



UNIVERSIDAD DE QUINTANA ROO

División de Ciencias Políticas y Humanidades

The Use of *Enciclomedia* and Web Quest in Teaching English as a Foreign Language (TEFL) in Primary School

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1. Introduction

Enciclomedia and the advantages of using the Internet to do activities for an English class are convenient when working in schools where the facilities allow the use of this technology. Technology is a fundamental tool around the world these days; the use of new technology represents an important innovation because it facilitates and enriches daily work in the employment, education, informative, culture, and social areas.

The Mexican educational system establishes, in a legal and curricular framework, a teaching model that intends to adapt teaching to social needs, in other words, a teaching pattern that caters for a diversity of learners according to the *Instituto Nacional para la Evaluación de la Educación* (INEE, 2008). Due to these changes made during 2006-2007 through an **Excale** data base it became evident that **language** and **communication** were needed to be reformed altogether with mathematical thinking. To this end, different measures have been taken mainly regarding the distribution of the contents and learners. In the field of Education, technology has tools to be used by the teacher, for example from the use of a tape recorder to more sophisticated electronic devices such as computers, projectors and the internet.

Internet offers a never ending sort of resources which constitutes a challenge for a customary user, so that he or she could increase the abilities for a suitable searching in a precise mode and with effective and useful information, thus the Internet could become an important tool for the classroom gathering required data. For this to happen it is important that teachers are highly **skilful** first in order to instruct students to use a search engine to accomplish an assignment and, secondly, to develop a good research work by the end of the course with the right indications presented by the teacher.

The use of the *Information and Communication Technologies* (ITC) make schools' environment emerge into this new reality by offering students a thorough formation and providing them with the tools that can guarantee their role as individuals in society.

Teaching English as a Foreign Language (TEFL) in public schools is one of the main objectives of the current government in Mexico due to the growing demand of the English language speakers in several sectors of industry, and tourism. Even though the subject as a

foreign language (English) has been taught for many years, it was until now that it acquired significant importance at primary schools as a tool for *competence* as an integral part in the formation of new professionals later on. Without the ability to communicate and understand a culture on its own terms of the Education, Cultural and Social field, true access to that culture might be barred. Since globalization, mobility and communications are bringing the world ever closer together, ever more urgent was the need for global citizens to be competent in other languages; thus, the growth for language learning around the world has been increasing within the past years.

Since the need for learning a second/foreign language became evident, English became part of the basic education. English has been taught at Public Secondary schools since 1926, however, these needs have penetrated deeper in society and nowadays the language has been included in the curricula of public primary schools as well. The Federal government desired to share this with all the people and they did not want it to be a privilege only for those students that attended a private institute. Languages are part of the cultural richness of our societies and the world in which we live and work.

Learning languages contributes to mutual understanding, a sense of global citizenship and personal fulfilment. Pupils learn to appreciate different countries, cultures, communities and people. By making comparisons, they gain insight into their own culture and society. The ability to understand and communicate in another language is a lifelong skill for education, employment and leisure in this country and throughout the world, and so it is important for the scope of education in Mexico to consider the inclusion of English as a subject matter in the curriculum now of primary schools.

In basic education, more specifically, in primary schools, educational **materials**; books are free and are provided by the *Secretaría de Educación Pública* in Mexico. They should be related to content and the educative model: books should bring the activities that would be used in the different subjects like Spanish, Mathematics, history, geography, civic education, and natural science.

The *Secretaría de Educación de Quintana Roo* (SEQ), together with the federal institution the *Secretaría de Educación Pública* (SEP), have developed a project to provide schools with

materials, and equipment. These schools should accept to use technology and transform the traditional classroom into an interactive classroom using *Enciclomedia*. The material should also be designed for the three levels of basic education. These three levels were designed based on the *Reforma Educativa* in Mexico, approved last year in Mexico City by most of the states of the Republic to change the way classes were given in kinder garden, primary school, and secondary school.

TEFL in the state of Quintana Roo is of paramount importance because of its touristic nature. In this state, English could be used at different areas: hotel jobs, tourist, in different fields from hotel management to education not so exploited in different regions of the country. For example, in the Riviera Maya the hotels introduced classes of English for Specific Purposes (ESP) to their employees in order to make them more proficient in the English language when performing what they were supposed to do like front desk activities, hosting, accommodation, giving information to hotel guests.

SEQ, SEP and the Government of Quintana Roo are all committed to reach the New *Reforma Educativa* that would allow all students to have the same opportunities in the work field after school. In Quintana Roo what is looked after is to make people affordable and capable of performing any activity that involves English so that investors and businessmen can hire local resources instead of bringing different people from other parts of Mexico or the world.

I worked as a teacher of English at two primary schools: Jesús Cetina Salazar Public Primary School and at the Comodoro Manuel Azueta Naval Primary School. The advantages I **have** encountered while working there have been a lot mostly at Comodoro Manuel Azueta primary school, because this school has been working with computers in the classroom to reinforce what students have been learning before with the aid of *Enciclomedia*. By working at those places my personal know-how has become sensitive to the role of an EFL teacher with the aid of technological supplies. My experience as a teacher of English at primary school and the enjoyable and useful use of ITC I did impelled me to share this experience with other students and teachers. I hope they would find some valuable pieces of advice for their courses in the future.

1.1. General Objective

Teaching English for two years to young learners is one of the most interesting experiences for me. The purpose of this descriptive work is to present facts in which the use of *Enciclomedia*, Web Quest as well as the Internet have helped me in the development of my lessons and show teachers of English that they might find the interaction with this kind of technology in the classroom interesting as I did.

1.2. Rationale

Most of the time teachers are afraid of using any sort of technology in the classroom perhaps due to malfunctions of the electronic devices, missing wires, or because they were ashamed of not being good users as many of the students were. Using technology for TEFL increases the opportunities of goal achievement of both teachers and students. Nowadays, ICT is a reality around the globe; taking part of this evolution is only a simple part of being a teacher: people never stop learning; knowledge cannot be stopped, but guided appropriately to produce excellent results in and out of the classroom.

Enciclomedia helped with most of the contents in the curriculum and provided me with a good system for evaluation; it allowed me to create a different environment in which the teacher could lead their class in order to make students reach the plus one level that benefited them in the development of the activities.

Utilising Web Quest is not very complicated if teachers take a basic course of computers and Internet use in order to apply this knowledge and skills in the classroom, but not a simple course that let them incorporate this tool into their classes in a gradual, effective and easier way but a course that also makes them aware of the advantages that might imply.

Technology was a useful tool that brought a diversity of ideas for the new teachers that might have the intention of working in basic education either public or private schools, taking into account the pros and cons of both entities too. Maybe with this, new teachers would not be ashamed of asking for the equipment if the institute has or they would also notice that technology might simplify things in the classroom when used appropriately.

2. **Contextual framework**

Public education is an education mandate offered to children of the general public by the government, whether national, regional, or local, provided by an institution of civil government, and paid for, in whole or in part, by taxes. On one hand, the term is generally applied to basic education, kindergarten to twelfth grade (K -12) education, or primary and secondary education and it was also applied to those post-secondary and advanced education, or universities, colleges, or technical schools enjoying public support.

The Navy gives a lot of value to education. The Navy encourages all students to pursue their education and gives all workers the opportunity to enrol their children in primary school. To help the members of this federal association, the Navy offers money to their schools and ways to pay off student loans. The high level of education and discipline ruling the **Naval education** has made it one of the most **desirable** schools to attend.

The setting for the development of this tool, Web Quest and Enciclomedia, took place in two primary schools that are different in background and social standards. Both schools are located in Chetumal and offer classes only in the morning shift from 07:00 a.m. to 12:30 pm from Monday to Friday.

2.1. Comodoro Manuel Azueta Naval Primary School

The Comodoro Manuel Azueta Naval Primary School is located on Belize Avenue with the intersection to Insurgentes Avenue just in front of a gas station. This school works with a federal budget granted by the Mexican Ministry of the Navy.

The facilities included 13 classrooms full equipped with air conditioning, a computer, a projector, fans and a tape recorder. A warehouse, six bathrooms: two for girls and two for boys, one for female teachers and one for male teachers, and one infirmary; the new computer and language centre was under construction. It had a lunch area, a main square, two sports areas and a playground too.

The staff consisted of one principal, one assistant principal, one secretary; the teaching staff had 18 professors and 13 the ones that were in a classroom with students, one teacher of physical education, one psychologist, and one security officer at the main gate. All teachers were officers on duty, graduated from the National Naval School that studied pedagogy and now teach the different subject matters (courses) at the school.

In 2008 the school's enrolment was about 390 students distributed in: two groups of 1st grade, two of 2nd grade, two of 3rd grade, two of 4th grade, three of 5th grade and two of 6th grade. The classes of English were part of their curriculum and were from Monday to Friday for the students of fifth and sixth grade from 7:00 to 9:00, three classes per week for each group. *Enciclomedia* was used to make students get used to computers, also activities to make sure they were capable to use the different basic functions, and Web Quests activities to present the final project in front of the rest of their classmates. Since the current educational model predominating basic education is the traditional in which students are used to receiving all information without any effort, and learning concepts by memorisation and repetition, I considered important to involve students, teachers and families after explaining to the principal what it could be if I used technology in the classroom.

Parents in this school were very devoted every minute of the day to their children's education and asked for their children progress, and they were very enthusiastic about the way students liked to build up their own knowledge by making them thinking. Teachers on the other hand, thought the aspect of stay still by the desk in the classroom should be avoided, though it is hard for them due to their military formation, discipline and order stands for, and they think children have to do what adults tell them what do and what to say.

2.2. Jesús Cetina Salazar Public Primary School

The Jesús Cetina Salazar Public Primary School was located on Rafael E. Melgar Street next to the City Hall, in front of an *Auditoría Superior del Estado de Quintana Roo*. The facilities included 12 classrooms equipped with regular fans and a tape recorder, two of the 12 are equipped with *Enciclomedia*, both from 6th grade.

A warehouse, two bathrooms: one for girls and one for boys, the principal's office, the Unidad de Servicios de Apoyo a la Educación Regular (USAER), a lunch area, a main square, two sports areas and a playground.

The personal staff consisted of one principal, one assistant principal, 12 teaching staff, one for each group, one teacher of physical education, one psychologist working at USAER area with children that show learning problems, all teachers are graduated from Javier Rojo Gómez Normal School for teachers, and two cleaning assistants.

The school's enrolment was about 355 students distributed in: two groups of 1st grade, two of 2nd grade, two of 3rd grade, two of 4th grade, two of 5th grade and two of 6th grade. English classes were from Monday to Friday after the regular classes for students of third and fourth grade in which teachers of English gave them tasks to be achieved by the use of Web Quest, and each group had three hours a week.

Both schools had students willing to learn how to use a computer, how to use technology whenever they get into it at home, at their parents' work, relatives or friends' places, and most important the willingness of learning a foreign language like English through activities that were related to the use of technology inside and outside the classroom.

In public school, however, teachers of English have to struggle between the old traditional models and call forth the predominant role that unions play to the education system, and most of old school teachers that are against new ideologies, methods and concepts that might allow an excellent advance in quality and equity for all (Un modelo educativo para México, 2006).

Never-the-less, the principal gave all her support to the subject of English and allowed the use of computers in the classroom, he talked to the teacher staff and made them realise about the importance of making students competent for different situations. Parents also supported this project and were happy that children could learn both English and the use of computers and Internet at the same time.

3. **Theoretical Framework**

It was important to base this paper work on theories because they determine and prove that a subject of study has been seriously analysed before and how it has worked for good or not, besides that by clearly stating the theories that support this paper the reader could go back to them and check on for further information; I connected this paper work with the Maslow's Hierarchy of Needs, the Constructivism Theory, the Humanism Theory, and the Communicative Approach as a background to support what it has been taught in the classroom with the ICT, *Enciclomedia* and Web Quest.

ICTs (Information and communication technologies) are simply tools for communicating, creating and sharing information. In communities where plan works, traditional ICTs are storytelling, village meetings, music and song, socialising, and physical movement within and between communities. But these "old" ICTs have a very short range, and the remote nature of many of these communities is one factor that has exacerbated their relative poverty and disconnectedness in 21st century society.

In the following section, I make reference to some of the authors whose theories were useful to support my paper work. I consider these theories important and useful because they are related to TEFL and indicate the use of new ICT at school and the benefits of teaching with the aid of this type of tool.

The theoretical framework I have been working with like the Communicative Approach that deals with meaningful learning, and Progressivism which suggests that school should encourage cooperation rather than competition, were essential in my practise when working with the students; also the use of Maslow's Hierarchy of Needs that indicated the progress of the student in the use of electronic devices, because students were used to compete among each other without sharing or helping the one student that might need it the most.

I highlighted the experience I had with children between 8-12 years old that used technology to complete the tasks given in the classroom from these two primaries, one public and one semi public. I hope I have reached my goal which was to show how students could attain

good results when using technology appropriately and the use of Web Quest when searching for specific information.

The activities for Web Quest allowed students and teachers to collaborate with each other and feel comfortable when working with a computer. The use of technology allows the person who uses it to learn more about the language, to make choices about published materials, to modify the format of already designed materials, to create completely new materials, to change the way information is shared by providing students with a new tool to learn inside and outside the classroom, beside that technology energises some people's teaching and learning (Bunting, J. 2006).

Education and business worked the environment to make crucial the use of technology; ICT development was only one of the important factors affecting growth. The cross-section model applied in 60 countries indicated that the quality of a country's business environment, as well as its attention to specific ICT enablers such as education, significantly affected their ability to harness the full benefits of technology (The Economist Intelligence Unit, 2004).

However, community groups with low incomes living in undeveloped countries hope to use technology to engage people had to deal with the reality that many people did not have access to ICT, especially the most excluded groups such as the homeless or those leaving in prison that represents a different economic sector.

Unfortunately, public access to the use of technology is delivered by educational bodies that were more familiar with formal, qualification-led, learning. Many people who have a bad experience at school are not motivated to take up formal courses. They often see it as "not for people like them." My own parents, who left school without qualifications, felt exactly like this and nothing I ever said could shift their point of view. The only way was to support people to learn about ICT in very informal, peer-led environments, starting with their interests to provide a tour of the web (Hellawell, S., 2001).

One of UNESCO's overriding aims is to ensure that all countries, both developed and developing, had access to the best educational facilities necessary to prepare young people to play full roles in modern society and to contribute to a knowledge nation. Maintaining the capacity to

advise national governments on the use of technology at schools and, in particular, on the optimal balance, given by local circumstances, between ICT and older educational technologies to assist countries in developing educational software and materials that reflect their own national and regional cultures are key components of the Organization's strategy to achieve the *Education for All* goal (UNESCO, 2002).

The importance new ICT played in Education goes back to 1998 when in countries like the United States the government looked for new ways of including this tool in the reform to the curriculum in teaching among all their schools' levels. But not only was the US intending to catch up with the new wave leaving behind the traditional use of the classroom-centred to move into the use of personal computers (PC) but also Hong Kong had a household PC and Internet penetration rate of 68% and 60% respectively in 2003. Some students had limited access to computers after school. An incentive grant has therefore been provided for over 1,000 schools to extend the opening hours of their computer rooms/facilities to be used by students (Education and Manpower Bureau, 2004).

It was proved by Michael W. Dunn (2006) that teaching with the aid of some kind of technology improved student's ability to focus onto the tasks set in the classroom. All skills should be integrated into meaningful content rather than taught as separate learning activities.

Kathryn Burke (n/d) on a research conducted in Australia found that using technology was not always enough for a good learning but to integrate technology outcomes of the board of studies K-6 syllabus, and to ensure that the teaching and learning remained focused on learning outcomes and 21st century skills. The aim was for real-life context and technology to meet and achieve outcomes in the curriculum through an inquiry-based approach.

Like Mexico, Africa showed a low access to the new technologies and it was recommended that African governments and their international partners prioritised ICT access and effective use at all levels, including the provision of public access facilities, relevant content, and increased capacities providing the context, describing how ICT can be used to boost economic growth, its role in poverty reduction efforts and the current situation of ICT in Africa and it showed how helpful it can be.

Africa's available ICT infrastructure was not fully utilised due to its low physical and techno-logical capacity (as was the case for Internet bandwidth) and due to gaps in interconnectivity, both at regional and international levels.

The following figure shows the capacity of connection to Internet between Europe, Asia, America (United States, Canada; Latin America) towards Africa's infrastructure and capacity (Africa Partnership Forum, 2008).

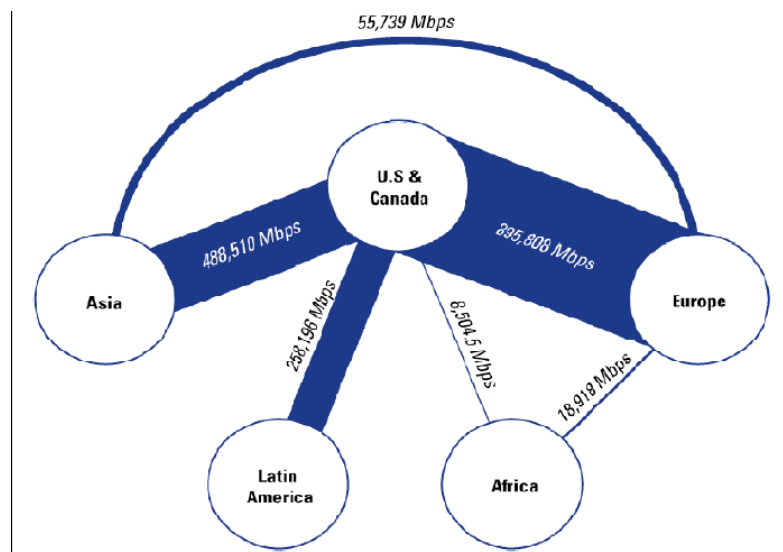


Fig. 1 Worldwide Interregional Internet Bandwidth 2006

(from: www.telegeography.com)

Human capacity was often another bottleneck to the spread and use of ICT across the world and especially for the Internet, its use was dominated by a tiny educational elite. Ninety-eight percent of Ethiopian Internet users had a university degree—in a country where 65 percent of the adult population is illiterate. Finally, women had less access to ICTs than men. Only 38 percent of the population polled in urban Latin America used a computer and Internet they all were women. The numbers were even more skewed in Africa: a survey of African users found that 86, 83, and 64 percent of Internet users in Ethiopia, Senegal, and Zambia, respectively, were male (Kenny, C. 2001).

However, the impulsion for educational reform did not come in the first place from any abstract recognition of the deprivations suffered by the young. It arose from reactions to

widespread changes in the conditions of life which affect all age groups. Their new situation forced both parents and children to seek new ways of satisfying the new demands thrust upon them. The child brought up in a tenement or an apartment in crowded city streets had different needs and faced more complex and perplexing problems than the child on a family farm.

Even though educational systems, to different degrees worldwide, were struggling to afford educational opportunities for all, to provide their graduates with the necessary knowledge and skills for evolving marketplaces and sophisticated living environments, and to prepare citizens for lifelong learning to fulfil and expanding access to education was a matter of both economic development and social justice. Education was positively related to development—that was, a higher proportion of the population of the most developed countries has attained higher educational levels than the population of developing countries (Haddad, W. and Jurich, S. 2002).

Concerns over educational relevance and quality coexisted with the imperative of expanding educational opportunities to those made most vulnerable by globalization—developing countries in general; low-income groups, girls and women, and low-skilled workers in particular. The International Labour Organization defined the requirements for education and training in the new global economy simply as “Basic Education for All”, “Core Work Skills for All” and “Lifelong Learning for All” (Vere, A. 2007).

Improving the quality of education and training was a critical issue in the United States on the early 1900s, particularly at a time of educational expansion. ICTs could enhance the quality of education in several ways: by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training.

Research has shown that the appropriate use of ICTs could catalyse the paradigmatic shift in both content and pedagogy that was at the heart of education reform in the 21st century. If designed and implemented properly, ICT-supported education could promote the acquisition of the knowledge and skills that might empower students for lifelong learning (Tinio, V. 2002).

Developing students ability to think is the parcelling out of instruction among various ends such as acquisition of skills (in reading, spelling, writing, drawing, reciting) and acquisition

of information (in history and geography). Training in thinking was a measure of the ineffective way in which we accomplished all three (Dewey, J. 1916).

The implications of such a view for education are threefold: 1. teaching is always indirect. Kids do not take in just what is being said. Instead, they interpret what they hear in the light of their own knowledge and experience. They transform the input. 2 the transmission model, or conduit metaphor, of human communication will not do. To Piaget, knowledge is not information to be delivered at one end, and one encoded, memorised, retrieved, and applied at the other end. Instead, knowledge is an experience that is acquired through interaction with the world, people and things. 3. A theory of learning that ignores resistances to learning misses the point. Piaget showed that indeed kids have good reasons not to abandon their views in the light of external perturbations. Conceptual change has almost a life of its own.

Nevertheless, there are other perspectives involved in this aspect like the way teachers as facilitators or guides should make students discover their own abilities and let them build this knowledge from scratch with a role that led them to the right track of education by using different tools. According to the Cambridge[®] dictionary, a facilitator is the person that promotes and makes possible the good use of techniques and tools to achieve a specific goal by helping him or her with appropriate guideline, creating an atmosphere of reasoning that would allow the person to complete successfully the task (Cambridge Dictionary, 2009).

Technology usefulness has aspects to be considered like the way it might support the curriculum: this has to be culturally appropriate to the needs that people have and that is affordable now to most parents. It uses an authentic scenario and tasks to stimulate higher cognitive thinking processes, promotes collaboration, and includes programme goals and student outcomes.

3.1. Vygotsky: The Zone of Proximal Development related to Problem Solvers in ICT

Vygotsky's theory of cultural appropriation is not so different from Piaget's notion that children learn through acting in the world—i.e., through relating to people and things. This being said, Vygotsky put greater emphasis on *how* the presence of adults with greater expertise could “speed up” and enhance a child's self-directed learning, and how *shared* cultural artefacts are

used to help mediate this process. More than Piaget and Papert, Vygotsky stressed the role of adults *as teachers*, and cultural artefacts as *teaching tools*. One of the key concepts in Vygotsky's theory was the notion of *zone of proximal development (ZPD)*.

The ZPD defines a potential *area of expansion* that each individual has at their disposal to overcome their limits, provides the social environment in which the learning takes place "pitches in". In other words, the zone of proximal development tells us "how far" we can push the envelope of what we knew, when helped by others. It is, again, through social interaction, that learners can mobilise, and best use, the *psychological tools* available to them (Ackermann, E. 2004).

By considering Vygotsky's zone of proximal development, which he defines as the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers, (Vygotsky 1978) I think that there was enormous potential for ICT in a primary environment. In Mexico the use of ICT in Education shows **the necessity of increasing** the curriculum in secondary school by implementing the subject of Computer science and Computer programming as a second branch. This is necessary to teach digital literacy in a very elemental level (Carnoy, M. 2004).

As the years go by, technology has penetrated to a certain degree in education and teachers have shown it was necessary to bring down the technological barrier that has been blocking progress due to the fear that the use of an electronic device represented. By the year 2003 the program Enciclomedia started with the purpose of integrating the new ICT to the teaching-learning process.

As a result of the incoming adaptations to the curriculum in Basic Education, teaching English in a primary school makes teachers part of the system that rules at the moment; besides teaching bases on communication the whole class, now new ICTs must be included, so that teachers make feel their students they are capable of doing the tasks marked on the course book. The purpose was to make students aware of what they were learning, to perform what they are supposed to do and most important to be aware of their own competence.

3.2. Competence and the Communicative Approach.

The concept of communicative competence and the Communicative Approach focuses on meaning and function, language authenticity, and integration of the four language skills. The communicative competence is to have more than grammatical competence in order to be able to communicate effectively in a language, to know how the language is used by the members of a speech community to accomplish their purposes. Hymes (1971) states that the competence for use is part of the same developmental matrix as competence for grammar. In application, the Communicative Approach relies heavily on pair and group communication activities, such as information gaps and biographical data bases that immerse students in situations that required communication.

Communicative language teaching make use of real-life situations that necessitates communication. The teacher sets up a situation that students are likely to encounter in real life. Unlike the audio-lingual method of language teaching, which relies on repetition and drills, the communicative approach can leave students in suspense as to the outcome of a class exercise, which would vary according to their reactions and responses. The real-life simulations changes from day to day. Students' motivation to learn comes from their desire to communicate in meaningful ways about meaningful topics (Berns, M. S., 1984).

It is important to encourage the processing and integration of new information, in place of the meaningless repetition that is pursued elsewhere at school and home. The rapid improvement of the students is due in part to the fact that their second language is not learnt from scratch. Vocabulary and grammar have meaning within wider intellectual skills and Communicative competence, indeed, they include the whole of linguistics competence plus the whole of the amorphous (indefinite shape or form) range of facts included under socio-linguistic pragmatic competence (the rules and conventions for using language items in context and other factors like attitudes, values, and motivation). Then students gain a deep understanding of the relationship between words/grammar and ideas. They achieve a sense of the role of language in developing and explaining opinions and interpretations, facts and observations, emotions and desires.

The purpose of language is to enable a systematic means of communicating and in human society, it is through words. Except for man, the entire universe creates and communicates in silence and non-verbally—and animals, of course, communicate or process information as well, but do not use human words.

The common concept of human beings is that they are by nature irrational, unsociable, and destructive of themselves and others. On the contrary, the Client-centred point of view sees people as basically rational, **socialised**, forward-moving, and realistic according to Carl Rogers (1969), the counsellor accurately understand the client's thoughts and feelings from the client's own perspective.

The Client-Centred Therapy (CCT) was developed by Carl Rogers in the 40's and 50's. It is a **non-directive** approach to therapy, "directive" meaning any therapist behaviour that deliberately steers the client in some way. Directive behaviours include asking questions, offering treatments, and making interpretations and diagnoses. Virtually all forms of therapy practises in the United States are directive.

A non-directive approach is very appealing on the face of it to many clients, because they get to keep control over the content and pace of the therapy. It is intended to serve them, after all. The therapist is not evaluating the clients in any way or trying to figure them out.

The foundational belief of CCT is that **people tend to move toward growth and healing** and have the capacity to find their own answers. We know that the facilitation of such learning rests not upon the teaching skills of the leader, not upon his curricular planning but into the relationship between the facilitator and the learners (Rogers, C. R., 1969).

Nevertheless, the Communicative Approach has been used in the classrooms around the world with an optimistic attachment, the way all four skills are developed and the final product. I considered the Communicative Approach can be taught through the new ICT by applying the essential parts that allow students to interact with each other and have a meaningful learning at the end of the day by using or manipulating technology in the classroom. However, it was necessary to be always in the vanguard of new tools to improve the class of English and the way

it is taught because teachers are role models that let students know the way he or she is prepared and organised.

3.3. Reforma Educativa: Alianza por la Educación 2008

The Reforma Educativa established in 2008 by the representation of all teachers in Mexico, the *Sindicato Nacional de Trabajadores de la Educación* (SNTE), and the Federal government and SEP proposed an alliance to transform the way education is settled down in Mexico compared with other countries in Europe and America. It is essential to prioritise three basic necessities and with the help of a deep evaluation it was shown that health, food and feeding, and social and communal development required to be improved in order to reach high quality and a full restructuration in the educational framework.

The alliance could create a tool for life and school in which the education institutions would have the duty to implement values development and competence that might generate production and promotion in the different sectors after school (SNTE, 2008).

One of the objectives of the *Reforma Educativa: Alianza por la Educación* is to improve schools by modernising them with the appropriate facilities and equipment, introducing the new ICT for the classroom, and to make sure that society gets involved in the process. The reform allows the English language to be inserted as a subject in the curriculum from kinder garden to secondary level now in public education, since it is being taught in secondary level only in the past years. Also, the updating for all teachers and authorities like supervisors and principals, besides the welfare and integral development for all students have been required. One way of achievement is the reform made to the curriculum by implementing the development of skills and competence (SNTE SECCIÓN 38, 2008).

Even though each state in Mexico is trying to apply the new model in basic education, it is a generality to promote meaningful learning through new routes to access knowledge through technology, it is useful in the process of creating new environments in which teacher-student can feel attract to, find it useful, and organised. For this, the federal institution and the local ones were working together in order to obtain the best results of this (La Comisión de Educación Pública y Servicios Educativos, 2008).

Implementing the use of technology has been a long hard way to reach due to all vices involved in the system; however it has shown good progress and acceptance by the society and the new teachers that wanted something better, especially with the use of computers and the teaching of English for free.

3.4. Enciclomedia

As students become increasingly “digitally native” their teachers face the ongoing challenge of keeping up with technology for providing relevant and current language instruction. However teachers will benefit from more practical advice on the type of technology best suited to achieve those aims and meet learner needs (Chylinski, R. 2006).

Enciclomedia was created in 1998 by Dr. Felipe Bracho Carpizo when he was director of the *Investigación Orientada* Department at Consejo Nacional de Ciencia y Tecnología (CONACYT). The programme was thought to optimise the educational materials that already existed in order to create a data base that would include information based on free text material given by SEP in Mexico (Enciclomedia, 2009).

The aspects that allowed the programme to become part of the educational system are the objectives in the proposal to structure it as a technological tool like: the development of *Enciclomedia*, teachers’ training and pedagogical support the right suitability and equipment requirements for the classroom, and monitoring and evaluation. The programme takes into consideration the design of the programme updating and training to guaranty the acceptance and performance by the teachers and students (SEP, 2004).

The release was only until August 2003 then the **programme** was promoted in primaries school to support what teachers have being teaching to students in the 5th and 6th grade, with the vision of expanding the use to all grades in the future. *Enciclomedia* is a **programme** that allows the use of technology in the classroom by using a computer and a software to teach the different subjects addressed to the three levels of basic education that are kinder garden, primary school, and secondary school. This program let the text books get linked to the platform by interacting with the students when the figures and exercises related to their contents in the curriculum are

shown in the screen of the PC (Departamento de Actualización y Capacitación del Magisterio, 2009).

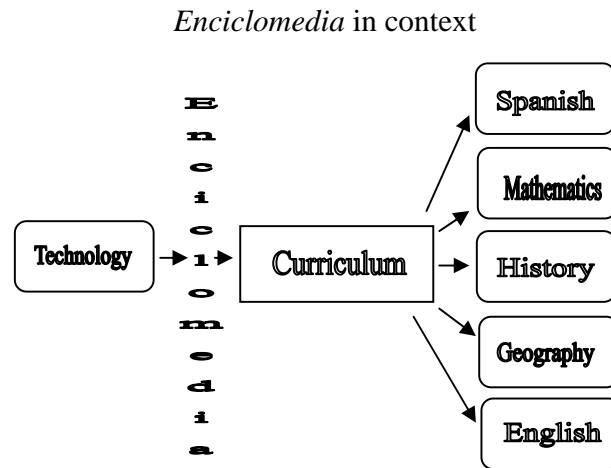


Fig. 2 *Enciclomedia in context*

Enciclomedia has joined to the Internet by making use of it, making easy the search for supplementary information about the topic seen in class. The software has a data base that allows access to Internet through links presented on the screen, and these links show interactive exercises that make students get used to vocabulary, listening, writing, speaking and reading activities that can be manipulated either by the teacher or the student.

Enciclomedia promotes the creation of meaningful learning through new routes of access to get knowledge that leads both, teachers and students to new attractive and useful environments from the inclusion of new audiovisual languages as a complement for the construction of the new message to improve teaching practise.

For example, in the Mexican state of Tabasco, *Enciclomedia* is used based on the Communications Model of Intergovernmental Policy Implementation. Thanks to the support of the *Secretaría de Educación Básica de Tabasco* the implementation of this programme is being supervised considering pedagogical and technical aspects. The objective is to identify the elements that affect the good operation of *Enciclomedia* in the local agencies (schools) of Tabasco.

The results show a great acceptance among teachers, even though there is little resistance *Enciclomedia* represents an opportunity to value their teaching practice in the classroom by using the programme as a tool for their own professional formation. However, the problem is detected in the funds budgeted for different programmes that work to fight school lag (García, V. 2008).

Enciclomedia has become an essential tool for most teachers and students. The access to the Internet through *Enciclomedia* allows consulting the different sources of information; it helps in the use of other subject matters like Mathematics and Sciences, and also allows implementing another way of working in groups.

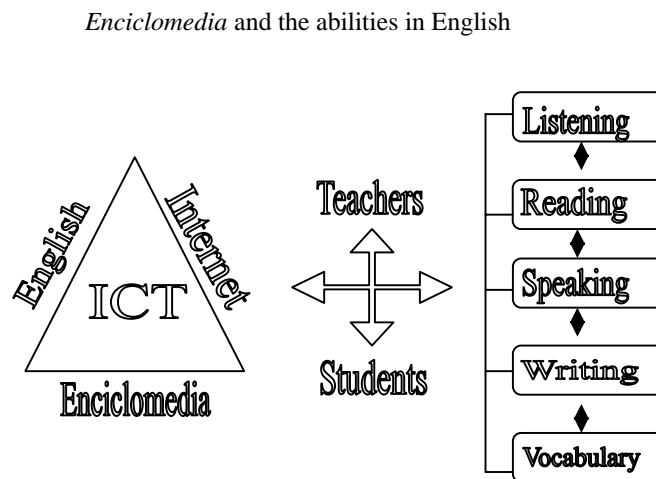


Fig. 3 *Enciclomedia* and the abilities in English

3.5. Web Quest

The creation of Web Quest **dated** from 1995 in the United States of America that allows the teacher to create programmes to encourage guided investigation and let the students build their knowledge. Web Quest favours analysis of contents and develops a critical vision of information (Dodge, B.; March, T. 1995).

With more and more information available to middle and high school students to conduct research, they probably need to be able to find information more expediently. This is the reason

why to develop and apply a Web Quest activity designed to promote students' ability to inquire and collaborate.

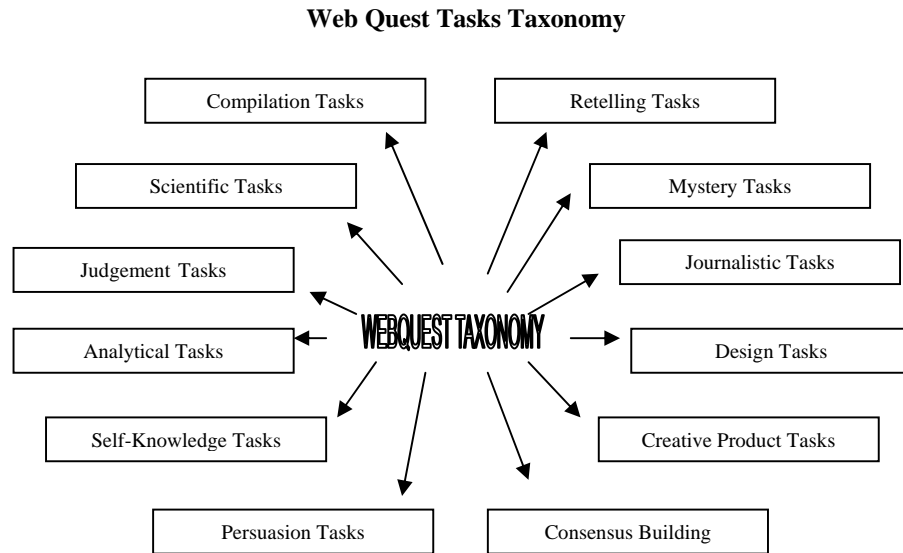


Fig. 4 Web Quest Tasks Taxonomy

3.6. Collaborative Learning

Collaborative learning occurs when small groups of students helped each other to learn. The aspects that might indicate a need to be assisted in the classroom when working in teams and gathering data can be used to promote a better interaction with each other, thus students are costumed to attain all the information provided only by the teacher. Traditional education often stressed the learning of facts, as opposed to the development of higher-level reasoning skills that enable students to grasp the meaning of information and analysed, evaluated, synthesised, and applied it (Klemm, W. R., 1994).

Web Quest is a tool that allows students to work in teams, but not the classic team work in which students have a reunion at someone's place and the most intelligent of the group does the project, and at the end just includes the names of his or her team mates. Web Quest is manipulated by the teacher in order to make all members of the team work and share what they have gathered, so that they can work as a team and collaborate by filling out the missing parts of the project or reinforcing what was needed.

To construct their own knowledge it refers to the idea that learners construct knowledge for themselves, each learner individually and socially constructs meaning, as he or she learns. We have to focus on the learner in thinking about learning and not on the subject/lesson to be taught. There is no knowledge independent of the meaning attributed to experience (constructed) by the learner, or community of learners. Web Quest allows students to create their personal opinion about the investigation and helps them start sharing points of views and feedback among each other without destroying the others but being critical about the topic.

Learning is an active process in which the learner uses sensory input and constructs meaning out of it. The more traditional formulation of this idea involves the terminology of the active learner (Dewey's term), stressing that the learner needs to do something; that learning is not the passive acceptance of knowledge which exists "out there" but that learning involves the learners engaging with the world (Hein, G. 1991).

3.7. Constructivism

Constructivism, in a nutshell, states that children are the builders of their own cognitive tools, as well as of their external realities. In other words, knowledge and the world are both constructed and interpreted through action, and mediated through symbol use. Each gains existence and form through the construction of the other. Knowledge, to a constructivist, is not a commodity to be transmitted— delivered at one end, encoded, retained, and re-applied at the other— but an experience to be actively built, both individually and collectively. Similarly, the world is not just sitting out there waiting to be uncovered, but get progressively shaped and formed through people's interactions / transactions (Ackermann, E. 2004).

According to Piaget's developmental theory children become progressively detached from the world of concrete objects and local contingencies, and gradually capable to mentally manipulate symbolic objects, within a realm of hypothetical worlds. The focus is on the construction of *cognitive invariants* as means to interpret and organise the world. Piaget's empirical studies shed light on the conditions under which learners are likely to maintain or change their views of a phenomenon when interacting with it during a significant period of time (Piaget, 1975).

According to Papert, projecting out— or externalising— our inner feelings and ideas is as important as internalising our actions. In expressing ideas, or giving them form, we make them tangible and shareable which, in turn, help shape and sharpen these ideas. Externalising ideas is also a key to communication with others. We can only negotiate meaning through tangible forms: our own expressions or existing cultural mediations (language, tools, toys). The cycle of self-directed learning is, to Papert, an iterative process by which learners invent for themselves the very tools and mediations that best support the exploration of intriguing ideas (Papert, S. 1980).

Perhaps so many kids “tuned out” of school because teaching and learning do not fall into their range of life experiences. Learning is different for each individual. Teaching practices based on constructivism are flexible and vary and therefore respond to different learning needs. On the other side, computers offer students individualised learning, allowing them to progress at their own pace.

Teachers are often urged to use the new technologies in their instruction. However, training is rarely forthcoming. While National Standards of Technology are part of the elementary curriculum, technology is also used in the content areas as a tool to facilitate learning. As such, it needs to be incorporated with other methods of instruction and careful planning must take place in lesson design. Web Quests are an example of a web-based activity that can engage higher order thinking (Paul, K., 2009).

According to the British Columbia Institute of Technology (BCIT) Problem-solving, research skills, analytical skills, conceptual thinking and flexibility in thinking, being able to think innovatively, and to a lesser extent, evidence-based decision-making are all thought to be important by the focus groups to demonstrate skill in face-to-face environment with authentic material or model (BCIT, 2002).

We know that students were normally in classrooms where direct instruction is the only mode of teaching. The hope is to change both students’ and teachers’ perceptions of web-based lessons in the classroom, as well as to make them conscious of the importance and usefulness of these educational tools.

Students have to participate in the process of how they will make the first contact to a Web Quest task, the level of autonomy and creativity is enhanced during the whole project. With the proper guidance and scaffolding, students could learn a lot and can develop several skills. Students like things and we educators can do a great service by showing them what the Internet is good for and can empower them with the right strategies and skills to take advantage of the educational power of the Net.

A goal of the teacher training program is to help students learn about appropriate uses of technology in teaching like Mathematics too, for example, the use of Web Quest to teach Mathematics at Florida State University where recent curricular developments in geometry have been based on the van Hiele model that consisted of five levels of understanding, numbered 0 through 4 by the van Hieles. The activity developing a short-term Web Quests by pre-service mathematics education graduates appears to be a meaningful way to encourage them to consider alternatives to traditional teaching. All groups provide positive responses to the use of Web Quest as a break from the textbook and traditional way of teaching according to Erdogan Halat and Elizabeth Jakubowski who performed an activity related to geometry with students from 7th grade (Halat, E. & Jakubowski, E. 2001).

Web Quest cannot only be used in one specific subject as it is shown here. By using this model in TEFL what we are really doing is encouraging them to read, write, listen and speak in the target language. In this respect then, a Web Quest is similar to other source material used in foreign language teaching (Blasszauer, J. 2003).

The task is the most important part in the use of Web Quest and there are many ways of direct them according to Dodge in his taxonomy in which twelve types of common tasks are described and suggested to optimise its use (Dodge, B. 1998).

The Internet has several advantages as a source of teaching materials; while some of the content of the Internet is several years old, much of it is updated on a regular basis: monthly, weekly or daily. People can get today's news from any number of publications without buying them, with the hope of finding that one useful item. For teaching English is considerably easier to find materials designed specifically for an area, than locating authentic materials on a particular topic, and while using the right tool would certainly better your odds by searching the Internet,

improving Web Quest tasks and *Enciclomedia* reinforcement is part of this important task in the end, furthermore, upgrading your skills in the use of technology (Teeler, D. & Gray, P. 2000).

The use of Web Quest does not intend to use multifarious software nor specialised programmes to create multimedia. Teachers do not need a huge amount of computational knowledge, they need to know how to create the conditions and develop the skills to navigate to the World Wide Web (www), and handle the search engines adequately, dominate the information and the subject itself to be taught, few knowledge in hyper-text mark-up language (HTML) is needed (Dodge, 2002).

According to J. Adell a Web Quest is an attractive and didactic activity for the students that let them **develop** their critical thinking to a high level. It is to know in the process what to do with the information by analysing, synthesising, understanding, transforming, creating, judging, and valuing what was done (Adell, J., 2002). Web Quests need to be designed following a logical order (See figure 5) so as not to lose the sense of the original goal. Occasionally, tasks might be too complex and they might take too much time to be carried out. At times it is difficult to propose tasks that are really effective without assaulting the very pedagogical value that they aim at.

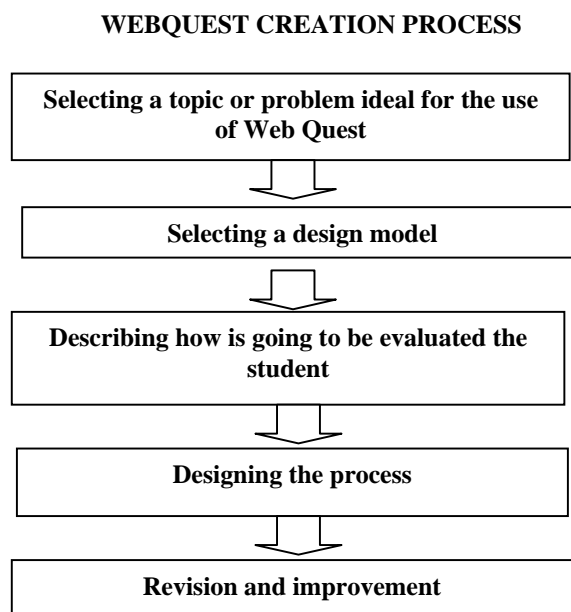


Fig. 5 Web Quest Creation Process

3.8. Bruner: Problem-Solvers in Constructivism

The view of students as active problem-solvers who are ready to explore “difficult” subjects, the teaching and learning of structure, rather than simply the mastery of facts and techniques, is at the centre of the classic problem of transfer. If earlier learning is to render later learning **easier**, it must do so by providing a general picture in terms of which the relations between things encountered earlier and later are made as clear as possible.

According to Bruner (1960), developmental growth involves mastering each of the increasingly more complex modes-- enactive to iconic to symbolic. Mastering this incorporates becoming more skilled in translating between each mode. An example of this sort of translation can be a discussion (symbolic mode) of what students have learnt from an experiment (iconic mode).

An implication of Bruner’s developmental theories is that children should be provided with study materials, activities, and tools that are matched to and capitalise on their developing cognitive capabilities. For example, a teacher wanting to help children learn about dinosaurs can use all three modes. Students can be asked to construct models of dinosaurs (enactive); they might watch a film about, or involving, dinosaurs (iconic); or they can consult reference texts and then discuss their findings (symbolic) (Bruner, J. 1960).

In order to present effective and useful tasks in the classroom, always taking into account that students are problem-solvers and that they need challenge to get really motivated when learning, is good to know that former students, undergraduate and graduate students can count on experience teachers once they get into service.

Web Quests are discussed in terms of how pre-service teachers have worked to construct useful and appropriate Internet activities for students. A pre-service teacher is a candidate to be part of a school in basic education like kinder garden, primary or secondary level. Teachers themselves are the ones that have been working several years at the school where pre-service teachers intend to work.

Many candidates express the belief that they will be able to make additional Web Quests. Teachers’ examples of Web Quests are available on the Internet. They have the experience in

writing lessons, they know the abilities the youth would practise in the Web Quest, the introduction to the Web Quest is made very early in the methods classes for the students, so that it can be integrated to a set of assignments, procedures, and assessments related to the Web Quest (Haas, Channell, Linder, Vandevander & VanSickle, 2006).

3.9. Maslow's Hierarchy of Needs

I used the Maslow's Hierarchy of Need for Web Quest and *Enciclomedia* developed by Abraham Maslow in 1940, because it has been used to study the way students from primary school develop the ability and necessity of using a computer for doing homework and it was applied because it portrayed the psychological aspects that indicated how important and connected to technology the students are.

According to Maslow's Hierarchy of Needs (1940) there are five levels, lower-order needs, which are considered *physiological needs*, while the top level is considered *growth needs*. The lower level needs need to be satisfied before higher-order needs can influence behaviour. "A motive at the lower level is always stronger than those at higher levels". These include needs for understanding, aesthetic appreciation and purely spiritual needs. In the levels of the five basic needs, the person do not feel the second need until the demands of the first have been satisfied, nor the third until the second has been satisfied, and so on (Maslow, A. 1940).

Students are highly remarkable to the use of technology that allowed me to set most of them into the fifth level of the pyramid (See figure 6) which is the self-actualization. Only a few amounts of students are placed into the third and fourth level according to their performance in the classroom.



Fig. 6 Maslow's Hierarchy of Needs Pyramid

The importance of learning might be achieved in order to obtain personal satisfaction or better scholar opportunities. The needs most of the students might have by learning English with the aid of technology such computers and the Internet, probably can be the same for those who like to learn the language by the use instead of the classical way teacher-centred role.

In the levels of the five basic needs, the person do not feel the second need until the demands of the first have been satisfied, nor the third until the second has been satisfied, and so on. Maslow's basic needs are as follows:

3.9.1. Physiological Needs

These are biological needs. They consist of needs for oxygen, food, water, and a relatively constant body temperature. They are the strongest needs because if a person is deprived of all needs, the physiological ones will come first in the person's search for satisfaction.

3.9.2. Safety Needs

When all physiological needs are satisfied and are no longer controlling thoughts and behaviours, the needs for security could have become active. Adults have little awareness of their security needs except in times of emergency or periods of disorganization in the social structure (such as widespread rioting). Children often displayed the signs of insecurity and the need to be satisfied.

3.9.3. Needs of Love, Affection and Belongingness

When the needs for safety and for physiological well-being are satisfied, the next class of need is for love, affection and belongingness could emerge. Maslow states that people sought to overcome feelings of loneliness and alienation. This involved both giving and receiving love, affection and the sense of belonging.

3.9.4. Needs for Esteem

When the first three classes of needs are satisfied, the needs for esteem could become dominant. These involved needs for both self-esteem and for the esteem a person get from others. Humans have a need for a stable, firmly based, high level of self-respect, and respect from others. When these needs are satisfied, the person feels self-confident and valuable as a person in the world. When these needs are frustrated, the person feels inferior, weak, helpless and worthless.

3.9.5. Needs for Self-Actualization

When all of the foregoing needs are satisfied, then and only then are the needs for self-actualization activated. Maslow described self-actualization as a person's need to be and do that which the person is "born to do". "A musician must make music, an artist must paint, and a poet must write". These needs make themselves feel in signs of restlessness. The person feels on edge, tense, lacking something, in short, restless. If a person is hungry, unsafe, not loved or accepted, or lacking self-esteem, it is very easy to know what the person is restless about. It is not always clear what a person wants when there is a need for self-actualization.

In order to combine the theoretical framework to make it worked in the utilisation of *Enciclomedia* and Web Quest in TEFL it is important to emphasise that the use of ICT in these two primary schools has **opened** the possibility to teach on computer-based method due to the facilities and context in which those schools are situated, and the Communicative Approach serves to manipulate the technology in order to make students not only learn something new or reinforce previous knowledge but to make them competent once they are out the classroom.

4. Memoir

The world is experiencing an information explosion of unprecedented proportions. Not only is the volume of new information large, but it is also growing exponentially. Rapid changes in many fields are making basic knowledge and skills obsolete. In this rapidly transforming world, where employment requirements and fundamental literacy expectations are quickly changing, education must also change to meet these demands. The essence of education has been to transmit society's cultural heritage to successive generations and to foster competencies will permit children to successfully participate in a society. To that end, Information technology must become an integral part of the general education curriculum so students are prepared to meet future technology challenges.

Teachers of English would like interacting with different tools and materials in their classroom like Web Quest and Enciclomedia, students might feel engaged with the topics and motivated to fulfil their needs, parents might consider to get involved in their children's school attainments to make better the way is taught. The use ICTs in both primary schools, Comodoro and Cetina, showed the different ways English could reach our personal objectives as teachers, but also it could achieve those provided by the educational institutions.

The raising of new technological equipments made possible to adjust them in the Education field, the low cost that implied for SEP to purchase an amount of these devices and the fact that the supplies are easy to handle now by most people at schools was a potential market to introduce what had been delayed: TICs; the kind of technology that has been implemented in Quintana Roo, according to the head of Departamento de Tecnología Educativa, who commented that it has been used in early years in most schools from Chetumal. (E. -A. Ley, personal communication, February 3, 2009).

I took a continuing education training based on guideline at school, and another related to values in education and Educational Technology that would allow me to increase my skills in the use of the new ICTs provided by the Instituto Tecnológico y de Estudios Superiores de Monterrey.

My professional training at UQRoo University has helped me with the role of a teacher in front of a classroom thanks to all the techniques I learnt and that I have been able to put into practise with my students. Furthermore, I explain how the use of *Enciclomedia* and Web Quest made students feel they learnt in a different way from the traditional one they were used to, and explained also the conveniences that using technology in the classroom gave the teacher when working adequately the Web Quest.

4.1. Description of the activities performed at work

Since I started working as a teacher of English in 2007, I became aware of the hard work that it represented being in front of a group of children, catching their attention up and making them do the activities according to the lesson plan. At the beginning I thought it was going to be impossible because my training was addressed to young learners, mostly to teenagers, young adults and adults.

The first school I had the opportunity to start with my practises was at Jesús Cetina Salazar public school because I was working at SEQ at *Coordinación de Inglés de la Zona Sur* with the *Programa de Inglés en Educación Primaria (PIEP)*. I started with six hours a week from Monday through Friday, one hour a day from 11:30 to 12:30. I taught two groups of first grade students with an average of 6 and 7 years old. I worked with them for two years.

Then in 2008 I started working at the Comodoro Manuel Azueta Naval primary school with three groups. Students were about 10-11 years old; the schedule was three hours a day on Tuesdays, Thursdays and Fridays from 07:00 am to 09:00 am. The principal himself asked me to teach the subject to the students of fifth and sixth grade, however, I was not able to take five groups despite of the administrative work I had at SEQ, so that I accepted only three of them.

Teaching English to young learners (children) requires patience and dedication. I needed to know students' needs and desires, that would help me better present a topic so would help students better learn the topic. Wondering about the activities I should perform at school, I considered the use of technology for the class and taking into account the diversity and colourful activities in the Internet I thought computers would do with the students' engagement.

While applying the different theories to my practise as a teacher, I realised that technology might be more than an adapted tool in the classroom and that children might like to interact with it. I decided to describe my experience as a teacher of English and the use of technological devices and gizmos (E-translators, Search engines, etc) in the classroom by applying the different techniques I learnt while I was a student at UQRoo University. I discovered that the new ICTs would be an excellent tool and the familiarization with this kind of resources made me think it could be interesting and productive to present the benefits of *Enciclomedia* and Web Quest in TEFL to those undergraduate students willing to teach.

I searched for theoretical information about the topics selected, trying to relate them with the different theories learnt during my formation and giving them a practical meaning during my sessions in the two different primaries I decided to implement the use of technology in two different primary schools, one was a private one with federal resources provided by the Mexican Secretariat of the Navy; the other was a public school with federal resources provided by SEP. I worked with children between 8 and 12 years old in an attractive environment created by me, so that children could feel interested in the topic and learn the target language.

The use of computers made the class interesting enough because children were able to manipulate this tool and made me think about the use of Web Quest to integrate a meaningful learning and information sharing with the rest of the group. *Enciclomedia* activities related to the different abilities and the use of vocabulary made the students to want more of it; Web Quest allowed them to work together and analyse what they were investigating.

The activities I made in the classroom with the use of technology triggered an unusual hunger for knowledge that most of the students developed during the classes of English. At the beginning, I considered my work as good job because I saw students loved to work what they were doing, however I needed more and that was why I decided to interact with the different theories I described later on this paper work to improve my teaching performance and my students' learning strategies. In the end I succeeded in what I wanted not only by tapping ICTs into TEFL, but to complement the theories I learnt at UQRoo and actually implemented them in order to make my performance go from good to excellent thanks to the tools acquired before. In the end what I had was a rewarding job.

4.2. Description and analysis of problems encountered and their solution

I did not have any problem with the institutions because they were the ones that allowed me to implement and promote the use of technology in the process of learning English in the classroom, nor even with parents or students. They all were very excited because of the opportunity given to those children that have never before attended private classes of English after school.

When performing *Enciclomedia*, the only problem I had was that one day school did not have Internet to work appropriately with to reinforce what students were studying that day. Nevertheless, I had offline exercises that provided vocabulary and precise backup for that inconvenient. Web Quest did not represent a problem because I explained the steps students had to follow, the search engine to be used, and the parameters in which the final presentation was going to be presented in front of the class.

4.3. Achievements' Description as a Teacher according to School Training

First, I discovered the use of *Enciclomedia* in the classroom, which engaged them with the visuals and audio that I showed in the classroom according to the lesson predetermined by the syllabus. The programme allowed students to get access to computers by playing games related to English making them reinforce the different skills like listening, reading, writing and speaking. It also allowed students to acquire a larger vocabulary. With this I successfully applied the Communicative Approach because the activities are related to real life situation, so that it allows promoting meaningful learning and acquisition of the target language.

One example of the mending of the Communicative Approach and the activities in *Enciclomedia* is to complete gaps in a dialogue with personal information; students had to ask simple questions to their class-mates and retrieve the specific information, in this section Reading and Speaking abilities are reinforced. Another activity is related to listening in which students had to identify the object; students are presented with four different objects in the book and the recording indicates the right word, students have to mark in their books the correct item.

Most children were excited and anxious about the class, some of them were confident because they took private lessons after schools, but I found the way to make all of them feel comfortable. First of all, I broke the image of strict teacher they had at school, I broke the ice by performing a game: The Magic Circle, in order to introduce myself and know their names. It really did not matter if their pronunciation was wrong, they only had to repeat his or her name and the name of their classmates, and the important thing was that they were having fun while they spoke their first words in the target language.

Then when working with *Enciclomedia*, they looked at the book and realised the activities were not difficult, they felt they could finish the activities very fast. I took advantage of that and made them use the information at home, with their families. Without thinking about it, they were able to activate meaningful learning, because they could use the vocabulary in what they did on a regular day at home.

Second, I applied Humanism in order to make my students feel comfortable and able to work first individually, second in pairs, and finally in team groups. Connecting the activities made in the classroom with their emotional environment, according with their likes and dislikes I could prove that students tended to learn faster than in other subjects since the method used for regular classes is the traditional one. In this part I implemented what I learnt in a qualified teacher related to values in education and Educational Technology provided by the Tecnológico de Monterrey.

An example of Humanism used in the classroom was the way I connected what I thought students needed first, then I asked them about the things they liked and how would be the interaction they might like to be involved in the classroom and the kind of materials related to the topics. I motivated them in order to make them feel rewarded in an intrinsic way by playing the role of a facilitator instead of a disseminator of knowledge.

Day after day they were more confident with the language, they were not ashamed of talking aloud in front of their classmates, they were not ashamed of making mistakes and being corrected either by me or their classmates; for example, when I showed some flashcards, they responded immediately by saying the name of the object represented on it.

At this point I was able to study the demands according to Maslow's Hierarchy of Needs (1940) and set my students in the first three levels. With Humanism and the Communicative Approach I made the students interact to each other, applying what they had seen in class. The different activities and material were useful in the development of my practise as a teacher and made me realise what should be included or not.

While being instructed in the use of the different methods in TEFL at UQRoo I was told to be patient when using them because is hard to mend the teaching stances that they offer and make them work. I was prepared to my next step that was to include Constructivism in the scene. For this, I thought Web Quest could help me in the development of my class and since both schools provided me with technological supplies, I decided to create a project that would let my students activate what they knew and let them be able to build their new knowledge.

Web Quest on the other hand, it allowed me to keep on track for those students that needed a little more. The Web Quest tasks consisted in gathering information by working in groups of 4-5 students and with a specific topic given by the teacher. Students had to follow 6 steps arranged by the teacher with an interesting topic related to what students saw in a different subject apart from English. Then students were given the dead line for presenting the final project at the end of the course. I included the use of Web Quest in my classes in order to insert collaborative learning, so that students could learn how to work with other people besides the regular friends they were used to.

The steps for using Web Quest were settled as follows:

1. Introduction: established the objective and the activity to be done by the students. This section presented the instructions in a funny and attractive way.
2. Task: it described what was going to be the final result and the objective of the work I used a presentation with the aid of power point. What I intended was to make them grasp information instead of sharing it to them.
3. Process: I suggested the steps students might follow. It was necessary to point out the strategies and the role each student had to perform within their teams.

4. Resources: I indicated the links and specific search engines to be used and looked up to gather the information. The point was to clarify that the use of Web Quest was to utilise the Internet.

5. Evaluation: it explained in the way the task and each part of the work was going to be checked and graded. Students had to know this part from the very beginning. In this step I also graded the way collaborative work was developed by the students.

6. Conclusion: with this step I thought it would be good if students activated reflexive thinking and synthesised the experience they had with the work. The idea was to generalise what everyone said about his or her part, and most important to know how to contextualise the information (meaningful learning).

An interesting development and a way to exploit the internet for good language learning practice was the concept of a Web Quest. A Web Quest that was an inquiry-oriented activity in which some or all of the information that learners interacted with came from resources on the internet. What was important was that learners had the possibility of getting a lot of exposure to the language by surfing on the web. In other subjects teachers were often worried because students spent too much time surfing the web without finding the appropriate information. By providing the necessary resources (web links) this problem could easily be overcome. For language learning they were asked to surf the web, skim websites, scan web documents for relevant information and decode the meaning, possibly by making use of translation programs provided by search engines, they were all good activities to learn the language.

Something I was expecting occurred one day when I was giving assessment about a topic in English about flora and fauna, by this time students were studying the same in the Geography and Natural Science class. The activity of Web Quest required investigating about the different ecosystems in Mexico, then when revising their process in the classroom, students realised that what they knew in Spanish was being complemented with the data gathering they were doing for the class in English.

Most of them started linking the new knowledge with the things they were learning in the different subjects at school, they were very motivated, they always came for monitoring when they felt they needed; otherwise, besides that, they worked in teams by themselves, finding the

solution to what might be a problem in their investigation. Meaningful learning and collaborative work were always important to reach the objectives settled at the beginning of the course, personal objectives and institutional ones too.

By the end of the course year I realised I have reached the five levels on Maslow's pyramid according to esteem and self-actualization. I considered teachers of English should have focused on the issues of the length of text and the time allocation of using a particular material in the classroom. Time dedicated on tasks has been shown to be a highly significant factor in learning, limited class time determines the extent of students' search, reading and information exploration.

Web Quest resources demanded much more reading than traditional materials such as textbooks. Students might be required to read at least 3-4 web pages which contained more than 3000 words each in a single Web Quest. This amount of reading was far beyond what they usually did for a regular class. Decisions needed to be made about how long the activities would have taken, especially when taking into consideration that students would have needed extra time when reading long and difficult texts. Therefore, when making lesson plans, I should took into account the time allocation each Web Quest required and the time a teacher may need to spend on class discussion and explanation.

Finally, I analysed my performance inside the classroom and by evaluating the final project, I realised the use of technology could make most of the students learn in an active way and most important, they would know how to use the language in real life situations faster than in a traditional classroom setting class instruction. The final project was the use of Web Quest that consisted in looking for information about ecosystems in Mexico by utilising Google search engine, and the activities done with Enciclomedia like listening exercises, speaking activities that required personal information and the vocabulary learnt in class.

I chose to describe my experience with the use of *Enciclomedia* in TEFL and the development of activities through the use of Web Quest. It was through the use of the Communicative Approach and Constructivism that I allowed my students to get their own knowledge; I made them focus on meaningful learning to get the main thoughts in which they could develop their own needs to use a computer for completing any activity.

It was important not to switch into Spanish too many times because what I wanted them to get used to the target language, in this case English. I made clear directions when explaining the activities; I used body languages and inference when they did not understand at the beginning. Even though the book for *Enciclomedia* (created by SEP) has the instructions in both languages English and Spanish, so that anyone could manipulate a computer. I always kept the target language in use.

To find the way to improve your class day by day and by using *Enciclomedia* and Web Quest for teaching English I would highly recommend to get involved with the authorities of the school where someone has planned to work, so that a teacher can make a difference with the students and have the support of teachers from the school and parents.

I had a Tecnología Educativa course in the fourth semester when studying the major at UQRoo and I really liked it, I did not know it was going to be really useful one day. I learnt how to use a projector, how to plug and unplug the electrical devices, what to do in case of any equipment malfunction, how to choose a web site suitable for students, how to use a search engine and so on. This type of formation during the major enabled me to do what was necessary for the use of *Enciclomedia* and the appropriate use of search engines too. I also took a teacher training course related to technology provided by TEC de Monterrey related to the new ICTs. I was able to expand my horizons in terms of activities related to the use of computers and the Internet. The foray of collaborative work and critical thinking was a step that made me think about Web Quest tasks and its performance in TEFL.

As for my professional training, most of the subjects in the major were in English, but only the last four semesters were most likely addressed to teaching and the role of students, teachers, materials, and the different language teaching methods there have existed since Grammar-Translation. For example I had *Práctica Docente*, *Elaboración de Material Didáctico*, and *Métodos y Técnicas en la Enseñanza del Inglés*; however, I considered to go in-depth on these subjects since, from my point of view, the themes tackled were superficial because of the huge amount of information given in the classroom and the different activities one should perform to prove the acquisition of the different strategies. Teachers did not cover all topics as they might like because of the short time we sometimes had. I considered superficial at some

point because teachers only taught in a deeper form what they thought it might help us once we were standing in front of the class. However, I was able to perform and furthermore, to investigate what I needed, the use of technology as a tool in teaching English, how to mix the different theories and use the most important parts of each one, how to engage students with the aid of colourful materials made by the teacher, how to adequate the lesson plan to what it was really important in the classroom; in the end, I thought that was the point at UQRoo with my professors, to activate self-study and made us take from different sources what was important and essential for teaching.

As for classroom management I thought it was a cardinal element in effective teaching. Students arrived habitually on time to the class; they always showed respect for the teacher and their classmates, they focused on the tasks when working was on the road, they socialised when they needed.

Teamwork would often be the only choice for solving complex problems or for creating complex tools, services and products – multiple talents would be essential. From coordination and collaboration to compromise and consensus, the skills for effective, collaborative teamwork would be a necessary feature of work in the Knowledge Age. As an extension of teamwork, knowledge students would have to bridge differing ethnic, social, organizational, political, and content knowledge cultures in order to do their work. In an increasingly multicultural society, a growing global economy, a world of increasing technical specializations, and a flattened network organizational model, cross-cultural skills would become more and more valuable.

Students would need to be able to craft effective communications in a variety of media for a variety of audiences. Given the bewildering number of communication choices available – printed report, electronic document, magazine article, e-zine article, book, e-book, print ad, TV ad, Web ad, phone call, cell phone call, Internet phone call, voice mail, telemarketing, fax, pager, Web page, e-mail, snail mail, spreadsheet, simulation, database, multimedia presentation, slides, overheads, floppy disk, tape, video, CD, DVD, radio, TV, Web-TV, teleconferencing, virtual reality – students would be perpetually faced with choosing the right medium for the right message for the right audience, and with the challenge of doing it all as effectively and efficiently as possible.

I must have reminded myself that, in many ways, I was still early explorer having just arrived in this brave new Knowledge Age world. I had not confronted a set of large-scale changes as challenging as these since the beginning of the End-User Informatics Revolution at the middle of the XX century called the next big revolution in information technology (The End-User Informatics Revolution, 2009). One could also argue that people have seen these changes coming for quite a while and that compared to the pace of change in the competitive business environment, education might be the last place to look for speedy action.

I must have also remembered that education in Mexico was firmly lodged in a political process where it was far easier to secure support for quick fixes that attacking symptoms than it was to find the political will to confront the root ailment of an elaborate education structure designed for an age that just passed. Despite the challenges, there were a growing number of school programs and even whole schools where these new skills were being learnt and where learners were being prepared for the knowledge work ahead.

4.4. Evaluation of teacher's performance.

More and more of us were enjoying the benefits of powerful knowledge tools –computers and telecommunications hardware and software. They were enhancing our learning, our work, and our play. These amplifiers, storerooms, and sensory extensions for our thinking and communication, were becoming power tools for our personal development. But without strong societal initiatives to make these tools available to everyone, the existing disparities between relevant and irrelevant knowledge would only increase. And if the darker uses of these tools remain unchecked – addictive graphic violence and titillation, feelings of social isolation and even depression from over-immersion in electronic media space, etc. –negative effects might have contributed to preventing many of our children from fully developing their talents.

Any teacher of English could use either one or both tools in the classroom and see how students might like it and get interested in the topics. The final result would show the positive aspects of using technology in TEFL and that is why I would recommend that using a specific gadget would be interesting when performing in front of their class.

Computer technology is creating a subtle but dynamic shift in teaching methods. The rapidly falling student-to-computer ratio in today's classrooms provided ample evidence of an inexorable movement toward computer oriented lessons.

The important fact was not to be afraid of using technology or not being able to use it. I would recommend taking a basic course related to how to use technology in teaching and see how easy even planning a lesson might be. It was important knowing that it was not only the computer itself that did the job but also the way I interacted with my students, and the way I could manage the tools and the information to combine what I had learnt previously while studying at UQRoo University.

Since I discovered the new ICT tool and its benefits, I let it be part of my class, even though I knew it could fail sometimes due to malfunctions in the equipment or lack of energy supply, but for that I was prepared as any other teacher in the traditional way might be and use the book, the board, flashcards, and even posters.

Evaluating teacher classroom performance was an integral part of school supervision and contributed to the on-going mission of the educational institution. Teacher's evaluations, when properly facilitated, functioned as professional indicators that encouraged excellence, offered praise for good methodologies and strategies, and highlighted areas that needed upgrading. If conducted properly, teachers should view periodic evaluations as necessary adjuncts to daily instructional routine with an end result focused on collaborative means to more effectively teach.

The most accepted criterion for measuring good teaching was the amount of student learning that occurred. There were consistently high relations between students' ratings of the amount learnt in the course and their overall ratings of the teacher and the course, so in the end there were those who learnt more and who gave me high ratings.

Thus, performance began in the classroom to a degree that could be discerned by how well students did in the class. Their success rested not only on my ability to effectively teach a subject, be it English or any other, but just as importantly, rested also upon their shoulders; their willingness to take advantage of your services and those being offered at the school that you work for in the use of the new ICT was of paramount importance.

Moreover, classroom teaching might only be a small part of a faculty member's educational activities. I also advised students, developed new courses and redesigned old ones, adapted and developed courseware and innovative teaching strategies for use in both traditional classroom instruction and Technological education, workshops, consulting, and mentoring to help graduate students improve their teaching skills. All of these activities could have a dramatic effect on a department's teaching quality, student retention, and chances of receiving full accreditation, but student ratings did not indicate whether and how well an instructor was doing.

In sum, several factors that were associated with the selection of *Enciclomedia* and Web Quest have been identified and discussed. These factors included vocabulary and grammar, prior knowledge of content, interest, assistance/scaffolding and task demand. The perfect mixture of different theories, methods and techniques were the tools in which I could base my performance in class so I could succeed in my practice this paper work on.

5. Conclusions

For many years, many people involved in education warned of the possible harmful effects of using technology in the classroom, of children losing their ability to relate to other human beings and/or becoming dependent on technology to learn, and using inappropriate materials to teach or learn. The same was probably said with the invention of the printing press, radio, and television. All of these could be used inappropriately, but all of them have given humanity unbounded access to information which could be turned into knowledge. Appropriately used, interactively and with guidance, they have become tools for the development of higher order thinking skills.

The changes to the reform in education to secondary schools in Mexico to join together the efforts in public education, allowed technology to be included in the curriculum in the primary level too. The Educational System was able to combine the new Information and Communication Technologies and from that day, English appeared on stage at public primary schools in Quintana Roo.

Enciclomedia a new programme that grouped the qualities required for working with children, the use of computers and the surfing of the Internet let professors to act out the way subjects could be taught, moreover. The use of complex tasks that enabled students to activate critical thinking through collaborative work in Web Quests was the point that a teacher of English had to take into account to do best his or her teaching.

TEFL seemed to work perfectly with technology since it is possible to combine different theories and strategies to incorporate ICTs to teaching English. The way *Enciclomedia* and Web Quest interacted together worked out very well, and to acquire the target language in the classroom was possible.

All combined was possible to bring it into context by utilising the adequate material, the simple and understandable explanation, class interaction addressed to the students. This paper work was thought as a first step perhaps, to improve and provide the basis of constructing new knowledge and capacity about how to work along with technology in the classroom and be able to manipulate it.

6. **Suggestions and Recommendations**

English is the most used and found language that gathers a high percentage of websites and as a consequence the World Wide Web offered a rich bounty for EFL teachers and learners. It also represents a vast repository of misinformation, poor language use, and potentially offensive material. There are any number of possible approaches to avoiding the pitfalls like being specific on searching and the use of formulas of the Internet while exploiting efficiently its resources and connectivity for language learning.

Technology could be inappropriately used in the classroom it could be used to perpetuate old models of teaching and learning. Students could be plugged into a computer to do drill and practise that which is not so different from workbooks. Teachers could use multimedia technology to give more colourful, stimulating lectures. Both of these might have their place, but such use did not begin to tap the power of these new tools.

Technology advances were not only helping to create virtual language learning environments, but also contributing to adding a new dimension to real-world language learning and cultural experiences. When students might go on field trips or participate in study abroad tours, they would often write a journal describing their experiences. This might include pictures and possibly video clips that would explain how to exploit the experience.

Teachers should encourage students to use the web as a research tool on a topic of great personal interest. They should also give parameters for the expected product, but let the student emerge as chief designer. Use the web to find the resources to solve the problem. Always start with what people are interested in doing and take it from there.

I would highly recommend exploring this field and if possible to complement the existing paper works with deeper research from different point of views in TEFL and the use of the ICT. The world has changed in the last ten years and if there are other ways to make the class more attractive and create an ideal environment to promote competence and meaningful learning, I would recommend taking advantage of it.

7. References

- Ackermann, E (2004). **Constructing Knowledge and Transforming the World**. In M. Tokoro and L. Steels (Eds.), *A learning zone of one's own: Sharing representations and flow in collaborative learning environments* (pp. 8-10). Washington, DC: IOS Press.
- Adell, J (2002). *Web Quest: Una Aventura del Conocimiento. Una Estrategia Didáctica para Integrar Internet en el Curriculum*. Symposium conducted at the meeting of the Jornadas Educativas de Calviá 2002. "Noves tecnologies i educació" September.
- Africa Partnership Forum (2008). *ICT in Africa: Boosting Economic Growth and Poverty Reduction*. In the 10th Meeting of the Africa Partnership Forum in Tokyo on April 2008.
- Berns, M.S. (1984). *Functional Approaches to Language and Language Teaching: Another Look*. S. Savignon & M. S. Berns (Eds.).
- Blasszauer, J. (2003). *Web Quests: Blending Learning Philosophy and Practise*. In: *novELTy* Volume 10, Number 1 March 2003, 76-84.
- British Columbia Institute of Technology (2002). *Constructivist Learning Activities: Imagine the Possibilities! BCIT [On-line] Available:*
<http://www.bcit.ca/files/ltc/pdf/constructivistactivities.pdf>
- Bruner, J. (1960). *The Process of Education*. Cambridge, Mass.: Harvard University Press.
- Bunting, J. (2006). *Using Technology to Inform Language Teaching*. Annual English Teaching Conference [On-line], 2009
- Burke, K. (NA) *Infusing Technology in Australian Teaching and Learning Through the Use of Project-Based Learning*. Premier's Harvey Norman Information and Communication Technologies Scholarship [On-line] Available:
<https://www.det.nsw.edu.au/media/downloads/.../part2/kburke.doc>
- Cambridge Dictionary for Advanced Learners. (2009) Cambridge University Press.

Carnoy, M. (2004). Las TIC en la Enseñanza: posibilidades y retos. [On-line] Available: <http://www.uoc.edu/inaugural04/dt/esp/carnoy1004.pdf>

Chylinski, R. (2006). Keeping Up With Practices in Language Teaching With ICT and Some Applications to ELLICOS Setting. Presented at 19th English Australia Education Conference, Perth.

Dewey J. (1916). Democracy and Education. The Free Press A Division of Simon & Schuster Inc. New York, NY.

Dodge, B. (1995). Web Quests: A Technique for Internet-based Learning. Distance Educator, 1(2), 10-13.

Dodge, B. (1998a). A Taxonomy of Information Patterns. [On-line] Available: <http://projects.edtech.sandi.net/staffdev/tpss98/patterns-taxonomy.html>

Dodge, B. (2002). Adapting and enhancing existing Web Quests. [On-line] Available: <http://webquest.sdsu.edu/adapting/index.html>

Dunn, M. W. (2006). It Was Written All Over Him: Classroom Teachers' Referral Criteria for Special Education Services. International Journal of Special Education, 21(2), 132.

Education and Manpower Bureau (2004). Information Technology in Education – Way Forward. [On-line] Available: <http://www.info.gov.hk/archive/consult/2004/wayforward-e.pdf>

Enciclomedia (2008) ¿Cómo y Por qué Surge Enciclomedia? [On-line] Available: www.encyclomedia.edu.mx/Conoce_Enciclomedia/Que_es/Antecedentes

García, V. (2008). Análisis del Proceso y los Resultados de la Operación del Programa Enciclomedia en Tabasco. *Sinéctica* [On-line] 31. Available FTP: http://portal.iteso.mx/portal/page/portal/Sinectica/Historico/Numeros_antteriores07/historico_sinectica_31

- Haas, M. E., Channell, J., Linder, M. T., Vandevander, H., VanSickle, A. (2006). Developing Social Studies Web Quests with Teachers Candidates. Social Studies Research and Practice [On-line] 1(1). Available FTP: <http://www.socstrp.org/issues/PDF/1.1.8.pdf>
- Haddad, W. & Jurich, S. (2002) ICT For Education: Potential and Potency. Technologies for Education: Potentials, Parameters, and Prospects. Washington DC: Academy for Educational Development and Paris: UNESCO.
- Halat, E. & Jakubowski, E. (2001). Teaching Geometry Using Web Quest. In the 19th International Conference on Technology and Education: Tallahassee, Florida.
- Hein, G. (1991). Constructivist Learning. [On-line] Available: www.exploratorium.edu/IFI/resources/constructivistlearning.
- Hellawell, S. (2001). Beyond Access: ICT and Social Inclusion. London: Fabian Society.
- Hymes, D. H. (1971). On communicative competence. In J. Pride and J. Holmes (Eds.), *Sociolinguistics*. Penguin, 1972. (Excerpt from the paper published 1971, Philadelphia, University of Pennsylvania Press.)
- INEE (2008). Exámenes de la Calidad y el Logro Educativos Tercer Grado de preescolar, 2007 [On-line] Available: <http://www.inee.edu.mx/index>
- Kenny, C. (2001) Information and Communication Technologies and Poverty. TechKnowLogia [On-line] Available: <http://www.TechKnowLogia.org>
- Klemm, W. R. (1994) Using Formal Collaborative Learning Paradigm for Veterinary Medical Education. Journal of Veterinary Medical Education [On-line serial], 21(1). Available FTP: Host name: scholar.lib.vt.edu Directory: scholar.lib.vt.edu/ejournals/JVME/V21-1/Klemm
- La Comisión de Educación Pública y Servicios Educativos (2008) Alianza por la Calidad de la Educación: Ley General de la Educación, Artículo Segundo. [On-line] Available: <http://adelantenciclomedia.org.mx>

March, T. (1995). What's on the Web: Sorting Strands of the World Wide Web for Educators. Computer's-using Educators Newsletter [On-line] available:
<http://www.ozline.com/learning/webtypes.html>

Maslow, A. (1940). Maslow's Hierarchy of Needs [On-line] Available:
<http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/maslow.htm>.

Papert, S. (1980). Mindstorms. Children, Computers and Powerful Ideas. New York: Basic books.

Paul, K. (n/d). The Use of Web Quests in Classrooms: Designing a Lesson that Exhibits Effective Instructional Strategies (Research proposal, Arizona University n/d). LRC530.

Piaget, J. (1975). L'équilibration des structures cognitive [The equilibration of cognitive structures]. Paris: Presses Universitaires de France.

Rogers, C. (1969). Freedom to learn: A View of What Education Might Become. Columbus, OH, Charles E. Merrill.

Schacter, J. (1999). The Impact of Education Technology on Student Achievement. What the Most Current Research Has to Say. Milken Exchange on Education Technology, 1999 [On-line] Available: <http://www.milkenexchange.org>.

Secretaría de Educación Pública (SEP, 2004). Programa Enciclomedia: Documento Base. [On-line] Available: http://www.oei.es/quipu/mexico/documento_enciclomedia.pdf

Sindicato Nacional de Trabajadores de la Educación (SNTE 2008). Alianza por la calidad de la educación. **Gobierno Federal**. [On-line] Available: www.snte.org.mx

Sindicato Nacional de Trabajadores de la Educación Sección 38 (SNTE 2008). Alianza por la Calidad de la Educación. [On-line] Available: www.snte.org.mx

Teeler, D. & Gray, P. (2000). How to Use the Internet in ELT. Longman

The Economist Intelligence Unit (2004). Reaping the Benefits of ICT: Europe's Productivity Challenge. EurActiv [On-line] Available: <http://www.euractiv.com/en/innovation/reaping-benefits-ict-europe-productivity-challenge/article-128491>

The End-User Information Revolution (2009). [On-line] Available: <http://www.theultimatetechnology.com/>

Tinio, V. (2002). ICT in Education. United Nation Development Programme. In ICT for Development. New York, NY.

UNESCO (2002). Information and Communication Technology in Education. United Nations Educational, Scientific and Cultural Organization [On-line] Available: <http://unesdoc.unesco.org/images/0012/001295/129538e.pdf>

UNESCO (2005). Information and Communication Technologies in Schools. United Nations Educational, Scientific and Cultural Organization [On-line] Available: <http://unesdoc.unesco.org/images/0013/001390/139028e.pdf>

Un modelo educativo para México (2006). [On-line] Available: http://www.congresoretosyexpectativas.udg.mx/Congreso%206/Eje%202/Ponencia_340.pdf

Vere, A. (2007). Social Dialogue in the Education Sector: An Overview. International Labour Office, Geneva, 2007. (p. 6-10)

Vygotsky, L.S. (1962). Thought and Language. Cambridge, MA: MIT Press.