

METHODOLOGICAL STRATEGY FOR THE RIGHT USE OF THE INTERACTIVE WHITEBOARD IN THE TEACHING - LEARNING PROCESS OF THE ENGLISH LANGUAGE IN THE UNIVERSITY CONTEXT

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Didáctica e Innovación educativa



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PREFACE

In light of the needs, and also projections of the development of higher education in Ecuador, and in line with international trends, the mastery of an important language as English becomes a goal fundamental.

The teaching-learning process of English as a foreign language has traveled a long evolutionary path in response to the social, economic and scientific and technical needs that nowadays demand a more effective communication in the foreign language. The higher education then has the mission to train graduates capable of acting as independent users of this language, so that, it serves as an instrument of academic, labor and investigative training and communicative tool in an increasingly digitized context in which it imposes itself the use of new information and communication technologies.

As the leading Spanish theoretician José Luis Brea stated metaphorically, technological development in the 21st century has allowed "ROM memories to be replaced by RAM forms of culture".¹ That is, cultural phenomena are increasingly interactive, characterized less by the passive accumulation and more by the constant processing of new information. Young people who enroll in universities today have been fully educated between the Internet services and technology, and this fact must be applied in order to promote in them, not idle consumption and dependent on such resources, but the ability to use them with independence and of course some creativity.

This book is indeed a proposal from the university teaching to overlap the technological tools and the study of the English language. Leading English professors and researchers from the Technical University of Manabí, Miguel Macías, Loor, Roberth Zambrano Santos, José Intriago Macías, Juan Carlos Carpio and Marianela San Lucas Marcillo, focus their work towards the use of the interactive whiteboard as a feasible way to improve the exchange of knowledge and motivation of students and teachers, in the teaching-learning process of English as a foreign language. The characteristics of this technological tool promote an active and collaborative learning environment, and simultaneously demand a greater role for students.

¹ José Luis Brea: *El tercer umbral. Estatuto de las prácticas artísticas en la era del capitalismo cultural*, CENDEAC, 2003, p. 58.

The first chapter of the book presents a theoretical study on the evolution of the approaches and methods through which the process of teaching and learning of foreign languages has traveled. In addition, it likewise supports the usefulness, influence and advantages of information technologies, and specifically the interactive digital whiteboard. In the second chapter the authors present a methodological strategy focused on the right use of it and moreover includes a manual that will allow readers to be instructed in its management.

This text is, in short, is a result of interdisciplinary, a sample of how Ecuadorian university teachers have internalized the need to use the most current forms of communication, in this case of putting computer science at the service of teaching the foreign language . The excellence of this book lies precisely in the updated methodology it proposes for the use of an educational media - the interactive whiteboard - which is very much in line with the demands and competences of young people in the digital age.

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Introduction

Research has become an essential opportunity so as to discover new knowledge, and also the best way to get possible solutions of the problems that society has, including the field of education. As part of the challenges of a globalized education, and as well as the advancement of science and technology in the different social and cultural fields, have currently demanded more and more to impose and translate with facts the pedagogical innovations that have become the icon of teaching-learning process to reach the best educational quality . Hence it is vital and at the same time a recent challenge to command a universal language such as English.

Over 400 million people around the world speak English as their mother tongue. This number is increasing more and more, if taken into account those countries, which keep it as its second language. But English is not only important in the economic areas, but also in other aspects such as: military, political and scientific; which little by little has helped it become essential, worldwide, and consequently, learning this language has been quite essential for millions of speakers currently.

We really agree with Toala and Garcés (2010: 2), "the study of the English language continues to grow day by day, as more and more people want or need to communicate in English" and they also say that English is the language that has been more taught, read and spoken nowadays worldwide.

With the use of the ICT, the English language learning has significantly improved at all levels, from the beginner to the advanced level, both within and outside a classroom; In a group or individually, and this has been possible by using different technological means such as, hearing aids as speakers or hearing aids to exercise the ability to listen, visual-graphic-printed materials prepared for the reading skill, other materials that combine Interactive games-songs-videos designed for the speaking and listening skills. In other circumstances, slightly more complex cases, three-dimensional and electronic materials such as computers, printers, scanners, video and CD players, televisions, radio recorders, projectors, microphones, among others are very used.

We also agree with Duarte de Kendler, (2007: 302) when expressing that "English has now become the most demanded language in several continents. The economic globalization along with the development of the internet service have placed it in a privileged place, so that it has been distinguished as the language of international relationships, interactivity,

trade and scientific dissemination” As far as Ecuador is concerned, the English language has acquired a great importance in the last years, so that, it is officially taught in the most primary schools, even in the new studies of the new educational model of the universities, here, the teaching of the English language is included in a compulsory way, incorporated in their curriculum, so that, supported by this subject, all learners can carry out some research work during their studies, and in the future they strengthen their majors by learning a foreign language which will give them the opportunity to get better conditions in a Competitive world, that allows them as professionals to open up better opportunities for success.

In Ecuador, English is also commanded with the use of technology, in small, medium and large scale, from something so simple as the reproduction of an audio script with radio recorders to postgraduate training through the internet service, modern books with Cds, or more updated with interactive CD-ROMs, schools that have English laboratories where both teachers and students can interact with various types of videos (Cristo Rey School, Santo Tomas, in Portoviejo), and several primary and higher level school where it is already possible to see the Digital Interactive Whiteboard in their classroom (UTM, ULEAM).

The priority of its importance is due to the practical benefit that comes from its normal learning, being widespread worldwide because it is considered that learning another language is not a privilege of elites, but an indispensable change of education, which is complemented by the use of some appropriate techniques to achieve the desired outcomes.

We, as authors believe that new information and communication technologies (ICT) can foster some individual and collective participation in the teaching-learning process of the English language, which could become a very fundamental base for a new type of educational process.

In particular, it is the correct use of Information Technology and Communication (ICT), more precise, the good use of a very modern and interactive tool such as the Interactive Whiteboard (IWB), considered currently an indispensable option in the classroom of Ecuadorian education, the one that can respond to some parts demands of national and worldwide development according to the economic, social and cultural reality of the country in order to get a better educational quality through the interactive techniques nowadays used in Pedagogy, which have been considered also as instruments that could guide the active participation of teachers and students.

From the above mentioned, it is inferred that educators and especially English teachers need some means to enable the teaching-learning process, such as infrastructures, didactic and technological resources, etc. And a steady pedagogical training, allowing the tutor to be on par with technology, and in this way, from this field to provide students with a quality teaching and warmth, using a technological tool such as the interactive whiteboard, which facilitates both the Trainer and scholars a more practical and interactive method to make the process a space for the exchange of knowledge.

The authors of this research, according to their practical teaching experience, agree with Marques (2007) in describing the Interactive Whiteboard (IWB) as "a touch screen device that just by getting a slight contact with it allows users to access and control any computer application or multimedia platform" .

Any user is able to write on programs with digital ink and then edit, save and print any change, as well as jot down in some pages that are being worked on. This provides a greater didactic potential, while inducing a progressive introduction of innovative practices and also focused on every student activity. Seeing this reality, it should be taken into account that the methodology used by the teacher will rub off on the knowledge students can acquire, so that the use of the interactive whiteboard will greatly help them out at any problem.

At all times and at any the level of education, the student learning has a lot to do with the methodology applied by his teacher, just because it is from this very area that the scholar is strengthened by the love of learning in the classroom; From the practical experience as teachers, we have realized that if there is no an inspiring environment in the class classroom, the mission of sharing knowledge between teacher-student and vice versa becomes monotonous, so that not to let this situation happens, every tutor must be prepared and updated with the new information and communication technologies (ICT), more specifically with the use of interactive whiteboard (IWB). Another important factor that plays a determining role in the teaching-learning process of the English language is just motivation in the classroom, as stated by Aguilera, (2010: 75), who states that the IWB "encourages the students".

On the other hand, according to a check out by SMART Technologies Inc. (2004: 7), it concludes that the IWB increases in the students their focus, their involvement, and also improves the memorization of content and its adjustment. In addition, according to this analysis, IDPs make teaching more visual and its learning more interactive.

We, as authors agree with these criteria, since the teaching of a foreign language can become a difficult task, if students are demotivated in their class, and this factor can cause difficulties in the teaching-learning process, while encouraged students show some interest in the Activities, they will feel the desire to be active, to participate in the process.

CHAPTER I

1. Theoretical concepts related to the teaching-learning process of the English language, ICT and the interactive whiteboard in the university context

In this chapter the theoretical references that support this research are presented, the elements that characterize the evolution of the teaching-learning process of the English language are described, as well as their intervention with ICT. In addition, the current situation of the use of the interactive whiteboard in the teaching-learning process of the English language in students of the Universidad Técnica de Manabí is established.

1.1 Analysis of the historical development of the teaching-learning process of the English language mediated by the ICT in the university context

“The new didactic process includes the words teaching-learning; didactic develops teaching but always as a task fostered at sponsoring learning, and all this, of course, in an educational way”. Coleman, 1929; Álvarez Méndez, 2001, cited in Soler, (2007: 185).

“General didactic is a scientific discipline that is in charge of studying closely this process, being supported by the Educational Psychology, within this, it is found the Learning Psychology”. Luckesi, 1987, quoted in Soler, (2007: 185). “The conception of this process and, therefore, of the teaching is, fundamentally, located in the paradigms of the General Didactics called mediational, centered in the teacher and mediational, centered on the student”, Pérez Gómez, 1983, cited in Soler, (2007: 185).

From this perspective, the pedagogical education of the current university teachers should be more interested in getting to know who and how their students are, what previous education they have had, with which kind of likes or dislikes, goals and expectations why they enroll themselves at the university and also discover the most appropriate methodological techniques to get a better understanding with them.

Teaching and learning a foreign language, especially English, has become nowadays in a social need and a priority in many areas, which could be personal, academic, scientific, professional, and cultural, among others, since it is considered the most used for the dissemination of scientific and technical information through magazines, books and mainly the Internet service.

“Foreign language learners would need a real communicative competence, not only for events, but for interlocutors, and computer software, typically found in English language books” (Chapelle, 2003: 4). “Technology gives a new set of options for a teacher” (Chapelle, 2003: 7).

“Higher education must deal with the challenges and opportunities that could be found with the right use of technologies, which improve the way to produce, organize, and disseminate to apply the knowledge to finally access to it” (UNESCO, 1998: 19). From these statements, the different assertions are made about the importance of technology in the English language learning, at all levels of education, and specially at the higher level, for this reason, we, as authors of this research open a special way to an arduous task regarding the compilation of different sectors to contribute and improve the teaching-learning process of this language.

Before noticing the deep features of the contribution of ICT to the teaching-learning process of the English language, it is necessary to recognize which have been part of the traditional methods used throughout its teaching and learning, before using the new Technological tools; This is followed by an analysis of the most inspiring methods that have been useful in the educational process of English.

All over the history of the teaching-learning process of a foreign language, as the English language, different methods have been applied so as to carry out the educational work, and here we could ask a simple question: What is a Method? According to The Longman Dictionary of Language Teaching and Applied Linguistics, in its 1997 edition, cited by Hernández, (1999: 142), defines the method as “a way of teaching a language that is based on systematized principles and procedures that in turn represent the conception of how language is taught and learned”.

The Longman Dictionary gives a remark, quoted in Hernández, (1999: 142), is that “methods differ from one another in their conception of the nature of a language and its learning, in teaching purposes and objectives, in some program that promote, the techniques and procedures it recommends and the role assigned to the teacher, trainees and instructional materials”. According to the aforementioned, it can be assumed that a way to teach a foreign language has always existed, and is set in the correct use of methods, which help to systematize learning, clearly developing the purpose of teaching.

Agreeing with Hernández (1999: 142), there have been different methods, which have been classified into: logical categories (synthesis, analysis, induction, deduction); In the

characteristic of the language in which it focuses (grammatical-lexical, phonetic, etc.); According to the skills that are trained (translation, oral, written, reading); (Conscious, suggestive, structural, etc.) and also are called based on the names of their inventors or more prominent manager (the method of Comenius, Gouin, Berlitz, Palmer, Lozano, Jorrín, etc.).

Hernández (1999: 142) also states that “it would be good and necessary to set a difference between methods designed to teach our mother tongue (auditory, alphabetical or phonic, linguistic, sentences, words, sight, etc.) and those designed or used mainly to teach either foreign languages or second languages (reading method, TPR or total physical, audiovisual, etc.)”.

Due to the given circumstances, we, as the authors of this research have considered in exploring only those methods that have rubbed off on the history in the teaching of foreign languages and the ones that continue nowadays, keeping alive their origins in the contemporary methods.

We will start with the Grammatical-Translation method (GT), this is certainly the oldest method of language teaching, that was established during the eighteenth and part of the nineteenth century, and basically its origin corresponds to the Latin schools where "Classical" languages (Latin and Greek) were widely used to communicate, but later also used to teach some modern languages (French, German and English).

The assimilation of grammatical rules are stressed In this method, for which the presentation of some rules, the study of a group of words, as well as the execution of translation exercises got a special support,. Antich, (1986), quoted in Hernandez, (1999: 143). Hernández (1999: 144) in this very context asserts that “linguistic correction is sought, and it is emphasized that by association of the spoken word and visual image, essentially through repetition the apprentice can learn the new vocabulary”.

In addition, Hernández (1999: 144) states “on mechanical exercises and imitation of native patterns are very stressed, using advanced technological devices (audio gramophones, tape recorders) and at the same time a detailed study guide that helps in all possible situations where the learner must use the language to serve as an example; All this process in order to obtain a model as accurate as possible.

At the beginning of the 70s the newness method of teaching of languages is born; as a matter of fact it is not a method but an approach, the communicative approach, in which is considered the learning of languages as a process where the most important things are the

communicative intentions, that is, the functional aspect, and its characteristics, not only the linguistic details.

Many structures and even some of the primordial ideas of the methods that preceded it are the ones that this methodology commands, as its own procedures, in this direction is wide-open, and is situated close to the achievement of communicative competence. "The communicative approach has been developed by British applied linguists as a reaction to approaches based on grammar". Richards, 1997, quoted in Hernandez, (1999: 148).

One of the most important American linguist Noam Abraham Chomsky (1957), quoted in Toala and Garcés, (2010: 19), presents his theory on linguistic competence, besides that, he illustrates his research on communicative competence, which serves as a basis for the development of the Communicative Approach, which is also considered as a method of horizontal teaching of oral-writing interaction of progression and that has been easily adapted to the needs of the students.

Therefore, according to Toala and Garcés (2010: 19), students are able to become communicators based on the communicative approach and despite their English knowledge is incomplete, they usually try very hard to make themselves as clear as possible, and so, they have learned to communicate by using, a series of activities with the language, such as games, representations, solutions of problems, among others.

Another point found in their research is on the four language skills (listening, speaking, reading and writing) that are controlled from the beginning of our lives, no matter what kind of order we are exposed to them, but obviously most of the time the priority of this process is on the speaking and listening skills. At present, we have got some new methods of teaching and learning, among them, the digital resources are presented to us, which are a tool that are tried to implement and improve in the educational system, so that, the information and communication technologies (ICT) are considered, as one of the essential roles in a current society that also fosters a real success in teaching-learning process. This role is becoming more and more relevant in the coming years.

ICT has got a high importance in many European states, so that, they have been included in their curriculum, with the main purpose of helping out in a need that is already demanded by professionals and likely will become more wanted in their future.

Therefore, some assertions about the definitions of ICT are made so as to make clear what they really mean. According to United Nations, (2005) quoted in Sarmento, (2009: 196) information and communication technologies (ICT) are "Tools that people use to share,

distribute, and collect information and communicate with each other, one by one, or in groups, through the use of computers and interconnection through computer networks". World Bank, (2002) quoted in Sarmiento, (2009: 196) define ICT as "hardware, networks, and means for gathering, storing, processing, transmitting, and presenting information".

According to Sánchez (2008: 1) "ICT are information and communication technologies that obviously must include the technological resources that are nowadays a fundamental part of society; these technological resources take the use of the computer as a means of communication and concurrently as a way of teaching. Because ICT have a great impact in the educational field, it also contributes positive changes to the teaching-learning process of the English language, since simultaneously the student can learn in a more interactive way and incorporates almost all their senses in the construction of learning".

In turn, Labelle, Rodschat, Vetter and Ludwig (2008: 3) describe ICT including some other devices such as a communicator or system, broadcast television, mobile phones, computer, and network systems Hardware and software, satellite system, among other things, as well as the various services and applications that were associated with them.

As for the evolution of technology, throughout the history of humanity, Adell, (1997) describes some very important points, he declares that "at the beginning of the sixties, many authors have proposed dividing human history into phases or periods characterized by the dominant technology, storage and retrieval technology".

According to this author, it is declared that "such technological changes have led to radical changes in the organization of knowledge, at the moment to practice and create a social organization in human cognition itself, essentially in subjectivity and identity. It is possible to understand the transformations only by taking a historical perspective that we are already experiencing in time".

Harnad (1991: 39) cited in Adell (1997) said that several hundred thousand years ago the first of these radical changes occurred, when "language emerged in the evolution of hominids and some members of the species felt inclined - by responding to some pressures, whose nature is still the subject of vague conjectures-to exchange propositions with the value of truth".

On the other hand Levinson (1990) quoted in Adell (1997) mentioned that "the creation of graphic signs to register the speech gave off the second great revolution"; in addition, he affirms that the evolutionary pressure was created by the fluency and abstraction of speech, necessary for communication beyond the biological limits: writing. The third revolution

according to Bosco (1995) quoted in Adell (1997), was due to the arrival of the printing press, which is also considered as a simple development of the second phase: after all, the code is the same in both manual writing in the printed.

“This generation has been involved in the fourth revolution, this is the one based on, the electronic media and digitization, a new code more abstract and artificial (we need devices to produce and decipher), and also information representation, whose consequences we have already begun to experiment” (Adell, 1997). The different opinions quoted by those authors and especially the fourth revolution can be declared that these changes are very common in our society and which depend not only on technological factors but those social and economic aspects.

Following the history Castells, 1997, Pérez, 2000, Echeverria, 2000, show that the door to a new way of understanding and interpretation in the history of the human being is opened by the electronic revolution at the end of the 20th century, its culture and its transformation. These topics have become very common: cyberspace, cyberculture, telepolis, teleworking, virtual universities, virtual learning communities; In short, a social construction of reality mediated by information and communication technologies (ICT) and which are mediated by the signs and meanings of the culture that guide their development.

According to the above mentioned, this has created a change in the way people think, act, communicate, work and earn their things in life; providing new ways of creating knowledge, educating people and disseminating information; This as well restructured the part of the way the world ran its economics and business practices; Beck, 2007; Castells, 1996-98; Negroponte, 1995; Sarmiento, 2004, cited in Sarmiento (2009: 197), described the period 1997-2002 as the period when the Information Technology has been present in the most industrialized nations, which was quickly followed by the end of the first Digital Revolution, symbolized in Silicon Valley dot-com that produced trillions of dollars into the global economy, and generated very high rates of unemployment.

According to Sarmiento (2009: 197), a perfect world would be like this, the digital opportunity would mean that everyone has easy access to ICT, in every process, all households equipped with ICT devices; All citizens have movable ICT devices; and everyone uses broadband. Kofi Annan (2002), quoted in Sarmiento (2009: 197), refers to "Digital Divide" as “The new technology of information and communication are that are among the instruments of globalization” Riascos, Quintero and Ávila, (2011: 134) assert that “at the beginning of the

eighties the importance of the incursion of ICT in higher education environment, especially in the teaching-learning process, was not considered”.

Definitely, we consider the appreciations of the opinions mentioned above as true statements, many years ago technological tools in all educational fields, and especially in the higher education did not receive a relevant importance, but thanks to the right and prompt initiative of the teachers themselves changed some traditional paradigms In the teaching-learning process, and even more in the study of the English language, that is being innovated in the appreciations on the significance of incorporating ICT in class so as to make the process more efficient.

López de la Madrid, (2007) quoted in Riascos, Quintero and Ávila, (2011: 134), states that “one of the Induction to change and adaptation to the new ways of doing and thinking started from the eighties in the different sectors of society due to the right use of information and communication technologies (ICT) in the world universities”.

Since the 1980s, as mentioned earlier, in some universities in developed countries has faced significant, not to say radical changes. Which has also generated a huge growth in school systems, as well as a strong increase in the number of departments, students and teachers, this trend towards college education growth has been strengthened and reinforced by phenomena that have been developing throughout the century and that have grown significantly in the last decades, such as the enormous diffusion of knowledge and a progressive differentiation and disciplinary fragmentation.

On the other hand, we also agree with Carter, (s.f: 1), when he declares “a new approach to the teaching-learning process is necessary, but with new strategies included in them; As well as the academic tools that bring us new technologies”.

“The potential of new information and communication technologies for the renewal of higher education should be fully utilized by expanding and diversifying the transmission of knowledge and making knowledge and information available to a wider audience” (UNESCO,1998: 3).

“The way knowledge is developed, acquired and transmitted is due to the rapid progress in new information and communication technologies. It is also important to realize that possibilities to renew the content of courses and teaching methods, and expand access to higher education are offered by new technologies” (UNESCO, 1998: 27).

It should not be forgotten that technology does not make teachers cease to be indispensable, but modify their role in relation to the learning process, and that the permanent dialogue that transforms information into knowledge and understanding happens to be fundamental.

“Higher education schools must set an example in terms of the advantages and potential of new information and communication technologies, so that they can ensure quality and maintain high levels of learning practices and outcomes, with a strong spirit of openness, equity and international cooperation” (UNESCO, 1998: 28).

Now, we can add, according to the previous observations that in the last years in the heart of the University has been developing, numerous initiatives are tending to confront this new paradigm of teaching-learning, and more specifically, those directed to methodological innovation, where Information and communication technologies (ICT) have acquired a relevant role.

Without any doubt, substantial changes in society are produced by the development and growth of technology; the University, base of this new society of knowledge, could not be apart from of this phenomenon, so it has been gradually integrating ICT in its teaching methodology. This also implies the acquisition and development by teachers and their courage to start integrating interactive tools in the teaching-learning process.

In addition, according to the aforementioned statement, it is possible to say that a school that is absolutely different from the traditional one prevails, a static teaching is no longer enough, but new ways of making the teaching-learning process should be advanced. Students and teachers are now satisfied with a new way of learning, so the use of technology in higher education is undoubtedly a task of all universities in the country and the world.

The new information and communication technologies (ICT) will not only be incorporated into the current training as contents to learn or as skills to acquire, but they will be used increasingly as a means of communication at the service of education. That is, as environments through which teaching-learning processes will take place. As Martinez (1996, p. 111) quoted in Adell, (1997) states, “in the teaching - learning processes, as in every communication processes, different spatio-temporal situations may occur, both in relation teacher-student, and in relation to its content”.

“It is not new to explore the current reality that for billions of poor people, computers and the Internet service represent nothing”. Sarmiento, (2009: 199). "Yet, in a big number of examples, and as part of a quieter revolution, a great variety of local organizations, aid agencies and government institutions are discovering that ICT could be able to extend the

influence of the information revolution to the poorest people living in the farthest places ever”.

“Both processes and sets of initiatives, from international organizations such as the ONU, UNESCO or the World Bank, governments, or non-governmental organizations (NGOs), are part of what some academic people call the Second Digital Revolution” (Sarmiento, 2009: 199).

From this historical approach we can conclude that the new training contents in the use of information and communication technologies (ICT) in the classroom must be part of the new profile of the English teacher; In the future, most teachers will have to acquire knowledge about the application of ICT, they should be able to select teaching materials related to these socio-educational demands, with the only purpose of improving the teaching-learning process of the English language.

Information and communication technologies (ICT) in the teaching of the English language in the university context wants to set a challenge that requires prompt, effective and concrete deeds, leading to pedagogical and methodological transformations in a complete educational framework, defining objectives, restructuring plans and study programs and creating didactic strategies that could allow us adapt educational systems and anticipate proposals to face future changes, that could be promoted by the development of ICT, and finally defining a new for the technological teacher.

According to Jiménez (2010) cited in Riveros, Arrieta and Bejas (2011: 35) “ICT has meant a considerable deep change, since the user, as a student or instructor, can access to a huge and dispersed information, fast and complete, but at the same time has the opportunity to easily make it coincide with their interests, if possible decipher and unscramble the multiple codes and barriers that both explicitly and implicitly present to us”.

Another important remark that can be mentioned is that, as mentioned by Ferrar, Cachia and Punie (2010: 352) ICT are playing a major role in innovation in education, when they stated that “the role of ICT has become very important in the last decade, if we debate for creativity and innovation in education”.

According to an important study prepared by the Pontifical Catholic University of Valparaíso (PUCV) (2005: 15), it is mentioned some contributions in favor of the field of education, such as:

Greater interaction among students and teachers.

The deep communication among students.

A better learning through the use of simulators.

The development of abilities and practical skills.

The provision of feedback in communication among students.

The ease of students' Access to educational resources.

The fast rise of technology, mainly as a outcome of the Internet, has caused a rapid deployment of technological tools that generally young people assign in their daily lives without any doubt, all these authors are very right to consider that technology can modernize the oldest things of the knowledge, and above all in young people.

Continuing with the same background, Silverstone (2006), cited in Ferrar, Cachia and Punie (2010: 352), expressed that the influence of ICT in a lot of people homes, has brought the mobilization of material resources, skills, cultural values and social skills and capacities.

According to Wright (2000: 4) “most of the technology used in modern education has increased the cost of commitment”. What this author expressed is very valid, since it is considered that the use of technology requires that some students can compete each other in a good way, taking into account that the majority of the students are used to using technology daily, and this causes that the teaching-learning process of the English language becomes more interactive and simultaneously encourages the student to learn more.

The evolution in communication practices proposes that the development of pedagogy needs to be addressed in what it means to educate in time, in order to avoid the “Yesterday education for tomorrow children”.

“The use of ICT in education has been considered as a transcendent and mandatory fact. First of all, because they have been penetrated virtually in all culture branches, starting from the economy to art, through the most diverse spheres of social and individual activity. Secondly, because they are causing deep changes in scientific-technological activities, from the emergence of new branches of science and technology, to the introduction of new methods” (Riveros, Arrieta and Bejas, 2011: 35).

On the other hand, the improvements in technology and the integration of these technological advances into the education process are demonstrated in several programs, since technological advances superficially are mentioned and also serious attempts have not

yet been made to unite the right use of ICT in order to mediate the teaching-learning process of an area of knowledge important in the education of the students, such as the English language.

Contemporary society in this age of globalization is increasingly involved by the growing technology; the different areas of social, economic and political interactions, show nowadays their interdependence with respect to the increasing right use of new technologies and also for their operation and development. The procedures that promote instantaneous information and communication with respect to any place in the world that has the technology for its interconnection, usually relativizes the time and space concept of individual and collective identity as a social group.

At present, education systems around the world have decided to face the challenge of using information and communication technologies (ICT) to provide the necessary tools and knowledge to their students, required in the 21st century.

With these statements, we, as authors could assume that ICT undoubtedly give an impressive twist in the teaching-learning process of the English language, some of the reasons come from the fact that through the right use of technology students might feel the pleasure and interest of interacting with their teacher in a technological environment that exists, and of course, for the good of the process, in this way the student critical-reflexive knowledge will grow up.

Paraphrasing Izquierdo and Pardo (2007) cited in Riascos, Quintero and Ávila (2011: 135), commented that the correct use of ICT in the teaching-learning process of the English language, in universities, has been evidenced as a requirement to transform their Methodological work and the training of teachers and other subjects involved in this process, so that, they can be able to face the current challenges that the education of professionals that our society needs nowadays.

From this current perspective, this means that depending of the degree of use of the technology, ICT will influence the impact that could be generated in the teaching-learning process of the English language. ICT are quite essential at the moment to learn the English language: this perception on the part of some teachers refers to its use without prior analysis of its usefulness in the context of education, implying in this way a sub use of them or, for their use in an irresponsible way, leading to unsuitable results of the teaching-learning process.

This perception gotten from the teacher involves only the use of current technology as a learning tool, and the result of its insertion in higher education without awareness of the advantages and disadvantages that these technologies may represent.

One of the use of ICT taken by teachers is based on applying evaluation processes to identify their true usefulness in the teaching-learning process of the English language. This indicates that the teacher is completely aware of its integration and appropriation, that is, as mentioned by Ilabaca (2008), cited in Oramas, (2008), integration also implies the clear use of technology, that is to say, it is a natural part of teaching, transferring instrumental use.

It is assumed from this area that most teachers have a very good perception of the use of ICT in class, as far as didactic, in summary, the use of technology, has gone hand in hand for prepared teachers to obtain the necessary elements to be at the head of educational technology, for which mechanisms have been established so that anyone who is interested in it can make use of it. Based on the technological resources and skills required by ICT all teachers must be trained for their well-organized presentation, in order to corroborate what has been said, some of the aspects are compared in terms of the methodology used in the traditional learning places and the new learning environments with incursion of technology.

The following realities are found in the traditional classes:

- Some instructions given by the teacher.
- Progress given by a single path.
- A single means of communication.
- Individual work.
- Transmission of linear information.
- Passive learning.
- Factual learning, based on experience only.
- In the ICT learning environment the following realities are mentioned:
- Student-centered learning.
- Progress given by several paths.
- Multiple means of communication.
- Collaborative work.
- There is information exchange.

- Active, exploratory learning based on inquiry.
- Critical thinking, informed decision making.

Riveros, Arrieta and Bejas (2011: 37), confirm that “ICT play a relevant and significant role in assisting and facilitating new learning contexts, since there is a diversity of means and resources among them, we could highlight the use of Computer as a teaching tool”.

“A direct outcome of the use of technology is learning their functional management skills, which is also called digital literacy”. This essentially implies to master the most relevant ICT applications. Learning these skills has been an important equity component of technological policies in education, especially in modern countries where the complete access to technological resources at home is still limited” (Claro, 2010: 12).

“The importance of ICT as an educational resource has begun to be appreciated and developed. As important tools, they have become a transversal content of the curriculum” Roa and Stipcich (2009: 165). “ICT could influence the content and objectives of teaching, as well as methodology and teaching system” (Roa and Stipcich, 2009: 165).

According to what is expressed, incorporating ICT within the curriculum is indispensable, that is, within the teaching-learning process, since it greatly influences the methodology, contents and objectives, as mentioned before by the authors.

The 21st century without a doubt is the technology century, it is so necessary, that at any time and place we really need to use it. So it is observed that in the university classes the authorities have decided to raise awareness of the need to implement them in all its educational areas, with the only purpose of students developing in their intellectual and academic quality, and from this field to contribute to the economic development of the Ecuadorian Society. With the rapid change in education, the need for a new vision and a new model of higher education is perceived, as well as a renewal of the contents, methods, practices and means of transmission of knowledge, which must be based on new types of links and collaboration with the community and the broader sectors of society.

That is why it is necessary for higher education schools to train their students so as to become well educated and deeply motivated citizens, with a critical sense and capable of analyzing the problems of society and seeking solutions for them.

“Information and communication technologies (ICT) in the world of university education can conceive deep changes, both in the interaction of daily classes and in the formal and methodological approach of them, so it becomes necessary to think over and discussing the

role of educators and educational methodology in virtual or semi-private environments” (Villegas, 2002: 38).

In addition, we, as authors of the present study consider that of the way of teaching English classes goes beyond a “technical improvement” with the implementation of ICT in the university context and that it affects basically two primary aspects: the redefinition of the role Of the university professor and the investment in technical infrastructures and resources for the development of the new educational forms.

“Information and communication technologies (ICT) are now increasingly influencing science education, both in secondary and higher education, not only in terms of improving learning of science on the side of students at such levels, but also play an increasing role in initial and ongoing teacher training” (Pontes, 2005: 2).

“Skills for teachers, such as visual, sound and digital communication, are the new demands from the knowledge society. It also demands the acquisition of skills to select and transform information into useful and personal knowledge” Ortega, (2007), quoted in Coscollola, (2011: 103).

As mentioned by Pontes (2005: 2) it could be stated that ICT, for both students and teachers, nowadays play an important role in education at all levels. After a historical analysis of ICT, and as well, their correct use within the teaching-learning process Marqués (2000: 2), showed some contributions: ICT (information technology, telematics, multimedia) enable a better performance of the current work, just because, these tools always require some information to do, a certain process of data and often also the communication with other people; And this is precisely what ICT offers:

Access to all kind of information.

All kinds of data processing, and quickly and reliably.

Immediate, synchronous and asynchronous Channel communication to spread and contact any person or institution in the world.

In addition, together with these three basic functionalities, ICT can provide: task automation and interactivity, storage of large amounts of information in small easy-to- transport media (disks, cards, networks), homogenization of some codes used to easily record information Digitalization of all types of textual and audiovisual information) (Marques, 2000: 2).

In another point, Marquès Graells, Pere, expressed a clear analysis of ICT and the teaching-learning process by saying “the accessibility of the practice with ICT by teachers and students

is by no means the end of better learning process based on memorization and the reproduction of contents, or the consolidation of socio-constructivist approaches to learning, despite the magnificent functionalities they offer for personal expression, personalized knowledge construction and collaborative work”.

However, the simple availability of ICT do imply some important changes in schools, such as:

- Greater dissemination of information. The relevant knowledge of the subject is no longer deposited in the teacher only. Libraries first, textbooks and pocketbooks later, the “mass media” and especially now the Internet brings students this knowledge, and from numerous perspectives. The teacher role made of bad notes is already unsustainable (his notes are on the website of the students from lot of years, and the exercises that he also posts).
- Methodologies and critical-applicative approaches for self-learning. nowadays the problems that the students face is no longer access to information (which is everywhere) but the application of methodologies for their intelligent search, critical analysis, selection and application.
- Students already know that nowadays this is an important thing. Master classes become every time less important and spaces and activities (working groups, seminars, etc.) are needed to enable students to work on their own with the support of ICT (information and communication media) but of course having the guidance and counsel from a teacher.
- Updating the programs. The instructor can no longer develop an obsolete program. On the other side, students can check out on the Internet what is done in other universities, and in some special cases they will not accept inadequate trainings.
- Collaborative work. Students can help each other more easily and work together more and more, through e-mail facilities and chats.
- Personalized construction of meaningful learning. According to the constructivist and meaningful learning approaches students can make their learning from their previous knowledge and experience, because of the fact that they have at their hands many alternatives, educational and informational materials to choose from

and the likelihood of requesting and receiving in any some advice from teachers and peers.

“The general purpose of some devices and software: Windows environment, word processor, Internet browser and e-mail” Marqués, (2000: 7) “Knowledge of the functionalities offered by the virtual campus” of the university itself. “Marques, (2000: 7)” The correct use of ICT to teaching, as an instrument of didactic innovation: creation of the web page of the subject, organization of virtual tutoring with its students, use of Internet resources for English classes and at the same time provide interactive activities to students” (Marques, 2000:7).

“Knowledge and use of databases and computer programs, specialized in the subject that is taught (professional tool)” (Marqués, 2000: 7) “Elaboration of web pages of common interest related to the subject” (Marques, 2000: 7).

The far-reaching implications are getting involved in the digitization and dissemination of information and knowledge through computer networks. Whereas, in the previous model, information, communications and transactions were physical, represented by cash, invoices, reports, face-to-face meetings; Currently, and increasingly, most human communications and transactions have become digital, stored on computers, and travel from one place to another through the network at high speed.

So that, the right application of new information and communication technologies (ICT) is changing a lot of lives of the people, since their use forces them to modify basic concepts such as time and space, and the very notion of reality begins to be thought over. As a sign of awareness of this new situation, the European Commission (CEC), in its 1995 report, that was called teaching and learning towards cognitive society, best known on education and employment as the White Book, and it has decided to give a special relevance in all levels of education, along with the teaching of reading, writing and calculus, towards the learning of foreign languages.

Therefore, it is essential to understand that education has the responsibility to face this new reality, accepting the new possibilities offered by ICT and getting to know how to guide its application in a positive way, so as to avoid likely imbalances generated by a mechanical and comfortable use. In this society, understanding that it is more indispensable teaching students the strategies that could allow them to select and access information according to their needs than memorizing.

The new technologies of information and communication (ICT) applied to education in the students and consequently teachers should help to develop different possibilities of learning English and also be the first to accept them as an increasingly essential tool for educational work, without any kind of fear of being replaced.

“The ease with which ICT make it possible to access knowledge and offer second chances to the population that had to drop out of university had not been so hard, so that some were not able to access them” (Sigalés, 2004).

ICT are becoming needed in currently, due to high competition in higher education, quality demands, and globalization of access. The integration of ICT in the university environment and in particular, in teaching, should be the product of an adequate planning that reflects the redesign of the teaching process, with new roles, structure, curricula and methodologies.

Therefore, the promotion of investigative and innovative attitudes in English teachers is justified, which will result in a permanent center of exchange of knowledge and experiences between teacher-student and student-student, which will be achieved through the use of ICT, to make the teaching-learning process more efficient.

1.2 Characterization of the main theoretical conceptions about the use of the interactive whiteboard in the teaching-learning process of the English language

At the moment, ICT play a leading role in educational processes, so that, in that education mediated through Technology (eLearning) represents 11% in Spain, according to an estimate by Martínez (2008). Within the ICT applied to training, a very well-known instrument within the field of eLearning and ICT education is the Interactive Whiteboard (IWB).

One of the new technologies that has acquired great importance in the current society during the last two decades is the correct use of the Interactive Whiteboard (IWB). The revolution that has led to the development and implementation of information and communication technologies in the different social spaces has led to the society being known as “Information and Knowledge Society”.

The example of industrial society, which has succeeded since the late eighteenth century until the late nineteenth century, is being replaced very quickly by a “digital economy” built on fiber optics, computers and networks. ICT include a large number of instruments and devices, however, the most relevant for this study is the Interactive Whiteboard (IWB). According to Professor Marques (2006: 7), “it is a modern technological system that basically

consists of a multimedia computer connected to the Internet service and a video projector that projects to a large size a screen on a wall what the monitor shows”.

Another statement given by Marqués (2006) on interactive whiteboard “it is an interactive screen that allows users to access and control any computer application or multimedia platform, including Internet, CD-ROMs and DVD's just by touching it. Users can write by using programs with digital ink and then edit anything, save and print any changes as well as jotting down web pages for future reference”.

Agreeing to Robinson, Matthew C. (2004: 5) “The interactive whiteboard (IWB) is composed of three parts: a computer, an LCD projector, and the interactive system of itself”. On the other side, Red.es (2005: 3), “The interactive whiteboard is a technology designed to provide tools to the teacher that facilitate and stimulate an interactive, collaborative and multimedia environment in a class”. According to the declarations of these authors, it is possible to affirm without a doubt that the use of a technological tool in class will help that the process of teaching-learning of the English language and the result could be for both teacher and why not say, favorable for student by getting in and out of the classroom.

“The digital interactive whiteboard allows all the future teachers to have a progressive learning in their teaching practices, an improvement to motivate and getting attention from their students, and the availability of new tools to attend to the diversity of learners, especially those with disabilities or severe difficulties or moderate for learning”. Hervás, Toledo and González (2010: 203). Marqués (2006) affirms that the IWB “allows a progressive innovation in the teaching practices, an improvement in the motivation and also based on the attention of the students”.

On the other hand, a review by the IWB manufacturer SMART Technologies Inc. (2004) stated that “the multiple advantages of using IWB include increased attention-seeking, and in the increased Involvement of students, and improves analysis and retention of new information”.

Based on what Hervás, Toledo and González (2010), Marqués (2006) and SMART Technologies Inc. (2004) said, the authors of this research agree with these assertions, since the correct use of technology will benefit the students, approving that motivated students learn and better understand what is communicated by the teacher, so the use of the interactive whiteboard in the classroom is very helpful to interactivize the teaching-learning process of the English language.

Another conclusion that the authors adopt according to the aforementioned statements is that the accurate use of the interactive whiteboard (IWB) promotes an active behavior on behalf of the student and also enables the unceasing assessment of the same ones.

For some other authors such as Ekhami (2002) and Levy (2002) stated that “interactive whiteboard is a complete technological resource, because it facilitates the integration and use of a range of multimedia resources in classes, such as texts, images, video, sound, diagrams, online websites”, that is, it includes other kinds of help that are no longer presented in an isolated way in order to move towards the improvement of student learning.

Therefore, it is a real statement that this kind of technology will be the promoter of innovations at any class, so that, the students can learn better. “Interactive whiteboards have enabled teachers to strengthen the potential of ICT within the component of the teaching and learning process in some ways that are not possible with the approach to ICT in schools with a personal computer”. Kent (2003), cited in Hervás, Toledo and González (2010: 205).

"The Interactive Assessment System is a wireless response system that allows students to respond to the assessment and other questions they have made on the interactive whiteboard". (Hervás, Toledo and González 2010: 205). Each student has a response command, where they press a key and have the opportunity to answer the questions of the teachers. The results can be evaluated instantaneously on the interactive whiteboard in the graphic format either anonymously or by identifying which student has the command. The results are presented in graphical format and can be exported directly to a spreadsheet" (Hervás, Toledo and González, 2010: 205).

Taking into account authors such as Cutts 2004; Cutts and Kennedy 2005, cited in Hervás, Toledo and González (2010: 206) have conducted research on the use of voting systems in some universities. The main conclusions they made suggest that the use of this technology helps a more active interaction with students. Some of the advantages of using this system are: anonymity, ability to assess student progress, and increased student interaction.

These voting systems (or response systems) are spreading out little by little, perhaps because of the benefits it takes in. Mostly, In the UK, the use of this technology (along with the interactive whiteboard) is well-rooted in both primary and secondary schools. Nevertheless, research on the pedagogical value of this technology is still in its beginning.

According to the opinions from some researchers such as Hervás, Toledo y González (2010: 207) the Interactive Assessment System is used to support a wide range of class activities, for instance: Find out what the students already knew about the topic of a session and draw their curiosity about it (during the introductory stage). To evaluate the knowledge of the students on what the lesson is about before designing certain pedagogical decisions. To start discussions and stimulate debate. To introduce an element of fun by designing competitive games (competition).

Undoubtedly, the use of the IWB and this interactive evaluation system would be a success, since the student could instantaneously clear off a doubt and respond to the questions raised by the educator, which will allow him to better develop the teaching process -English language learning.

It is debated that the right use of IWB in the classroom has many advantages, including, for instance, the ones stated by Beauchamp & Parkinson (2005: 97), arguing that this may bring benefits to students such as: Greater capacity to focus in different learning styles, or the opportunity to participate and form part of it. In this same line, Marques (2006) asserts that among the “general cognitive repercussions of the IWB” are: drawing the attention of the students, assisting the understanding of the curriculum, activating visual memory, improving teaching and learning processes, In general, easing the development of self-learning strategies, etc.

From different studies and reports on the implementation of the IWB in educational environments, something that can be drawn is that, from time to time, the installation of these devices is accompanied by training courses on their use for teaching staff. Regarding, in line suggested by Gallego, Cacheiro, and Dulac (2009) and Marqués (2006) among others, teachers need a certain period of training in order to take advantage of the tool advantages.

To emphasize the need for this type of training for teachers, Gallego, Cacheiro, and Dulac (2009:127) asserted that “The Interactive Whiteboard (IWB) is a resource with great educational possibilities for teachers”. In addition, in another instance, Marques (2006) states that sometimes the teacher must do some work previous to the use of the interactive whiteboard in class, such as, searching for information and digital materials (or may even be required to prepare them Himself), suitable for what he is going to carry out in the classroom.

Regarding the effects of ICT in students, Martín (2003) stated that the interaction with certain kind of technology could favor the development of meta-cognitive strategies (that is,

strategies that attend to the cognitive functioning itself and that have, mainly, a function Self-regulation).

According to the positive effects of ICT on what has been presented above, specifically that of the IWB helps the learner to better understand what the teacher has taught: this is what Marques (2006) considers to mean that “the IWB has certain consequences in the processes Cognitive generalizations of students”, among them we can find: attracting attention- although authors such as Beauchamp & Parkinson (2005: 97) relativize this assertion by saying that once the knockout factor passes, attention may decrease- assistance of the understanding of the curricular content, the activation of the visual memory, among others.

In other area, Levy (2002) proposes the existence of a relationship between the creativity in classroom on the presentations of students and the use of IWB. According to this author, the technology has an advantage because it “empowers students to be more creative”, in addition to promoting their self-confidence and self-concept. Becta (2003) cited in Beauchamp & Parkinson (2005: 97) also talks about the potentiation through the interactive whiteboard and the creativity in the presentations of the students.

Along the same lines, Levy (2002) points out that “interactive whiteboard makes learning more enjoyable and interesting”. Also in a survey conducted by the same author it is cited that “It gives an excellent rumor about being a teacher”, referring to the interactive whiteboard; It is concluded from this perspective that because it is an innovative tool, the teacher, no matter his age, is seen as a modern teacher with a new methodology.

Regarding public presentations of school content, Marqués (2006) declared that, because they rely on the proper use of the IWB, students might lose their stage fright, because they do not have to keep in mind everything. Regarding the influence of the IDP in the classroom, Ball, 2003; Quoted in SMART Technologies Inc., (2004: 11) SMART Technologies Inc.'s 2004 report said that “having a IWB in the classroom encourages educators to plan their classes in a more interactive way”. Regarding the influence of the IWB on the teacher, Marqués (2006) considers that there is a risk that the technology will become as an instrument managed by the teacher. It is also worth mentioning that in the study by Gallego, Cacheiro, and Dulac (2009: 140) it is pointed out that the equipment is an aid in the teaching task and inspires teachers.

Aguilera (2010: 74) also talked about the creativity, stating that the IWB in a more creative way gives the teacher the possibility to change the contents of their classes. In this line, Aguilera (2010: 74) declared that “it is a perfect instrument for the constructivist educator

because it favors the critical thinking of the learners". Hervás, Toledo, and González (2010: 204) consider that the practices in the classroom would be innovated with the right use of technology, as well as to increase student motivation and attention processes. On the other hand, a study by Gonzalez and Gonzalez (2011: 1) tried to find out the connection between the epistemological conceptions of 22 teachers of primary and secondary education in Madrid and their uses of the IWB.

The teachers of the sample were divided into several groups, more direct or more constructive, according to their epistemological conceptions on teaching and learning the English language. It is assumed that the epistemological conceptions of English teachers are articulated in a continuous variable, at one side is situated the direct concept that discusses to a fast learning and of innate origin, and also presumes that the knowledge is stable, and is transmitted mainly from teachers to students. At the other side, there is the constructive theory that refers to a gradual and mediated learning by experience, and, in addition, to that knowledge is changing, maintains an interrelated structure and is the product of own observation and reflection.

In the bibliography accessed a great number of tangible proposals with the IWB for the classrooms appear as a good information. However, an integrating model is needed that can cover all of them. In this sense, does not seem to be a uniform set of proposals, and in some cases, methods of using the IWB that arise in a specific case of a school or a teacher.

Specifically, the role of technology in class, in this particular method of teaching, especially in shared literacy, is highlighted. This way of proceeding, although useful, due to the encapsulated and blocked nature cannot conform an integrative model, since it is very specific to the context where it was devised. Similarly, Gerard (1999) quoted in SMART Technologies Inc. (2004: 6) without mentioning a specific methodological proposal, affirmed that the IWB can assist in the presentation of new information of a cultural and linguistic nature. An application of this assertion could be the right learning of a language.

In another order, in a compendium of more current proposals made by Marques (2008), for the IWB have been mentioned the usefulness of this instrument for the area of Special Education. In this way, the IWB can exert a compensatory function in the field of the visual, the auditory and the psychomotor.

According to the review made by SMART Technologies Inc. (2004: 4) the IWB allows being carried out for different learning needs in different learning style. So that, this instrument may be applicable for visual apprentices, kinesthetic or tactical apprentices, deaf or hearing-impaired learners, students with some visual disparity.

Very determined efforts in educational activities in the English language learning have been made to show, which can be completed using the IWB. Although the ones listed below are not articulated in an interactive proposal, the list that is exposed can serve as a sample of the advantages that this instrument holds.

These activities have been drawn from a compendium of research conducted by SMART Technologies Inc. (2004: 5). Some of these are: manipulation of text and images, notes in digital ink, storing notes and send them by email, through the web or print them, viewing websites as a group, teaching software use, creating digital lessons using templates, use of presentation tools to enhance presentation materials.

On the other hand, Marqués (2006) referenced some other activities very useful with the IWB as a very good support the explanations of the teacher or to the presentations made from the students, collective correction of exercises, accomplishment of collaborative work in class and debates, to have communications at a distance, among others.

Beauchamp & Parkinson (2005: 101) also have a proposal, a teaching method that begins with an “interactive approach” and moves to methods that include a greater involvement of beginners. On one side of the scale would be the method where the information is presented by the teacher and, on the other side, a method in which the arguments are co-constructed using a specific software that join texts, editing them and using the IWB by several members of the class.

In an analysis of cases with English teachers, Armstrong (2005) said that “IWB can be an extremely useful tool when editing texts together”. If Armstrong (2005) is responsible for anything, it is extracted from his study that teachers are important agents in relation to the IWB. Teachers are agents that mediate between software and students, something in which is also agreed in the article by Aguilera (2010). The teacher is the one who has to propose different activities that, along with the IWB, are the ones that will be used in class with the students.

According to the authors, the work of the teacher would be easier if he could go to a pedagogical model of reference. It is also believed that a new pedagogical model is not necessary for IWB, but one that is based on a critical constructivism and adapted to the IWB,

in line with what Martínez proposes (2004) in the CAIT model Acronyms that refer to Constructive, Self-regulated, Interactive and Technological).

This model emphasizes aspects such as classroom interaction, student autonomy, the role of the teacher as mediator, contextualizer and knowledge manager, and so on. This model, according to Real (2006) prescribes that the student has to become manager of his own knowledge and, on the other hand, the teacher acquires the role of mediator. Therefore, one of the main concepts of this model is the change of role with respect to a more traditional teaching.

The use of interactive whiteboards or the Internet, is fundamental to the CAIT model, as a way to articulate knowledge, lessons and activities, and active use by both teachers and students. The IWB, according to this model, the necessary role of catalyst performs for a transformation in the teaching of epistemological conceptions. So, the transmissive, expositive and scholastic nature of teaching is abandoned, in pursuit of an epistemological conception that conceptualizes a learning process in which the student has to construct his own knowledge. Not only a change of role of teachers and students, but also of the classroom, because in order not to restrain interactivity, it must be a movable classroom.

A typical installation of an interactive whiteboard should include at least the following components:

1. Multimedia computer (portable or tabletop), equipped with the basic elements. This computer must be able to play all multimedia information stored on its disk. The computer operating system must be compatible with the provided whiteboard software.
2. Projector, in order to see the image of the computer on the whiteboard. Provide sufficient brightness and resolution (Minimum 2000 Lunen ANSI and 1024x768). The projector should be placed on the ceiling and at a distance from the whiteboard to obtain a large light image.
3. Connection medium, through which the computer and the board communicate. There are connections via bluetooth, cable (USB, parallel) or connections based on radio frequency identification technologies.
4. Interactive screen, on which the image of the computer is projected and controlled by a pointer or even with the finger. Both teachers and students have at their

disposal, a system capable of visualizing and even interacting on any type of documents, Internet or any other kind of information that is available in different formats, such as multimedia presentations, disc documents or videos.

5. Interactive whiteboard software, provided by the manufacturer or distributor and generally allows: manage the whiteboard, capture images and screens, have templates, various educational resources, zoom tools, manual text to text converter and writing recognition, among others.

Point out that the acquisition of an interactive whiteboard includes the screen, the elements to interact with it (markers, erasers, etc.), an associated software and all related to wiring. To this must be added the projector, the computer as well as the peripherals and accessories that are considered quite necessary.

The parameters that characterize an interactive whiteboard can be summarized in the following points:

1. Resolution refers to the density of the image on the screen and is expressed in lines per inch (i.e., 500 lpi). The different technologies offer resolutions ranging from 65 lpp to 1,000 lpp. A higher resolution allows the presentation of the information in a clearer and more precise way. We can also talk about output resolution or internal screen resolution.
2. Surface or active area, it is the drawing area of the interactive whiteboard, where the working tools are detected. This surface should not play reflections and should be easy to clean.
3. Connections, interactive whiteboards have the following types of connections: cable (USB, serial), RJ45 (or network) cable, wireless connection (Bluetooth) or connections based on radio frequency identification technologies.
4. Pointers, depending on the type of digital interactive whiteboard used, can be typed directly with the finger, or with electronic pencils that provide functionality similar to the mouse (they have buttons that simulate the functions of the left and right mouse buttons and double-click) or even with dry-erase markers.
5. Software, interactive whiteboards have software compatible with Windows 98, 2000, NT, ME, XP, Vista, V7; Linux (depending on model) and Mac (depending on

model). It is advisable that the software is in as many languages as possible, including Spanish, Catalan, Galician and Basque. We, as researchers should also consider some or all of the following options:

- Recognition of manual writing and keyboard on the screen. Library Image and template: Pedagogical tools like, rule and transporter of angles, bookstores of images of Mathematics, Physics, Chemistry, Geography, Music, etc. Ability to import and save at least some of the following formats: JPG, BMP, GIF, HTML, PDF, and PowerPoint. Ability to import and export in format: IBW format common to all digital boards. Didactic resources in different areas with different formats (HTML, Flash). Ability to create resources. Integration with external applications. Regarding the new benefits it would help to teachers, we could mention the following: flexible and adaptable resource to different teaching strategies, the resource is adaptable to different teaching-learning modes of the English Language, and finally adequate combination with the individual and group work of the students.

It is also worth mentioning that the right use of IWB increases the motivation of the teacher, provides more resources, obtains a positive response from the students, prepare their classes much more attractive and with clear examples. The materials teachers create can be adapted and reused year after year. The digital interactive whiteboard favors some of the interests a teacher can have in innovation and professional development, and pedagogical change that may involve the use of a technology that initially fits in with traditional models, and obviously is easy to use.

With the correct use of the IWB, something very important is offered in the educational process, and it is about the fact it saves much more time and this way the teacher has the possibility of recording, printing and reusing of the content of class besides reducing the effort invested and facilitating the revision the information given.

Other kind of advantages through the use of the IWB according to the results obtained in the research carried out by Coscollola (2011: 109) to the faculty of the department of Philosophy and Letters of the University of Navarra Pamplona. Spain, some advantages are their mentioned:

- Increases attention of the students, motivation and student participation (98%).
- It gives easy access to more resources and comments in class, and also helps understand better. (97%).
- Encourage the students to present their work, arguments and corrections (93%).
- It is good at collaborative activities and group work (89%).
- It facilitates the treatment of student diversity, and promotes their involvement and participation (88%).
- It provides power reflection, critical reasoning and opportunities to research and develop imagination and creativity (83%).
- It assists in the greater contextualization of activities in the student environment (80%).

Without any doubt, the interactive digital whiteboard is an excellent instrument for the constructivist educators, since it is a device that favors critical thinking in the students, it also promotes the flexibility and the spontaneity of the teachers, since they can make notes directly in the Web resources using markers of different colors. It is also an excellent resource to use in videoconferencing systems, favoring collaborative learning through communication tools. It gives the possibility of access to an attractive and easy to use ICT technology.

Another important contribution to using the IWB is that it helps greatly all the students with disabilities: for instance, in visual difficulties, in addition, it increases the size of texts and images, as well as the possibilities of operating objects and symbols, when hearing problems, it will be favored by the possibility of using visual presentations or the use of sign language simultaneously, students with other types of special educational needs, such as severe behavioral and attention problems, will be favored by having an interactive large touch screen surface, very sensitive to an electronic pencil or even to the finger.

In a study carried out by the author Coscollola (2011: 109) could be pictured some problems, such as:

- Spend some more time to prepare classes (74%).
- Internet connection problems (56%).

- Shadow that is projected on the WDI, if the video projector is at a long distance (44%).
- Maintenance of equipment (39%).

Coscollola (2011: 109) in his research it is also showed that the interactive models mostly used with the IWB are those focused on the activity and control of the teacher. The most valued uses by almost all teachers were the following:

- Master presentations.
- Public correction of exercises.
- Performing exercises among everyone.
- Elaboration of synthesis during the class with the uses.
- Internet search for information to comment in class.

1.3 Diagnosis of the current situation of the use of the interactive whiteboard in the teaching-learning process of the English language in the university context

As a form of verification, a preliminary analysis was developed for the purpose of the observation and survey (Annexes 1, 2 and 3) as methods and techniques.

The main results are presented below.

In the elaboration of this research the sample of the population of 300 students and 6 teachers of the fourth level of the Accounting and Auditing major of the department of Administrative and Economic Sciences of the university were taken into account. Fourth level, parallels "M", "N", "O", "P", and 4 teachers. The choice was made on a random basis based on the following indicators:

1. Participation in classes.
2. Interest in learning the English language.
3. Linking English with the main subject studied.
4. Ignorance of technological tools.

At the beginning, it can be observed that in the first indicator 30% of the students show an interest in participating in class, there were 60% who did not feel very attracted to the language compared to when they are in their main subjects, on the other side, 10%

considered that learning the English language would be motivating, as long as a technological tool is used.

Regarding the second indicator, it can be stated that 20% do not show interest in learning the English language, considering that the classes have become monotonous, 40% consider that they would like to use the interactive whiteboard to feel much more motivated in terms of Learning, finally the remaining 40% believe that the use of interactive whiteboard (IWB) will be a technological resource that improves and encourages learning English.

Going on with the third indicator, it can be observed that there is a little apathy in most surveyed students, since 20% assert that this language is not going to be used in their career, 45% see it in an uncertain and not so necessary way in profession and 35% takes it as a fundamental part of his future professional life.

Finally, the last indicator clearly shows that the link with technology is very limited, since 30% expressly not to know the current technological means for learning the English language, 30%

reflect that technological means should be implemented to facilitate this Learning and 40% believe that ICT are used sporadically for language learning.

With regard to the survey applied to teachers, it was observed that 30% do not know the management of ICT, only 20% use it in their academic work, another 20% recognize the importance of using ICT but do not give the appropriate use and finally 30% affirm that its implementation would be an important resource to strengthen the teaching-learning process of learning.

Once we have analyzed all the data collected in this section, it is possible to indicate lacks in the active participation of the students in the English classes, low interest in the learning of this language considering the monotonous and boring English classes, they do not manage to totally link the study of English in their future jobs, a certain degree of ignorance of information and communication technologies.

When reflecting on all that is expressed, the following regularities are mentioned:

Strengths:

- Interest in participating more actively in the English class.
- Recognition of the importance of linking the English language with their future job.
-

- Use of technological tools to strengthen the teaching-learning process of the English language.
- Implementation of the IWB, to increase the participation and interest of the students for learning the English language.

Weaknesses:

- Lack of technological tools to achieve a more meaningful teaching.
- Deficiency of knowledge about the use of ICT in English classes.
- Some apathy in the students for learning the English language, just because they do not consider it important in the performance of their future profession.

CHAPTER II

2. Theoretical fundamentals and design of the strategy for the use of the interactive whiteboard in the teaching-learning process of the English language in the university context

This chapter presents the theoretical foundations of the methodological strategy based on the use of the interactive whiteboard in the teaching-learning process of the English language in the university context. The characteristics, requirements, stages and actions of the methodological strategy are also shown. In addition, the methodological strategy based on the management of the interactive whiteboard is exhibited as the means to awaken students' interest in language learning, as well as the appreciation of the same by specialist criteria.

2.1 Theoretical fundamentals of the methodological strategy based on the use of the interactive whiteboard in the teaching-learning process of the English language in the university context

The philosophical, psychological, sociological, pedagogical and didactic sciences, which helped from the theoretical point of view to provide the scientific, structuring and coherence, of the stages and actions that are part of it.

The education of mankind is considered like a historical social phenomenon, if we start from the philosophical perspectives, the same that can be instructed in specific situations according to the diagnosis and the environment in which it develops; The progress of the students in the development of his practical and transformative activity and also the indispensable thing that must exist in the interrelation among different factors of socialization are taken into account :some aspects, such as the community, the family, the group , School, political and mass organizations in education and in the development of the personality of students.

Another point to consider is that the methodological strategy is based on the historical-cultural approach, from the psychological point of view, in which the principles and postulates of this theory and the pioneer in this branch of education are assumed, as Vigotsky (1971) cited in Toala and Garcés (2010: 44), expressing that the learning of mankind

is a result of his historical-cultural experience, that knowledge is the result of the dialectical interaction between cognoscent subject and object within a historical-socio-cultural context ; That the teacher is a guide, who monitors his learners in various aspects to such an extent that they gradually gain independence in solving their different questions and in this case can cause the socio-cultural and cognitive development of the student.

Vygotsky (1971) quoted in Toala and Garcés (2010: 44) stated that an alone person does not learn by his own, but learns with some help from the others and their learning consists in how good he is to command the instruments, basically the ones created by culture. “Neither the hand nor the mind alone can achieve much without some help, and instruments that make it perfect”. For our new knowledge to become a proper discernment as human beings, it must be internalized in the interaction of its construction, therefore, it can be said that the training and education of people must be considered as a process in which social interactions are linked.

Vygotsky declared (1971) quoted in Toala and Garcés (2010: 44) the human being does not maintain a direct and isolated relation with the things of his environment, instead of it, he runs into mediators that make it possible to build his knowledge through a cultural historical context.

As regards one of the approaches from Vygotsky's (1971) cited in Toala and Garcés (2010: 44) the categories of activity, consciousness, social context, communication and education are the keys in education, considering these items as fundamentals, necessary for the elaboration of this Interactive methodological strategy at the moment to teach English.

Vygotsky (1971) mentioned in Toala and Garcés (2010: 44) expressed the essential notion of the historical-cultural approach, which is undoubtedly one of its most characteristic contributions to education, and this is the area of development (ZPD), he has defined it as “the distance between the actual level of development and the level of potential development, under the management of the adult, or in collaboration with another more capable partner”. It is also possible to say that from a theoretical analysis the zone of proximal development establishes new links between learning and development.

In order to understand the process of the PDZ, two basic elements must be assumed: the unit of analysis, and the account of the activity, in a more specific way, the action, since it must be considered that the PDZ is not focused just In the subject, but also is based on the action, on interaction; some mediation fosters an interactive strategy between students and

teachers, and in other cases between students and students, stimulating some help, to the point of creating several links between what has been learned and what should be learned.

According to Toala and Garcés (2010: 45) “The PDZ has a cyclical and dynamic structure, which requires the establishment of an emotional climate that benefits the interpersonal relation, hence the importance of the affective feelings with the cognitive in the teaching-learning process”, so the authors agree with the aforementioned statement that this determines, in a very significant contribution for this research work.

Analyzing the most inspiring points of the above mentioned details, about the PDZ, the authors of this research consider that, so as to achieve the effective development of communicative competence, the level of development achieved and the level of potential development of the community must be taken into account at once. Student and, secondly, the nature of the object of knowledge, which allows the teacher to clarify the goals and objectives to be achieved and to construct the optimal conditions, so that this way learning takes place, and which supports the use of the digital whiteboard Interactive strategy.

As for the sociological stance, Emile Durkheim pauses with the prevailing view of the time, to consider "education is an individual entity", since the perspective of Durkheim, it is social and is linked directly with society, since it is a product of it. This same author expresses that education has an eminently social role, since it forms a social being that will live in society and that the final objective is getting the individual to resemble the ideal of man created by society. The pedagogical postulates of the strategy are based on the laws of Pedagogy declared by Carlos Álvarez de Zayas (1999) cited in Toala and Garcés (2010: 46), the first one sets the relationship of the pedagogical process with the social context, and the Second one derivatives from the previous one, which mentions the relations between the personal and personalized components of the before mentioned process, as well as its categorical system, instruction-education, teaching-learning and training-development.

Regarding the educational aspects we should be very clear on what didactic really is; It is mentioned that training is the “art and science of teaching”, from this perspective, D.E. Papalia mentions that “Learning is a relatively permanent change in behavior, reflecting an acquisition of knowledge or skills through experience and that may include study, instruction, observation or practice. Changes in behavior are reasonably objective and therefore can be measured. On the other hand, Piaget could defend that “learning depends on the two central concepts: the organization of what we already know, and the ability to

adapt ourselves to a new learning situations. If adaptation is the guiding principle of life, there is no reason to think that it should not be also of intelligence and learning”.

For Bruner, learning consists of three essential phases:

1. Integration of new contents. It may happen that this new information is contrary to what is already known, or that it needs to be replaced. Knowledge is gradually refining.
2. Integration of these contents into the cognitive structures of the subject, so that they assimilate new contents. The information received is reordered to enable new learning. It is about processing the information to be able to after going beyond it.
3. Evaluation that assesses if the previous knowledge have been used in a suitable way for the acquisition of new contents.

Ausubel in turn demonstrates that learning is “a construction of relevant meanings that occurs as long as the person is capable of performing substantive new actions between what he already knows and what he is learning”. For learning to be good, it must link the new information with prior knowledge”.

Considering the diverse proposals above mentioned and linking them with the practical use of classroom technology could be asserted that the educational and developmental part of personality education makes every person acquire their knowledge in a more essential and well-organized way by having a didactic stimulus in the process of learning the English language.

It is stated that in a general way the pedagogy practiced within the classroom along with the principles of the use of technology emphasize the formative, didactic and motivating, since it involves the new with the educational, without leaving aside the fact of instilling values such as respect, responsibility, communication and improvement in the education environment.

Once again, we, as authors of this work agree with the criterion of De Armas Ramírez and Lorences (2004), as they commented that "in the educational area the methodological strategy is based on the pedagogical orientation of the real change of an object from its basic or natural state to reach a final phase, in which the desired result is seen, must have a foundation, based on a diagnosis, to propose a general objective from which strategic planning, its implementation and evaluation are derived”.

It is recognized that, it is necessary to start from an analysis in which the effects and elaboration of several aspects are considered for the improvement of the knowledge of the English language in order to reach certain proposed objectives, by using some technology in Class so that with this means could be instructed and encourage the students at the same time.

The deep bases of knowledge that are presented in this research work as a basis for the explanation of the methodological strategy, which are also proposed for the teaching-learning process of English in the university context.

2.2 Methodological strategy based on the use of the Interactive Whiteboard in the teaching-learning process of the English language in the university context

This methodological strategy based on the correct use of the Interactive Whiteboard in the teaching-learning process of the English language in the university context consists of a set of duly ordered actions, directed by stages in which it is necessary tasks that are developed for the purpose of reaching the objective before mentioned, and which will become an instrument of great importance and utility in order to improve the teaching-learning process of the English language, and with the use of interactive whiteboard so as to make every class more interactive and cooperating, and in this way raise the motivation of university students.

The methodological strategy proposed in this research is based on the theoretical analysis carried out in the first chapter, and also on the things formulated in the first section. With the purpose of meeting the objective and its implementation of the methodology strategy, the following **requirements** are proposed:

1. To have an available classroom for the correct use of the Interactive Whiteboard.
2. Availability of university authorities, teachers and students to use the interactive technology.
3. Have the required preparation of the teachers regarding the proper use of the manual for the use of the IWB.
4. Have all teachers with a basic training in computer science.

The methodological strategy applied in this research aims to promote the correct use of technological tools to teach in class, to achieve greater motivation in the teaching-learning

process of the English language through the appropriate use of the interactive digital whiteboard, and within of the main **distinctive features** are shown below:

Flexible: Because it could be adapted due to the technological knowledge that each student and teacher has previously.

Interactive: Because everyone has the opportunity to participate at the moment of sharing some knowledge between teacher-student, and student-student.

Contribute: Because both the teacher and the student will have an active participation during the development of all procedures.

Participatory: Because during the whole process the teacher actively participates with the student.

Integrator: Because it gets all the students together during every session.
Communicative: Because from it, the environment influences the interaction in the development of communication among students.

The methodological strategy we are proposing is based on the communicative approach of the English language, which has been recognized in four stages in other countries, which has been elaborated under the foundations of the systemic-structural method, and expresses the existence of order and coordination among them. They are therefore described below:

STAGE 1. Diagnosis to the teachers of the department of Administrative and Economic Sciences on the right use of technological tools.

Objective. To determine the frequent use of the technological tools in the teachers of the department of Administrative and Economic Sciences in the teaching-learning process of the English language.

Methodological Orientation. This stage has a great importance as it assesses the relation between educators and technology.

Action 1: Design of instruments for the application of ICT. (Annex 4).

Action 2: Operation of the designed instruments.

Action 3: Verification of results obtained through applied instruments.

Action 4: Analysis and socialization of results. (Annex 5).

STAGE 2. Presentation of a practical manual focused on the use of interactive whiteboard. Preparation of a group of teachers of the department of Administrative and Economic Sciences in the proper use of the useful manual that is related to the IWB in the teaching-learning process of the English language.

Objective: To train professors in the use of the IWB manual.

Methodological Orientation: In this stage a study of the manual is carried out, which allows analyzing the potentialities and needs of the same for the projection of the new proposal.

Action 1: Preliminary study of the manual.

Action 2: Demonstration of the use of the manual. (Annex 6).

Action 3: Socialization of the proposal with the educators for its right use.

STAGE 3. Teacher training for the use of the manual.

Objective: To train professors in the use of the IWB manual.

Methodology Orientation: At this stage, the preparation of the instructors takes place in the use of the manual that is related to the technological tools in the teaching-learning of the English language: A professional seminar will be developed, addressed to the teachers to train them on the correct use of the IWB, it will show them its current importance and how it should be applied within the teaching-learning process of English through the following actions:

Action 1: Design of the topics to be addressed at the seminar “Appropriate use of the IWB2”. (Annex 7).

Action 2: Development of the seminar and analysis of its manual.

Action 3: Perform a class

Lesson plan

General Information:

Subject: English

Unit 4

Class: 1

Techniques: Oral procedure (questions and answers) with visual and practical oriented steps (through the whiteboard). Games will be applied in the proposed activities.

Media: Book American English File # 1A, CD, interactive whiteboard, manual.
Contents: * Grammar: Present Simple with "ING", main verbs (based on the book); "CAN / CAN`T" for skills; "CLOTHES" for vocabulary.

Pronunciation: all the words in the new vocabulary.

Course: Training Seminar

Introduction: (5 minutes)

It explains how the interactive whiteboard is activated, then it is emphasized in the first steps its appropriate use through the manual and is passed to a teacher to see the development.

Thread: "I can`t dance"

Objective: Express several actions that can and cannot be done through small talks using affirmative sentences, negative sentences and questions and describe the dress of the people in addition to being able to apply the taught vocabulary.

Development: (75 minutes)

The teacher encourages his students to remember several verbs by showing them the words in English through flashcards, then to reinforce, shows the same verbs but this time he does it by applying figures, he shows them drawings of the actions that they already know through of illustrative cards that are displayed on the board. In this activity the participants show a great interest in their input.

The teacher asks the members of the class to control the pictures that are displayed in the IWB, also asks them to pronounce the action that are shown and that they say their meaning, at the moment of pronouncing the words, try to verify that all pronounce well the new taught vocabulary. (Page 49).

The teacher explains the difference between "CAN" and "CAN`T" stating that with the first they can talk about the activities they do, and with the second, the activities they cannot perform, then the teacher gives them some samples of how to express themselves using "CAN" and "CAN`T" and applies them with the verbs already analyzed in the IWB. (Pages 40-41).

The teacher asks the students to continue with a sentence with "CAN" and "CAN`T" using the IWB, students perform the task in their notebooks while the teacher monitors them and then selects a small group to show their sentences displayed on the IWB, then the students can

give their criteria in each one of the sentences confirming if it is right or wrong. Students make sentences in all forms, that is, positive, negative, questions and answer them in two ways. Finally, the teacher gives them a photocopy exercise with the use of "CAN" and "CAN`T" and provides them five minutes to do it in the given material and in the first instance they must do it orally, and then display it on the IWB. Then the teacher shows them another use of the verbs, this time with the use of "ING" and indicates the verbs through flashcards (Page 42).

The teacher explains the "ING" rules, one by one with their proper example and applied in the verbs given, then provides them as example, a couple of sentences, and asks them to make some notes in their notebooks an individual sentence, once finished, Asks them to display it on the IWB for analysis.

The other students are given the chance to give their own opinion on whether it is right or not, and if there is not a well-made sentence, so they can correct it at that very moment.

Conclusions: (10 minutes)

The outcome of this process is based on demonstrating the skills that can be realized by the students, the students can carry out a self-analysis of their qualities, and as for the sentences can be given with the intention of demonstrating their tastes in several activities.

Assessment: (5 minutes)

The evaluation will be made as a natural process during the development of each procedure during the class that in its effect can be written or oral.

Homework: (5 minutes)

The teacher will ask his students to write a small statement describing a circumstance where they can talk about his physical qualities when performing some activities.

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American English File teachers "book # 1.

American English File student "s book # 1.

Action 4: Analysis of the results obtained in the seminar. (Annex 8 and 9).

STAGE 4: Demonstrative methodological workshops for the right use of the manual.

Objective: To estimate the importance of current technology through the methodological workshops proposed with the interactive whiteboard.

Methodological Orientation: The process of this stage will evaluate the degree of knowledge that professors have regarding the use of technology in the English language, through several workshops.

Action 1. - Analyze the topics to be presented.

Action 2. - Organize the planning of the workshops.

Action 3. - Install and review the programs for the training process.

Action 4. - Evaluate the workshop developed.

Right after conducting the workshops, and therefore the corresponding evaluation, they should be carried out in a participative, open and sincere environment, emphasizing the exchange of ideas and suggestions for a correct use of the IWB, in addition, each member of the group must contribute with some knowledge, appreciation and experience. In all the workshops, cognitive and affective should be combined in their realization. For a better implementation of each deed, means should be established to help reinforce what is explained, as well as to emphasize the use of methods and techniques that help to better assimilate the use of the IWB manual, participants, decision makers, and the evaluation strategy according to the analysis of the manual and adequate establishment of the time to carry out the effectiveness in the fulfillment of each action.

Methodological guidelines

It should be taken into account that the knowledge spread is assimilated in the best way by those who received it, that is why, it has reached certain conclusions:

1. **Set priorities:** It should be noted that both the contents and the activities must be carried out in the training have reached those who participated in the training, when asked questions related to the preparation.

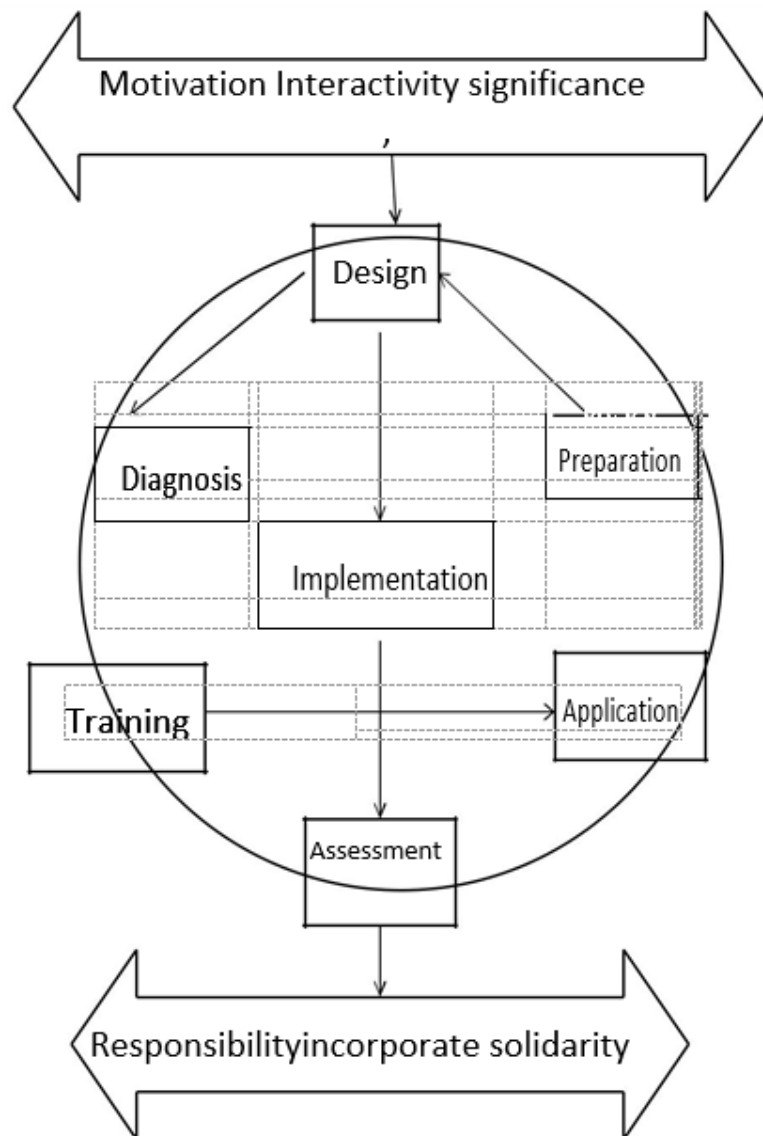
2. **Encourage everyone:** Try to enthuse those students when doing an activity with interactive whiteboard, showing that much of what we learn we discern with practice, as some of them can show resistance with technology.
3. To gratify the effort given to the best participants, giving them a motivating detail, which can be a set applause, a compliment, etc.
4. **Provide more practice:** Use several pedagogical tools to create a more interactive environment and in this way, make activities and knowledge meaningful to the student.
5. **Evaluate the participants according to the achieved successes:** appreciate the work done, in addition to the accomplished learning effect.
6. Help change the unmotivated mentality of the student by changing certain patterns within the class work.
7. Increase self-esteem of the student: This is because there are numerous students who think that learning another language is very complex and in some cases it is also considered that it is not so necessary to acquire it, in this type of situations, what the teacher should try to do is just to motivate their students and part of those ways is to make classes more interactive with the use of technological tools.

The methodological strategy has four phases, that is, four different actions, among them the preparation of teachers for the correct use of technology in the classroom, the management of the IWB through the manual, the exemplification of the class applying the technology and the assessment of the specialists of the proposal itself, as it will reflect the acceptance of the technology in them.

To carry out the evaluation of the four phases of this strategy we will think through its protagonists, for teachers and students, in teachers the evaluation will be according to the management of the IWB, whereas in students will be in the ability to demonstrate that they understand everything during the educational process.

The graphical representation of the methodological strategy is presented below.

Methodological strategy for the right use of the interactive whiteboard in the teaching-learning process of the English language in the university context



2.3 Assessment of the feasibility of using the methodological strategy

The methodological strategy that is proposed, establishes within the university context a viable alternative for learning this important worldwide language, which essential estimation, the authors place the strategy proposed to the criterion of experts with the purpose of guaranteeing that it could be given in the university education area. It took into consideration some factors that the specialists must have for the contribution of their criteria. These also include:

1. Be a graduate of higher education with the mention of English.
2. More than five years of experience in higher education.
3. Knowledge about the methodology of teaching English.
4. Basic knowledge of computer science, in the office group.

It was possible to have a meeting before the presentation of their opinions to ensure that their input to this investigative work is given in the most enjoyable way, and besides that, can come true. The surveys were sent to 20 experts from different parts of the city, from which 15 specialists were selected, who proceeded to evaluate the strategy, (Annex 10).

Taking the results obtained was observed how the theoretical foundations were evaluated, strategic methodological, proposal, stages and actions. (Annex 11 and 12).

In the first point of the survey that talks about the theoretical foundations of the proposal, 20% of the consultants classified them as very adequate, whereas 80% agreed to consider them quite adequate, since they were conceived as a fundamental basis for the elaboration of the proposed strategy.

As far as the objective was communicated, the systemic relation of this research is concerned, 46% of the experts agreed on their criteria by qualifying it as quite adequate since it is necessary to act within the motivation through the technological tools in The teaching-learning process of English, 40% considered it very suitable as a good tool in the classroom and the other 14% considered it adequate because they do not have much experience with technology in class.

Regarding to the activities that are in stage 1 for the development of methodological strategy through technology, 23% of experts consider that the use of classroom technology is adequate because it could maintain an active participation from the students. Another 27% considered it as very suitable as the first phases to support when it comes to the use of technology. Whereas 50% of the experts contemplate them as quite adequate because it works as motivational and also as a teaching tool at the same time.

At the point of the methodological strategy, that was proposed for teaching the English language, 26% of the experts accepted it as very adequate since they think through it as a good change in higher education, and 74% consider it quite adequate, although mostly do not know the use of this tool for the development of their classes but they think it should be incorporated in the current teaching.

In the assessment of the objective of the fourth stage, 80% of the experts classified it as quite adequate because this stage must be linked to the learners. On the other hand, only 20% of the experts agreed on qualifying them as very suitable because it is a process that must be carried out in more practice but because of several factors are not fulfilled in a nowadays practice. Taking into account what several experts point out in different facts of this survey, it could be said that as a suggestion it is proposed that the use of technology as is the case of the IWB it gets a great importance at present, because it increases the level of motivation in the students, and that, this tool can create a more participatory work environment.

In summary based on the criteria of the experts, we could say that the use of the whiteboard is very beneficial in the teaching-learning process.

GENERAL CONCLUSIONS

- The thorough analysis of the criteria presented for the different guidelines in diverse ways are contributing to the society with its scientific backing to support this pedagogical research, and it is very favorable that it projects the student as the most important member of this work and also locates the professor as the best guide that the learners have.
- The analysis of the bibliographic sources is considered on the major theoretical concepts as for the IWB, such as a scientific support for those professors and students who wish to fill with more training in the technology area and its link with the education, especially in the field of the study of English as a foreign language.
- This analysis helps the authors to distinguish the shortcomings found in the students regarding with the use of the IWB in the English language teaching-learning process.
- A methodological strategy was created based on the use of technological tools such as the IWB so that in this way the student can get to learn more and more about the English language starting from the motivation and therefore from the active participation of the university students, what helps to develop significantly the teaching-learning process.
- It is confirmed the importance of the methodological strategy taking into account the opinions of the professionals involved in the daily practice of the educational work on teaching the English language.

RECOMMENDATIONS

- To use the IWB in the teaching-learning process of the English language, a bit more frequently so that students of the Accounting and Auditing major of the department of Administrative and Economical Sciences of the UTM can learn in a greater proportion this language.
- To train the professors of the Accounting and Auditing major of the department of Administrative and Economic Sciences of the UTM, so that they can get used to the management of the IWB.
- We recommend the university authorities emphasize the importance of the use of IWB in the teaching of the English language, providing this technological tool in a progressive way to all departments.

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APPENDIX 1

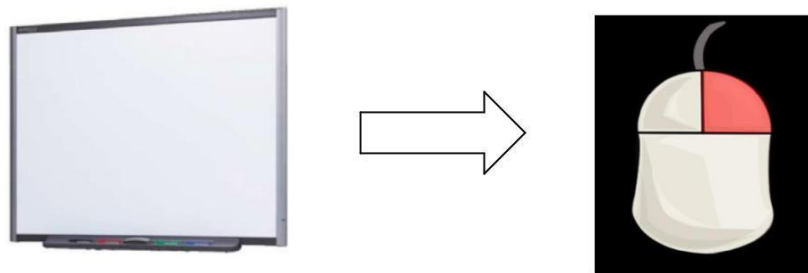
Didactic use of the manual of the IWB

The purpose of this material is to provide assistance to anyone who wants to use the IWB and has not made use of it before. Here are the basic steps for using it.

Basic functions

Screen

This tool is very easy to use, since it is simply like commanding a traditional whiteboard with the only difference that it is mixed with technology. The whiteboard works like the normal computer mouse.



Computer

This equipment comes with a regular computer that is simple to control, as it is very common to use and allows you to move images, videos and specific programs in a simple way.



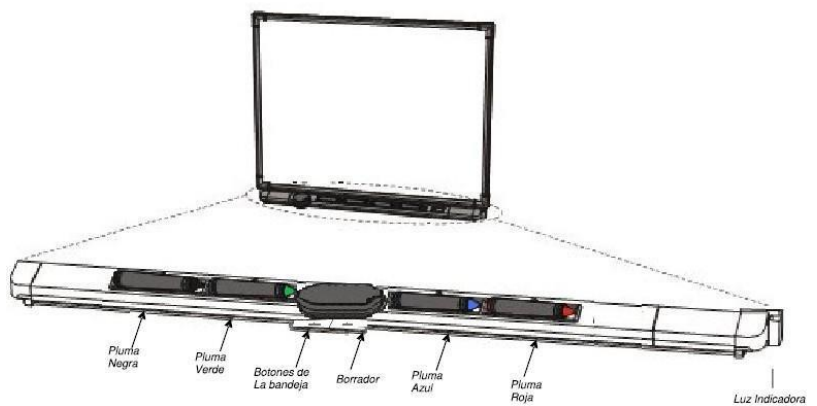
Projector

The projector is the central character of the image that is represented on the whiteboard. It has a sufficient illumination capacity (not less than 1200 Lumens) and a suitable resolution (minimum 800x600), also incorporates the possibility of wireless connection.



Labels or smart pens and eraser on whiteboard

The SMART IWB has a tray of four markers (black, green, red and blue) and a regular eraser. When you lift one of them it is possible to write on the IWB.



Assembly of the whiteboard

The steps to follow for the assembly of the whiteboard are the following:

1. Connect the laptop to the power supply, using the power cable.
2. Connect the laptop to the projector using the image cable.
3. Connect the laptop to the audio, using the audio cable.
4. Connect the laptop to the whiteboard, using the USB cable.
5. Turn on the projector.
6. Turn on the computer.

How to use the IWB

Once the laptop is turned on, to begin its use, basically we calibrate it and activate the writing tools.

To calibrate it

We click, with the MOUSE, on the COMPUTER; On this icon, and the Calibration screen will appear. In it we will click on the nine points, this time on the SCREEN and just like that the IWB (Interactive Whiteboard) will be calibrated.



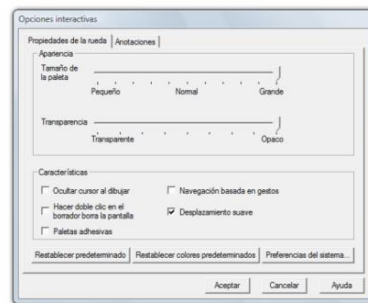
To activate the Roulette Tools

If we click and we have the whiteboard connected, the Roulette Tools will appear.

An icon will appear in the bar below the computer:



If we click on this icon, we will be able to edit the properties of the Roulette



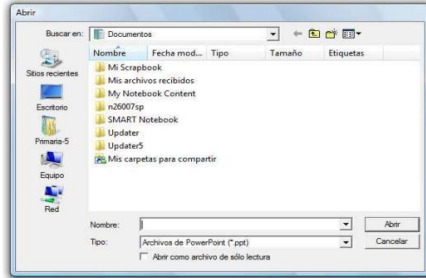
We can appear the keyboard

When we click on this icon, the keyboard will appear.



You can also open a Power Point tab

If we click on this icon, a menu will appear to search and open a POWER POINT tab



Capture screen or part of screen

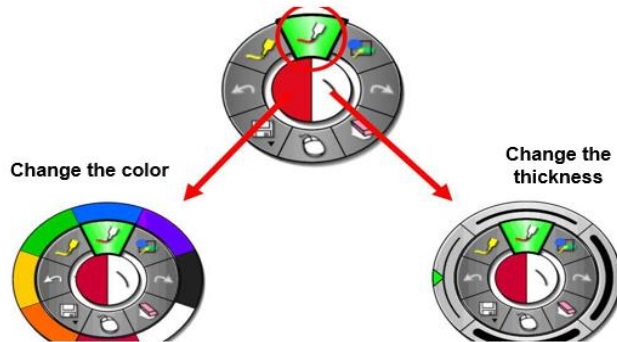
if we click on this icon, we can capture the screen or part of it.



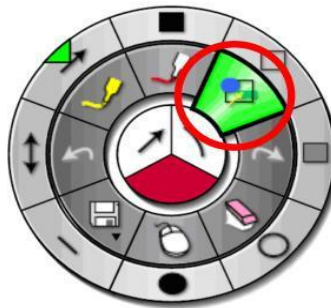
Writing Tools

If we click on this icon, a menu of writing tools will appear

It will change to this other roulette, and we can write in it directly.



We can select shapes



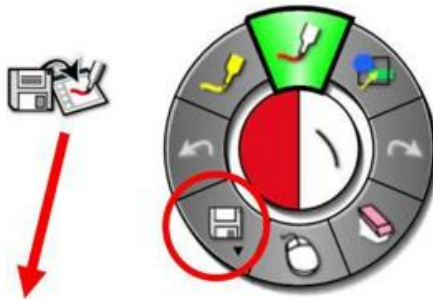
We can select the eraser



We can select, go back and go forward in the activities that we perform.

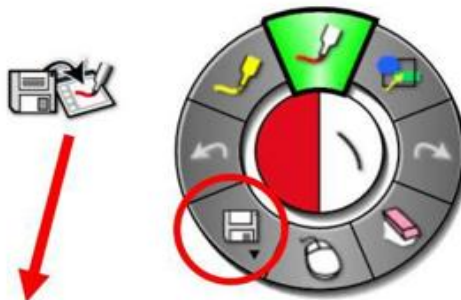


We can keep our notes. A screenshot will be captured and sent to the SCRAPBOOK whiteboard program.



**To save in
the program**

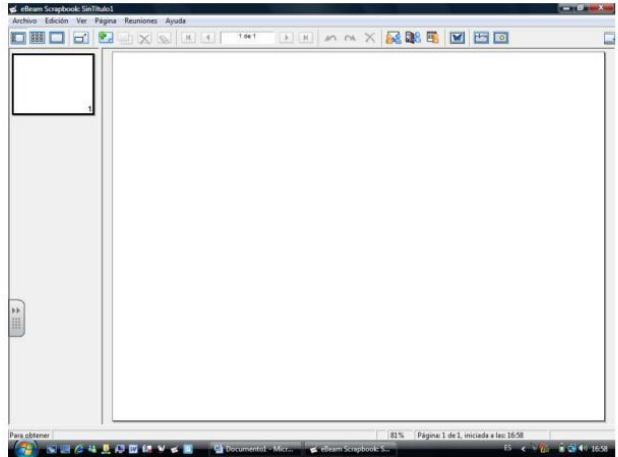
It keeps it in the whiteboard program.



**To save in
the program**

How to open the whiteboard program: SCRAPBOOK

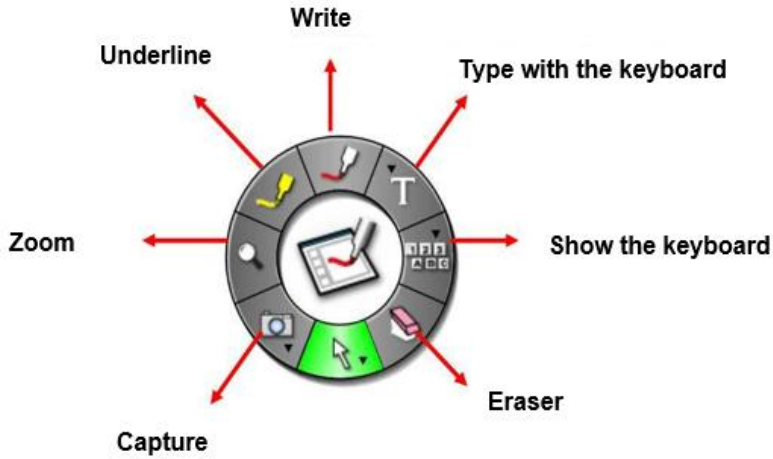
If we click on this icon, will open the program SCRAPBOOK



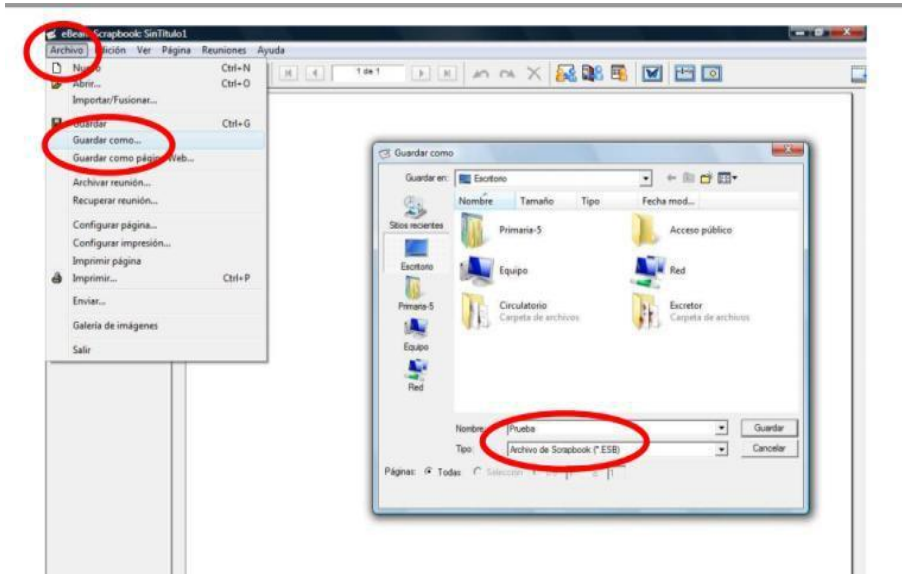
The SCRAPBOOK tool wheel.

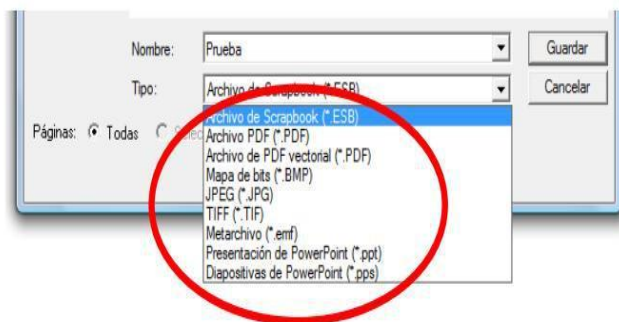


With this roulette we can write, underline, delete, expand, save, capture, and make the keyboard appear or disappear.



The capture and write buttons can be modified to display other functions. The use of the SCRAPBOOK program can be done without the need for the board to be connected to our computer. To save, just click on file, then SAVE AS, and finally give the file a name, and it will be saved as a SCRAPBOOK file.





APPENDIX 2

Training Planning

Title: "Appropriate use of the IWB"

Total hours: 10

Rationale:

In the working life of English teachers are many rough edges caused by several factors including the demotivation of the students, and at the time of instruction in the English area, as the classes can become somewhat boring, that is why the use of technology within the classroom is very important and fundamental currently, it is for this reason that this scheme has been designed in the field methodically concentrated on increasing performance, efficiency and predisposition of everyone in group or individually.

It also gives the updating of values immersed in collective participation and the scientific-technical development that supports the acquisition of the four skills, when becoming an active member of the activities carried out in class, and it is of course with some Help of the technology we get in a better professional service.

General objectives

Strengthen the knowledge in the use of the IWB to promote the professional development of the teachers with the objective of improving the teaching-learning process of the English language. Encourage all teachers to continue the use of technology, both inside and

outside the class to improve the teaching-learning process of the English language.

Topic 1. - The teaching-learning process of the English language.

Objective:

Strengthen the importance of the didactic training of a professor so as to guide the educational process of the English language, efficiently both in the instructional and training of the human being.

Content:

Concept of Teaching-Learning.

Evaluation of didactics and its current trend.

Position of teacher and student in the teaching-learning process of the English language.

Topic 2. - The components of the teaching-learning process of the English language.

Objective: Establish the right components of the educational process essential for a better analysis of these, which will improve the function, use and integration that must exist among all components.

Content:

Components of the didactic process.

Linkage between objective, content, methods, measurement and evaluation.

Topic 3. - ICT, its classification and its application in the teaching-learning process of the English language.

Objective: To reinforce the importance of ICT and its classification in the teaching process.

Content:

Importance of ICT in the educational process.

Main features of ICT.

Classification of ICT.

Topic 4. - The IWB and its importance in the teaching-learning process of the English language.

Objective: Highlight the importance of the IWB in the teaching-learning process of the English language.

Content: Definition of the IWB. Characteristics of the IWB. Importance of the IWB. Use of the IWB. Socialize the Handbook on the use of the IWB with the people involve.

Didáctica e Innovación educativa

