the university as the platform does not eliminate either the teachers figure as one of the main actors in the field or the classroom.

The results of this project showed that developing blended learning not only is an innovative method but also has a potential benefit in increasing students' self-education and heightening the time saving, the easygoing, and clear and homogeneous navigability in all its pages. Therefore, makes this platform more attractive and useful in the career according to Contreras et. al. 2011

5.5.1.4 Development of a Computer Prototype for the creation of Online Learning Environments (Desarrollo de un prototipo informático para la generación de entornos de aprendizaje en línea).

History

According to Burgos et. al, some highlighted events on distant education are:

- 1837, first distance teacher, Anna Ticknor.
- 1892, the first correspondence courses at the university level by William Rainey Harper, from the Chicago University.
- 1906 Calvert School from Baltimore is the first school to offer studies by correspondence in the United States of America.
- 1934 The University of the State of Iowa is one of the first universities to offer courses on paid radio, and it becomes the first educational institution to broadcast on television.
- 1984 First online courses for students provided by the Technology Institute of New Jersey.
- 1989 First online program offered by Phoenix University.

Conceptual Frame

Virtual classroom

According to the RAE, when referring to a virtual classroom, one thinks of a set of activities with a higher communicative than otherwise, that is, without the existence of the computer connected to the network, would not have the meaning that it acquires in the authentic context provided by the technology. Also, according to Burgos et al. distance education refers to the organized instruction program where students and teachers are physically separated, but the educational center has specialized personnel and equipment in a technological area beyond the reach of the people who for reasons of distance cannot have access to such education.

Distance Education Technologies

According to the researchers, distance education involved the study by correspondence to individuals. They use printed materials to study. Currently, there exist technological means that have been used for the use of distance education, among them: radio, television, and the telephone; a wide variety of technologies based on telecommunications is within reach for the help of distance education.

Long-distance education

UNESCO (1998) defines it as "learning environments that constitute a new way, about educational technology ... an interactive computer program of a pedagogical nature that has an integrated communication capacity. They are a relatively recent innovation and the result of the convergence of computer and telecommunications technologies that has intensified over the last ten years. " Translated from Burgos, 2006.

Based on Instructional Technology for Teaching and Learning, a dominant element of these technologies is often the ability to communicate between the teacher and the students. We classify three categories of the technologies of long-distance education:

- Audio-based technologies
- Video-based technologies
- Computer-based technologies

Audio-based technologies

In radio, we can find an example of a technological tool that can reach a relatively wide geographic region at a relatively low cost compared to a video-based technology such as television. Audio-based technology can provide a standardized message to a wide audience, and it has clear utility in areas such as music, discussion, dramatic presentation, and language learning among others. However, the radio is one-way; an instructor can send messages to students but does not allow students to message the instructor again.

Video-based technologies

Like radio, video can travel long distances and also use a variety of media, among which we can mention: local broadcasting (educational television), satellite, microwave transmission, and cable and closed-circuit systems. Video, like radio, often involves the one-way transmission of information, with limited opportunities for interaction. But even though this might be unidirectional, as in the TV case, the advantage of video for distance education is its ability to reach a large audience, being able to use images.

On the other hand, the latest development in video-based distance education is two-way video interaction. With this technology, equipped with screens, video cameras,

microphone, and speakers so that the instructor can interact with the student, though it has higher monetary costs, and these are the costs that it may incur since an optimal transmission has to be guaranteed so that communication is effective for both participants in the classroom.

Computer-based technologies

To study at a distance and obtain the maximum performance from personal study, it is necessary to have a device such as a computer, this being a representative of the newest tools for distance education. Currently, computer-based technologies integrate communication through text, video, and audio and include a new communication methodology between the student and the teacher such as the e-mail service and instant messaging, this helps rapid assimilation of knowledge by part of the student.

“The videoconference service is a multimedia service that allows interaction between different work groups; by interconnecting through interactive sessions to a variable number of interlocutors, where all can see and speak with each other.” Translated from Burgos, 2006.

While developing this project, Burgos et. al. 2006 carried out three kinds of investigation to proceed with their own: documental, field, and experimental.

Documental investigation: during this phase Burgos et. al. 2006 researched and collected information to select the most suitable tools to create the virtual classroom. The researchers interviewed software developers, to guarantee a fast website with backup information that was pleasant to professors and students.

Field investigation: Burgos et al. 2006 split this research into two stages. On stage one, they interviewed eight full time working professors from Centro de Investigaciones y Transferencia de Tecnología of Don Bosco University. It was essential for the researchers to

know which were the educators' common necessities, and their vital requirements to design a virtual classroom based on their demands. Moreover, these teachers expressed an optimistic attitude, facing the idea of blended learning.

Stage two was performed in the validation period of GAVI; in the attention of knowing the nature of interest in non-traditional learning on behalf of the students, Burgos et. al. 2006 surveyed the ones who used this LMS, that was applied to the conventional manner of teaching and learning.

Experimental investigation: Burgos et. al. 2006 consulted e-learning websites, as a means to find instructive material linked to design and functioning features, that could be integrated into this informatics prototype.

The analysis of the data obtained through answers in opening questions, interviews with the student population, and the classification of information, was carried out to obtain details about the expectations that the population had towards the use of this LMS (GAVI). The result showed that the development of this project brings a positive and beneficial impact on the teaching and learning process. Since it provides not only the use of virtual classrooms which support semi-face-to-face education but also serves as a useful tool for face-to-face educational training.

Due to the potential of this project, it allows different services such as publishing information updated by the teacher, keeping better control of students, organization of class material, as well as the opportunity to carry out online evaluations and grade students' work, before they start piling up, etc. The design of GAVI has standard elements that can be used

in different pages and websites, thus facilitating the student population interaction with GAVI to get positive results from users.

To the validation of this project, technical and validation tests were carried out. In the same way, a level of credibility was implemented in the system to control quality and avoid technical failures, so GAVI could be used as a computer tool that generates virtual classrooms and could be used as a support for education in the face-to-face, blended learning, and non-face-to-face modality.

Graduation projects critique

Currently, there are several tools created to integrate computing into teaching and learning processes; these tools are called Information and Communication Technologies (ICTs), which are linked to LMSs. They turn out to be effective for education when their use is focused on teachers' and students' needs. The appliance of ICTs began in the fifties, after the creation of the first computer with the purpose of communication; nowadays, there are many gadgets brewed to facilitate the transmission of information, and most of them are engaged with schooling.

Along with the hardware comes the software, which is the system responsible to operate the device that grants communication; such is the case of Windows and its products like the Office package that is well-known in our country. Respecting education, the employment of PowerPoint is more than going to the next slide to teach a class; it is about

teachers and students using the program as an aid that gives pace to meaningful learning. An example of the last content is the case of GAVI.

Considering that teachers lead the class, they need to be aware of their knowledge regarding digital tools; signifying that they need to master the LMS intended to employ to develop the course of the class when studying the content of the subject, and not the other way around. This action will motivate students to keep working with this methodology because they will understand that actual learning is happening.

In addition, online and blended education yields language learning strategies that enable to increase positive interaction between the teacher and students. Some benefits of these strategies are self-confidence, expanding the role of teachers, orientations to solve problems, among others. Hence, the teacher becomes a guide who aids to achieve students' goals, and the last ones come to be self-directed. While it is true that integrating an innovative educational tool could increase classroom performance activities, along with the facilitation of teacher's work by offering a wide network of knowledge, besides imparting more dynamism and improving the education quality. Moreover, it supports students to improve areas such as vocabulary, grammar, and listening through videos while reinforcing topics they do not understand at the same time.

Therefore, the key for teachers is planning. When they are willing to use LMSs to introduce and explain the content of the subject, they need to have in mind which tools will be suitable to teach each class; for technology could turn out to be a distractor for students if the activities are not aimed at the content of the topic. Consequently, for succeeding in this field teachers must efficiently apply these tools, that let students be hooked in an atmosphere where actual education occurs, instead of entertainment unrelated to the theme.

5.5.2 ACADEMIC ARTICLES

5.5.2.1 Distance Education in El Salvador, Why not? (Educación a distancia en El Salvador, ¿por qué no?)

Distance education is not a new concept, but in recent years it has gained prominence and taken on new forms. The first meaning of distance education is linked to correspondence education. In the nineteenth century, and from then until today, some vocational education programs were mediated through the mail. This non-traditional equation in which the teacher and the student were far from each other is what gave life to the concept that we now know as distance education.

The two most descriptive elements of distance education can be identified: the physical separation of the teacher-student and the mediation of technological tools.

The key characteristics (Keegan, 1988a) of this field are:

- The separation of the teacher and the students, which differentiates it from a face-to-face class.
- The use of technical means through which the content is presented is different from the use of verbal communication in a face-to-face class.
- The influence of an educational organization (school, university) that differs from the private study (by the student himself, without credits academics).
- The provision of two communication channels, in such a way that the student can benefit from it, even start the dialogue.
- The possibility of occasional encounters for educational purposes and socializing.
- Participation in an industrialized form of education, which if accepted, contains the gene for radical separation from education to distance.

Distance Education in El Salvador

El Salvador has not been unaware of the distance education experience. In fact, at the time, El Salvador was a pioneer with the Educational Television Program.

The Ministry of Education promoted this program in the third public cycle of the country in the 1970s. Institutions were provided with TV sets and teleguides to teach basic subjects through telecasts. In 1992, the Ministry of Education started the Interactive Radio pilot program, to support 1st, 2nd and 3rd grade through the radio taking children program The Wonderful World of Numbers. It is estimated that at the time an average of 2,292 schools was served with approximately 300,000 students according to data from the 2005 Enrollment Census.

It is not feasible to implement Distance Education programs

The belief that it is not feasible to implement Distance Education is possible because of the costs, the technology, the lack of knowledge and experience in this kind of education, the roots of face-to-face education, the lack of specialists and teachers in this discipline, etc. These assessments can be relatively valid, as a Distance Education project involves all of that and more. To achieve learning through whatever means in the best possible learning, not just through the traditional approach.

This paradigm shift requires moving from a passive classroom to an approach that promotes discovery on the part of the student. It involves moving from a format in which the teacher speaks and the students listen, to the new paradigm in which students are empowered in the active role that their learning requires. The role of the university is no longer simply to transfer knowledge but to create environments and experiences that prepare the student to

discover and build knowledge for themselves. The role of the teacher is no longer that of the "wise man in front of the student" but of the "guide alongside the student" (Huebner and Wiener, 2001). This new way of conceiving university education is strategically congruent with the philosophy and theory of Distance Learning and is the challenge for Salvadoran universities.

5.5.2.2 Open e-learning platforms for supporting open educational resources

José María Boneu is a Computer Science Engineer from the Open University of Cataluña, who teaches Moodle courses to the education department of the same University. He was responsible for implementing an e-learning platform at the Barcelona polytechnic Studies Center. His article titled "Open e-learning platforms for supporting open educational resources" talks about the scenarios, elements, evolution, features, and tools of e-learning platforms.

Since the origins of humankind, education has always been evolving to more advanced approaches that make it a productive and affable process. Such has been the progress that it has changed from traditional learning to e-learning, "which is a way of using technology to distribute educational materials and other services, allowing establishing a return channel between teachers and students" (Boneu, 2007, p.3).

Boneu (2007) states that e-learning can be categorized into three scenarios:

- CBT (Computer Based Training): learning based on a computer or assisted by a computer.

- IBT (Internet-Based Training): through the internet, the content can reach students and teachers.
- WBT (Web-Based Training): this one is on the Virtual Campus.

Therefore, e-learning can be categorized as pure virtual learning (fully distance classes) and blended learning (a mixture between face to face and distance classes).

Moreover, these are the elements of an e-learning system:

- Communication systems: they can be chronic (no communication on live time) and synchronic (communication on live time).
- E-learning platforms: it is the software used to provide communication services.
- Courseware is the learning material for students.

In addition, the author explains the evolution of e-learning platforms:

- CMS (Content Management System): allows the creation of dynamic websites (images, texts, videos, sound, etc.); no chats or forums (collaboration tools) are included.
- LMS (Learning Management Systems): Boneu (2007) explains that they are oriented to learning and education, providing tools for managing academic content that allow improving the competencies and communication of users.
- LCMS (Learning Content Management Systems): it is the combination of CMS and LMS. They facilitate the construction of didactic material, learning control, and maintenance of updated knowledge.

All these elements share the following features:

- Flexibility: when implementation, friendly adaptation to the institution requesting the system.
- Scalability: the system runs in excellent conditions when working with big and small groups.
- Interactivity: users are aware of their education.
- Standardization: the courses created are available for every organization.

Furthermore, many current platforms display several tools suitable for every user:

- Learning tools: forums, e-portfolio, file sharing, multi-format support (Office, Acrobat, etc.), chat, messaging or email, multimedia (videoconference, e-board, video, etc.), blogs, wikis.
- Productivity tools: favorites or personal notes, calendar, help, search engine, platform news, updates notices, updates podcast.
- Involvement tools: study and workgroups, students' profile, self-assessments.
- Support tools: users' authentication (users name and password), student registration, audits.
- Publication tools: test and result, course administration, online rating.
- Planning tools: content reuse and comparison, course templates, curriculum administration, look and feel design tools.
- Systems for knowledge management in education: comprehensive knowledge systems, e-libraries, and repositories.

The teaching-learning process is not an immobilized event; therefore, it is important to create a connection between traditional and online education, so this one can be adjusted to students' and teachers' needs.

Critique.

Boneu (2007) stands that “e-learning offers the chance to create learning environments centered on the student” because online education provides an interactive, flexible, and standard environment where actual learning takes place; no matter the number of students, or the time and location where the class is being taught.

According to Boneu (2007), e-learning is the last phase in the evolution of distance education because it is more than upload learning content documents to a website; it is about being aware of how the combination of resources (LMS), plus the student-teacher intercommunication, and supporting learning material are useful to build systematized activities that guarantee meaningful learning.

Moreover, with all the details provided in the article, the author endeavors to explain what e-learning means for its vast field with many terms related to it (such as blended education or virtual education), which can lead to confusion. Then, it is important to know everything linked to the area, in order to manage the information without hesitation.

5.5.2.3 The university education in virtual contexts

Daniel Alejandro Velásquez was a professor and researcher of the University Francisco Gavidia, who used Learning Management Systems (Moodle platform) to teach the subject Quality Management in the semester I, 2006. He stated that online education demands higher engagement on behalf of the institution, teachers, and students; therefore, to accomplish all the expected objectives, planning is a fundamental piece in this modality.

The accurate didactic preparatory measures will determine the potential of the virtual scenarios on the teaching and learning process. Having in mind the traditional education methodology, Velásquez (2010) indicates a set of steps to follow to achieve precise and reliable planning for e-learning:

1. Revision of plans: a review of the objectives and structure of the traditional course (evaluation of changes). They need to be customized to reach the established goals. On the other hand, the population needs to be taken into account; for their features, aspirations, and competencies will impact the development of the class.
2. Objective construction: they function as the inception of the course.
3. Definition of competencies: consider the volume of contents, expectations, and learning capabilities of the students.
4. Attitudes and skills: contemplate the responsibility, independence, and discipline on behalf of the students.
5. Definition of groups: virtual learning or blended learning.
6. Didactic material preparation: clear comprehension that supports the class.
7. Program preparation: the creation of them with all the professors involved in the subject.
8. Evaluation preparation.

Finally, planning is a simple action present in people's everyday life. However, in the educational field, it becomes a fundamental piece, especially when LMS resources are immersed in classes, for they are designed to facilitate the teaching-learning process and not the other way around. José María Boneu

Critique

Velásquez (2010) clarifies that traditional education and virtual education have different teaching methodologies and both require a tailored strategy to their concept. Traditional education focuses on the teacher-centered edge; whereas virtual education is centered on the student's edge. Yet the author does not disdain the first one, he just emphasizes that their pedagogical design does not match. This argument is valid because the classical method is not useless at all. In fact, this one improves when it is combined with an LMS, for it enriches the teaching and learning atmosphere. Therefore, traditional education is the landmark for e-learning, and with accurate planning comes a new methodology that is suitable for every human being interested in alternative educational manners.

5.5.2.4 The use of social networking and learning management systems in English language teaching in higher education.

Taking into account the current educational reality, teaching and learning styles are evolving new tools to adapt them in new practice since they are changing the everyday life of students. Due to this, the case study about the use of social networking and learning management systems in English language teaching in higher education in Greece was developed to examine student's perceptions of online instruction. To carry out this project, the researchers decided to use Moodle as a learning management system (LMS), with and without the use of Facebook (FB) as an adjunctive learning platform. Although the blending of this platform and the use of social networks in foreign language learning was a matter of concern for researchers and pedagogical suppositions. Due to this, the researchers worked in the investigation about how online social networks such as Facebook (FB) could develop a

sense of community in language classrooms, besides the impact that it has in the development of pedagogy inside a language learning classroom.

The study followed students enrolled in the Department of Applied Foreign Languages in Management and Commerce, in the Technological Institute of Epirus, Greece in an online English Language laboratory course that was used as a bridge for students through the following two semesters. The research created and administered two different surveys to students. The first was developed to follow the student exposure into Moodle as an LMS (LMS Survey). The second one was to measure the use of FB as a supplementary tool (FB Survey). After developing the survey, they compare students' course preferences, and students' attitudes, toward English as a foreign language. Both survey courses were delivered with the addition of FB as an online tool to support their communication and interaction among the members of the learning community.

To dig deeper into the study, an online discussion course was created for students who were assigned to use FB as a way of communication between teachers and students. The selected students were required to participate not only in the discussion but also to interact actively with each other during the semester as a reward for all their participation and work points were assigned to them. Besides that, to provide explanations, support, and prompt discussion, instructors' participation was a valuable resource for students throughout the semester. During this period students and teachers were able to upload files, photos, videos as well as, they were allowed to post status updates, followed activity streams, and other educational material that was relevant to them to create a connection between the course and learning language within a FB environment.

After completing the first semester of the online course, students were invited to fill up the first pre-FB questionnaire concerning their LMS online course experiences. The questions were designed to allow students to provide their online course opinion about the usefulness and usability of the online platform (Moodle); and their motivation to participate actively in the online course before the introduction of Facebook, as well as their preferences concerning the tools set of it.

The study results demonstrate that the use of web-based tools and social media changed the way students utilize technology and the development of their English language learning skills. As the survey showed, most of the students agreed that FB courses helped them to increase their participation and to enhance their language skills, as well as reinforced their cognitive skills and supported them in an active learning environment.

Critique.

It is important to remark some benefits that facebook has in students' learning environment including the facilitation of communication among students and students-teacher; it enriches their participation, collaboration, and motivation. Evriklea Dogoriti and Jenny Pange 2015 emphasize that Web-based tools, such as blogs, wikis, and online forums nowadays are a powerful instrument for teachers to use inside the classroom, at the same time allowing students to get a different learning environment. Blattner and Fiori, 2009, cited in Evriklea Dogoriti and Jenny Pange 2015 explained that learning takes place in the form of constructivism, where knowledge is constructed in a community of practice where users share similar interests and have pedagogical potentials that can be utilized in language classes in varieties of constructive manners.

5.5.2.5 The Use of Learning Management System projects for teaching a foreign language in the university

“The purpose of this paper is too well upon the implementation of social media as web-based technologies into the educational environment in the university” (Lyashenko and Malinina, 2015, p.1). Teachers have the principal role when using informational technology in education; LMS depends on professors’ willingness, attitude, and skills to involve education in an online discipline.

E-learning environment represents a challenge for teachers and students since knowledge can be transferred through several technological hardware (computers, cellphones, tablets, etc.); software (programs, courses, platforms, etc.); several tools (e-books, dictionaries, e-libraries). On the other hand, social media can be considered an integral complement of e-learning because teachers and students are familiarized with their management; they provide chances to obtain greater motivation and commitment and increase the odds for designing classes that engage students on futuristic education.

Having this in mind, the authors focused their attention on the LMS projects for teaching a foreign language that describes the teacher-student interaction. Since 2010, The Higher School of Economics of the National Research University, Nizhny Novgorod, Russia created an LMS intending to increase the level and quality of the educational process. However, teachers and students demonstrated a high unwillingness regarding the use of it. They objected to frequent breakdowns of the service and time-consuming as the principal disadvantages of the program.

Therefore, Lyashenko and Malinina researched to discover the negative and positive experiences regarding the usage of the program, according to teachers’ and students’

statements. Some of these findings were problems with the interface, technical glitches, enabling cheating and plagiarism, low levels of students' spelling and grammar skills. Therefore, teachers' willingness towards this tool directly affects the successful implementation of the system.

For that reason, the authors suggested the creation of less formal LMS projects to obtain a comfortable learning atmosphere. Meaning that the teacher-student relationship should be closer and warmer; in addition, teachers must design short and challenging tasks that require everyone's participation, since according to Rubinstein (1940) the success and effectiveness of learning activity are based on the interest the learner has toward the task he is doing. For educational purposes, the authors created the three following LMS projects:

- VELL (Virtual English laboratory): combining several shapes of ICT (forums, websites, podcasts, videos, etc.) it is aimed to provide a training course in English at the pre-intermediate level.
- Woerter@ Words: it is a German-English interactive dictionary that emphasizes learning German through English.
- Brush up your grammar: the idea is to take over grammar rules and can be tailored to any level.

Lyashenko and Malinina (2015) designed these LMS to narrow the teacher-student interaction, which produces a positive e-learning environment that can be suited to students' needs. Thus, the authors promoted an equilibrium while introducing LMSs into traditional education (the usage of the two approaches at once) because they consider that benefits overcome difficulties.

Critique

Lyashenko and Malinina (2015) looked forward to dwelling upon the effects of social media as web-based technologies into the educational environment in the university. Since these websites are being used at a macro level (campuses, departments, faculties) and micro-level (peers, family, and friends) within the university structure; then, it is essential to be engaged with them for they have become the new educational and communicational channel in the e-learning field.

When studying a language, besides social media, blended and virtual education include Learning Management Systems as a teaching and learning tool. This was the case of the Higher School of Economics of the National Research University, Nizhny Novgorod, Russia; however, this LMS presented some inconveniences that generated reluctance to its usage on behalf of teachers and students.

Facing these problems, the authors created new LMS projects for collaboration at micro-level communication. There is no objection to this action because these softwares are a great supporting alternative for teaching; but having in mind the authors' capabilities to build such programs and the hurdles of the main system, the new products cannot be considered the solution to the problem, and if they tried to repair it is not mentioned on the article. The first logical action is working on what already exists, instead of investing time, resources, and energy in other projects. Consequently, fixing the main LMS and working along with the new ones is the way out to obtain a pleasant and productive educational experience.

5.5.3. BOOKS

5.5.3.1 UNIVERSIDAD DE EL SALVADOR MODELO EDUCATIVO EDUCACIÓN A DISTANCIA

Ayala et al. (2021) created a set of questions and answers to provide the reader the main aspects that allow understanding its objectives, principles, main actors, characteristics, dimensions, and components.

1. What is the underlying educational theory of that model?

In Vygotsky's theory he refers to cognitive development which is fundamental in the cognitive process he explains concepts such as culture-specific tools, language, and thought interdependence. According to the mediation concept, he emphasized the importance of understanding brain function. The mediation term is developed through the use of signs, tools, or instruments. Therefore, the mediation through technological tools implies externalization and internalization reality; to professors, the technology works as a connector between communication, interaction, and transposition of didactic knowledge, that should be understandable to students.

In the field of blended learning, two learning modalities are fundamental to take into account which is the collaborative learning model and the independent learning. Collaborative learning occurs when the whole group participates in a synchronic way. While independent learning comes about when the students have their rhythm; they set their goals, organize the study time according to their needs and possibilities. The psychological principle is based on different psychological theories, where the cognitive psychology of Piaget, which

promotes internal processes that regulate human behavior, meaningful learning theory focused on significant processes, discovery learning, with problem-solving, is included.

2. Which is the teacher's role in the blended learning model?

According to the authors, the professor has two roles:

First, as “Tutor which according to the UES Educational Model is the professional in charge of providing academic and emotional support to facilitate the comprehension of subjects and to guide the integral development in the superior education institutions that allow that the student himself accomplishes the academic and personal goals previously defined, throughout strategies and action lines that promote and encourage labor and social insertion” (Anonymous, 2016).

Secondly, as a “professor which is defined as the professional whose mission is to teach a certain science or art, through pedagogical skills that allow them to become an effective agent of the learning process. For this purpose, the teacher can rely on the figure of the tutor” (Anonymous, 2016). For these two roles, it is also found that the professor and tutor will identify and respect the individual differences of the students to enhance their capacities and abilities for self-learning.

Besides this, the tutor will be a facilitator who will act as an “instructor” who will be familiarized with the contents and with the organizational aspects of the subject, and on which they will have full knowledge to guide the students’ learning, both in-person and virtual, supporting them in their understanding of the topics, helping them to make decisions about their curricular transit and maintaining their interest and motivation.

In addition, according to Modelo Educativo de Educación a Distancia de la Universidad de El Salvador, the tutor must fulfill a series of functions:

- Technical
- Academic or pedagogical
- Organizer
- Counselor
- Social

“A professor who could assume two roles, as a facilitator and as tutor always in a scaffolding arrangement concerning a student who learns. In general terms, it can be affirmed that the guidance professor and learning facilitator is responsible for accompanying, advising, informing, through the development of strategies for individual and group work of students, defining the basic orientation on the use and handling of materials, as well as the academic activities to develop” (Anonymous, 2016).

3. Which is the student's role in the blended learning model?

The student is responsible for his learning progress, in his development it provides an intrinsic motivation through different technological, information, and communication methods during their educational process. Its main characteristic is acquiring the necessary experiences to make himself responsible and to others. The blended learning students are the main characters in this process and as such is the maximum responsible for their learning. Moreover, the principal role of the learners is to be capable of planning thoroughly their educational project, in collaboration with their tutor, and to take advantage of all support and facilities that the University makes available for them.

4. What is expected from the student under this model?

Every student is expected to be able to accomplish the development of skills and abilities associated with the academic field through the use of new technologies of communication: “The computer, Internet, web services, and communication tools facilitate different means for the teaching-learning process, these means force students to develop skills and abilities related to the domain of information and communication technologies, ability to discriminate and value information in its quality, to share what they have developed through all media on their disposal, for the accomplishment of the educational processes through interactivity, dynamism, multimedia, hypermedia, and connectivity” (Anonymous, 2016).

5. Which is the compromise level on behalf of students in this model?

According to long-distance academic requirements, students are responsible for their learning process to take them to real development.

6. How are learning achievements measured under this model? (Based on rubrics, guidelines, exams, etc.)

The hetero-evaluation will be a duty of the professor and the tutor, while the co-evaluation will correspond an opportunity of the peer to contribute to their consideration regarding the learning of the learning partner; meanwhile, self-evaluation constitutes the opportunity for the learner to assume, commit and control their performance, thus contributing to the construction of critical and responsible judgment.

Critique

Distance education is a large vision, which allows developing processes in teaching-learning, implementing different didactic resources, either from traditional textbooks or

cutting-edge multimedia resources. Since education became not only indispensable but also as a research object itself, to greet the particular needs of each historical moment, the reflective and analytical tradition has allowed the user to overcome modular industrial education to produce changes in both its form of organization and implementation and development. distance education is a powerful alternative to acknowledge students' needs in this increasingly globalized world.

With the arrival of new technologies, an important helper in its development in the last thirty years, the distance model is the one that has undergone the most innovative changes since the unidirectional written communication text, based on individual and repetitive learning, up to virtual communication platforms bidirectional, synchronous and asynchronous, through learning communities. Due to this, the University of El Salvador directs the offer of long-distance education to improve students' academic performance.

The project provides in detail the implementation of the distance educational model, along with the mandatory regulations for the institutions. All these are supported with the corresponding articles set up for Salvadoran higher institution education. Moreover, it includes the teacher's and student's role as well as the general characteristics together with the dimensions of the model in both structural, organization, communication, pedagogical, technological, and interactive. Furthermore, involve the main components of the model, meaning the curricula and programs to be offered at the University of El Salvador in distance learning education.

Although the model seems to generate new developments and capacity in the students' population there is a lack of program content, along with the deficiency of the

pedagogical material. Since they are simply explained without going into depth. It is also worse to mention that while the distance education promoted in the university in 2016 helps to bridge the gaps in terms of coverage and access to education since for many students the traditional education is unavailable, little do we know about the efficacy and effectiveness of the distance education in the University of El Salvador compared to traditional learning. That analysis should be left for further research.

5.5.3.2 TÉCNICAS DE INVESTIGACIÓN DOCUMENTAL

In 2015, MSc. Janett Rizo Maradiaga co-directed the Teaching Department of UNAM-FAREM-MATAGALPA (Universidad Nacional Autónoma de Nicaragua- Facultad Regional Multidisciplinaria de Matagalpa). She published the book *Técnicas de Investigación Documental* the same year, which emphasizes its content on the proper research techniques that any inquirer needs to master when carrying out a bibliographic investigation. Since the core of this kind of study is the collection of information related to the topic of interest, the book excludes the next steps associated with a scientific investigation: “objectives, statement of the problem, hypothesis or guiding questions, data processing, methodological design, and theoretical framework” (Rizo, 2015, Introduction).

Moreover, the book is structured in the following five units:

1. Introduction to research.
2. Process of documentary research.
3. Techniques for collecting and selecting information.
4. Processing of documentary information.

5. Processing of documentary information.

The last 2 units differ on these aspects: unit 4 deals with the analysis and interpretation of the information; whereas unit 5 covers the features of technical writing.

Furthermore, the book functions as a guide to create a scheme for developing bibliographic research. The subsequent observations support the previous statement for it aids to:

- Consider and analyze the general aspects of this investigation as well as its importance.
- Identify the methodological procedures applied during the phases of the research.
- Classify the information sources to select objective material that enriches the content of the project.
- Employ effective reading techniques for analyzing and interpreting the gathered details.
- Write the final report of the investigation by considering the organization of the information that has been analyzed and interpreted.

Therefore, this book is an excellent tool that benefits the design of bibliographic research, which could work as a precedent for future scientific or social projects.

VI. CONCLUSION

It has been fascinating to read and connect many common points, and also, to see the importance of the effects of implementing learning management systems at the college level in the teaching of English as a foreign language, through the time within different thesis works and academic articles. Moreover, just the fact of realizing how through history, from Mesopotamia until our days, we can notice the importance that technology has taken in the learning process, no matter the budget of academic centers, it is almost impossible to think of a life without technology and its gadgets.

Students spent a significant amount of time browsing the internet. However, a high percentage of them use technology for entertaining purposes only; nevertheless, this is not an entirely negative situation for they are exposing themselves to authentic material while watching videos, listening to music or podcast, playing live online videogames with foreigners (native speakers most of them), etc. Then, they indulgently acquire the language without feeling forced to be attached to a book. These are excellent actions when they are taken as a complement of the class because amusement is not everything in education.

For that reason, well-structured programs of pedagogical nature need to be innovating to get results of convergence for life, according to UNESCO; learning environments and technology find such a wonderful ambiance for interaction, investigation, inspiration, and creation through the learning process. Moreover, LMSs can increase educational productivity by “accelerating the rate of learning; reducing costs associated with instructional materials or program delivery”.

VII. RECOMMENDATIONS

Daniel Pennac once said, “You can’t make someone read. Just like you can’t make them fall in love or dream.” Nevertheless, you can inspire, and with this, insight great goals can be accomplished; therefore, we recommend the following:

TO THE DEPARTMENT OF FOREIGN LANGUAGES

- To manage technological equipment, training, internet connections to support teachers’ development in ICTs.
- To motivate all the teaching staff of the department to be trained in the use and management of LMSs as part of the teaching-learning process.
- To offer courses or specializations to train teachers in the use and management of it.
- To define modalities and particularities of integration of LMSs in the curriculum, without losing insight into the quality of education.

FOR PROFESSORS

- Learning processes generate such an impact that generates lifetime milestones; therefore, academics should be an entity, a team genuinely interested in guiding and accompanying their pupils through the learning process that goes beyond topics, books, and walls.
- It is precise to create an engaging team among professional peers and students, it is truly necessary to have spare time for professors, and also to create spaces to share experiences and find new ways to achieve goals. The creation of spaces does not belong just to a mere physical space, but space in agenda and even in technological platforms.

- To sharpen the saw as Stephen Covey advises, we are constantly learning and, even more as a professor, in constant need of learning more to share knowledge and experience with others.

FOR STUDENTS

- To take advantage of the potential of LMSs to continue their academic development.
- To request the university the necessary resources to enhance their academic skills.
- To incorporate ICTs as part of their everyday professional training.
- To be aware of the importance that LMSs have in nowadays education.
- Students must understand that sometimes the licenses to certain materials such as digital workbooks can produce benefits that are greater than the investment they require.

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