UNIVERSIDAD DE QUINTANA ROO

División de Estudios Internacionales y Humanidades

INTERNET AND EFL: SOME PEDAGOGICAL CONSIDERATIONS

MONOGRAFÍA RECEPCIONAL
Que para Obtener el Grado de
Licenciado en Lengua Inglesa

PRESENTA
Pablo Abelardo Montalvo Rodríguez

DIRECTOR DE MONOGRAFÍA
M.C. Andrés Miguel Alcocer Verde

Chetumal, Quintana Roo 2001

UNIVERSIDAD DE QUINTANA ROO

Monografía elaborada bajo la supervisión del Comité de Asesoría y aprobada como requisito parcial, para obtener el grado de:
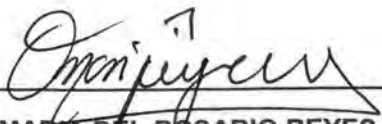
LICENCIADO EN LENGUA INGLESA

C O M I T E:

DIRECTOR: _____

M. C. ANDRÉS MIGUEL ALCOCER VERDE

ASESOR: _____

M. C. MARÍA DEL ROSARIO REYES CRUZ

ASESOR: _____

M. C. MARÍA ISABEL HERNÁNDEZ ROMERO

Chetumal, Quintana Roo. Enero de 2001

Agradecimientos

A Dios por que no se ha olvidado nunca de mí.

A Carminia, mi eterna inspiración para ser una mejor persona.
I love you.

A TODOS mis profesores universitarios, no sólo por darme
respuestas, sino por enseñarme a hallarlas.

Pablo A. Montalvo Rodríguez.

Enero de 2001

"INTERNET AND EFL: SOME PEDAGOGICAL CONSIDERATIONS"

LIST OF CONTENTS

Abstract

The development of technology has affected many aspects of everyday life, among them learning and teaching. One of the fields where the usefulness of technology is undeniable is English Language Teaching. This paper presents a theoretical discussion on the pedagogical justification for the incorporation of the Internet to the EFL instruction at UQROO. Also, the theoretical discussion has been directed towards to argue to what extent the incorporation of the Internet to the EFL instruction at UQROO contributes to the objectives of the English Language Major (ELM) and The Four fundamental Principles that rule the functions of the University of Quintana Roo.

The work involved a revision of both printed and electronic documents. This exploration of documents allowed defining EFL and recognizing the language learning theories that have been the base of EFL throughout history. We also gave a look at the EFL instruction at UQROO to see what its current characteristics are. We discussed a recent study to find out the language learning theories that UQROO EFL teacher base its instruction on. We analyzed the strengths and weaknesses of EFL instruction at UQROO. We also gave a snapshot to the Objectives of the English Language Major, one of the contexts where EFL instruction takes place at UQROO and we took a look at the Four Fundamental Principles that rule the functions of the University of Quintana Roo. This allowed to pave the terrain for a further introduction of the Internet.

As for the Internet, the revision of documents allowed to know what the current theory on the subject is. First, we found out about CALL (Computer Assisted Language Learning). Secondly, we collected information on the History of Internet; we gave a look at its main resources (the World Wide Web, email and IRC). Very important, we gathered all the information that has emerged around Internet and EFL. We knew what the researchers say the Internet can contribute to foreign language instruction and English as a Foreign Language Instruction specifically.

The results were that, according to existing theory, the Internet can contribute to EFL instruction at UQROO and its incorporation to the EFL curricula is coherent with the objectives of the English Language Major and complies the Four Fundamental Principles that rule the functions of the UQROO. As to the benefits of the Internet to EFL instruction, we saw that it has advantages and drawbacks. These drawbacks however, are of a practical nature and once removed, the Internet can be a true asset in the EFL classroom.

The paper also contains some practical suggestions that hopefully will be of help for those EFL teachers who are trying to incorporate these new technologies to their curricula.

Preface

Education in its various forms has been, is and most probably will continue to be one of the cornerstones of society. The way of transmitting knowledge to new generations has undergone changes throughout history and it is probably safe to say that one major change is now taking place. The development of technology, which has made many aspects of everyday life different from that of previous generations, is also affecting learning and teaching.

The Internet is by far, the most important arrival on the technology scene and while its use in education divides opinions, one of the fields where its usefulness is undeniable is language learning.

This paper deals with the incorporation of the Internet to the EFL curricula at UQROO. I have given great importance to the pedagogical justification of the use of the Internet in the EFL classroom because I believe it is important to know how and why new devices can help learning; they should not be used simply because they are available.

This paper will go from the general to the particular by analyzing what it has been said about the incorporation of the Internet into the EFL curricula and by deducting what the implications would be when talking of the UQROO context.

In general, many claims have already been made about the benefits of the Internet in EFL instruction, but while exploring the WWW and revising the printed material, I noticed that there really wasn't a work that included a complete overview. After analyzing the information I could collect, the reason of the lack of such document became obvious. The Internet in EFL instruction is still a young field, and although an enormous amount of literature has already been published, its contents goes from serious research to anecdotal evidence from enthusiastic teachers. Moreover, these resources are difficult to locate since they can be found in books, journals, electronic journals, and scattered on the Internet.

This somewhat pioneer work tries to address the most important issues UQROO EFL teachers will encounter when integrating the Internet into their curricula. For practical reasons, I concentrated on English as a Foreign Language which is my field of study and also because English has become the Lingua Franca of the Internet. Additionally, I delimited the educational context to the University of Quintana Roo – my Alma Mater. However, the findings and main arguments written here, are well applicable for Foreign Language instruction in general and outside the UQROO. Although perhaps not complete, this thesis is expected to be a good starting point for EFL teachers at UQROO who are seeking to integrate the Internet to the EFL curricula. In this context, this thesis explores a number of major issues and provides both theoretical background information and practical suggestions.

I hope this thesis will also be of use to educational institutions other than the UQROO and their EFL teachers who are interested in integrating the Internet in the EFL classroom. After completing this work I am convinced of the benefits of the Internet in the educational scene and although it is by no means the be-all and end-all of education, it can certainly be an important tool in the EFL classroom. Hopefully, this thesis will contribute to the spread of that belief and as such I hope to have provided language professionals and instructors with a good starting point from which they can further discover the educational opportunities the Internet has to offer.

<div style="text-align: right;">

Pablo Montalvo Rodríguez
September 2000

</div>

CHAPTER 1.   Introduction

Shortly after finishing college, I had the opportunity to join the Mexican representation of an American company dedicated to the commercialization of web servers. The Mexican office had been founded to look after the growing number of Spanish-speaking clients around the world. I was first hired to translate electronic documents such as web pages, emails, newsletters and manuals, just to name a few. But perhaps my most important assignment was that of building a communication channel between our clients and the company's technical support team in the US. To achieve all of these tasks, I had to rely on the Internet entirely.

Although I had known the Internet while I was studying at the UQROO, I never really had the opportunity to thoroughly revise what it had to offer. So far I thought the Internet was just a source for song lyrics and homework-solving information. But after joining this web hosting company and spending 8 hours a day connected to the Internet, I realized what the Internet really was about: enormous amounts of information available in different formats, including audio, video and text among others. The choice of the topic for this work, the Internet in the EFL classroom, reflects my interest in the Internet and my desire to link it with my field of study: English as a Foreign Language (EFL).

Not too long ago, when I was still a secondary school student, learning English meant little more than memorizing a series of grammatical rules and vocabulary. It seemed that the fact the primary goal of any language is communication did not have any influence on how it was taught. Teachers were truly convinced they were doing a good job if students could reproduce grammatical rules and apply them in translation exercises.

Now, things are different. However, although theories about communicative language teaching and learner autonomy are widespread and generally accepted, they have still not had much impact in many Mexican schools. Lots of teachers are still unwilling to change their perceptions about language teaching and they stay the same. While in college, I was taught the importance of communicative language teaching and the student-centered classroom. However, by the observation of real teaching practice (I have been part of the teaching staff in different schools), I have discovered that reality is different. The majority of English teachers are not convinced about the benefits of current pedagogical theories and they continue following the old fashioned teaching strategies.

Of course, not all teachers follow this pattern. Many understand the importance of communication and learner autonomy in English language teaching and realize that the benefits of the new approach compensate the adjustments they have to make. Lots of teachers are creative at the moment of changing from the old fashioned model to the new approach and some of them have started to see Internet's pedagogical potential for this process. However, the use of Information and Communication Technologies (ICT) is still not very widespread, although it is a very effective way of effectuating this change. This is due to economical reasons. Statistics show that the use of Internet is very restricted in developing countries like ours. Mexico has only the 0.1% of the world's Internet users. Our state Quintana Roo yields a very reduced number of Internet users to the national cipher. Despite these numbers, the Internet will very probably make his way to incorporating to our society's daily life as it has happened in developed countries. We are just on time to get ready for this process and take the most advantages of it.

It is clear to me the usefulness of the Internet in many fields and its increasing impact on society. As a student, I would usually go to the Internet looking up for information to do homework. At work, when doing a translation, many times I looked up for meanings of words in one of the many dictionaries available on-line. Many times I have seen my wife, also an English teacher, browsing the Internet looking for material for her class, exams and even her thesis.

Due to its very nature, the Internet fits into the current theories of communicative language learning and learner autonomy. I believe the Internet can be an important complement to existing language learning methods if used properly.

1.1 Monography Objective

This work's objective is to present a theoretical discussion of the pedagogical justification of the Incorporation of the Internet to the EFL curricula at UQROO. It will also be argued to what extent the incorporation of the Internet can contribute to the objectives of the English Language Major and the four fundamental principles that rule the functions of the University of Quintana Roo. This will be done by discussing the current trends of EFL instruction at UQROO, the objectives of the English Language Major and the four fundamental principles that rule the functions of the University. Also, a research on the current findings of the benefits of the Internet to EFL instruction will be carried out.

In the elaboration of this work, I departed from the assumption that the reader has a basic knowledge of computers and Internet. However, I still decided to include a glossary of terms (APPENDIX A), that hopefully will help everyone to better understand this work.

I would like to note that all the Internet resources contained in this thesis were collected during the WWW exploration process. They were selected following according to the SCAD checklist (See section 7.2.2). Since the Internet is in continuous change, some of these resources could be outdated, like broken links for instance. However, because of the way web sites were collected and information evaluated, the fact a source of information is not up to date does not make it invalid.

Additionally, documentary research was carried out to find the strategies proposed by the experts in the field, on the best way to incorporate the Internet to the EFL curricula. With this, the work aims to be not only a theoretical discussion, but also a practical starting point for UQROO EFL teachers who are seeking to integrate the Internet to their subjects' curricula.

1.2 Methodology

This work has a deductive nature since it goes from collecting general perceptions to place them into a specific context: The UQROO.

The research prior to the elaboration of this paper included a revision of both printed and electronic materials. As for the electronic documents, these were selected using the SCAD checklist (See section 7.2.2) and they included web pages, electronic journals, and discussion forums, among others. Printed material included books taken from the library, borrowed from teachers, friends, etc. The outcome was an enormous amount of information related to the topics of this work. Such information was classified by topics using different types of cards.

This theoretical framework was then validated by giving it to experts in Language Teaching and Distance Education. After being sure the raw material was adequate, the theoretical discussion was carried out.

It is important to say that the documentary exploration was continuous even in the last stages of the elaboration of this paper. In order to facilitate comprehension, a glossary of the Internet terms used in this work was included.

1.3 Outline

Chapter two deals with EFL and Language Teaching. The main focus of this chapter is on defining EFL, setting it as Language Teaching and describing its supporting pedagogical theories. We will aslo take a look at a recent study, to know a little bit more about UQROO's EFL training. Following a coherent path, a brief stop is made in order to discover the objectives of the English Language Major at the University of Quintana Roo and the institution's four fundamental principles. The main objective is to pave the terrain for a further introduction of the Internet.

Chapter three is a straight introduction to the Internet. This introduction includes a brief history of the Internet and a description of its most popular resources. The practical nature of this monograph is made present when a few links to Internet sites of the interest of EFL teachers are presented.

Chapter four starts working with Internet and EFL as a joint concept. In this chapter, the reader will know about the first attempts to incorporate computers to language and the current research and practices on the field. Aditionally, a number of pedagogical considerations with respect to using the Internet in the EFL classroom will be presented.

Chapter five is complementary to Chapter four. This chapter describes the ways in which the various Internet applications (the World Wide Web, e-mail and Internet Relay Chat) can be used in an educational context, according to the researchers. Particularly, we will assess the usability of Internet tools in the EFL classroom.

Chapter six will go specific and will confront all the information gathered in chapters two, three, four and five, to discuss the implications of integrating the Internet to the EFL instruction at UQROO. We will recap what the current theories say about Language Teaching, what EFL teachers at UQROO do in practice and what the researchers say the Internet can contribute to these aspects. We will also figure out how the Internet contributes to the objectives of EFL instruction at UQROO and the objective of the English Language Major. Finally we will determine how the incorporation of the Internet in the EFL classroom fits into the four fundamental principles that rule the functions of the University of Quintana Roo.

Chapter seven will deal with a framework that teachers can use to make the most out of using the Internet. Furthermore, we will review a number of ways in which to incorporate the Internet into existing EFL curricula and will give practical suggestion for the use of Internet resources, email and IRC.

Chapter eight is the final chapter. This chapter will first of all assess the main objective of this work. Conclusions will be drawn, based on the previous chapters. The last section will make recommendations with respect to the actions that can be taken to improve the quality and integration of EFL education and the Internet.

CHAPTER 2. English as a Foreign Language (EFL) and Language Teaching

This chapter will deal with EFL and supporting pedagogical theories. We will begin by defining EFL. We will continue by presenting a brief history of language teaching theories. We will continue by taking a look at the five features of successful language/learning as stated by the Center on English Learning and Achievement. Afterwards, we will start delimiting our study field and will take a look at the EFL that is taught at the University of Quintana Roo by discussing a recent study by De León & Vázquez (1999)1. After that, we will make a brief stop to know a little more about the objectives of the English Language Major at the University of Quintana Roo and the institution's four fundamental principles. This will allow us to pave the terrain for a further introduction of the Internet.

2.1 English as a Foreign Language

A definition of TEFL by Celce-Murcia (1991)2 will help us to understand what EFL is.

> Teachers of English as a Foreign Language are those who work in systems where instruction in other subjects is not normally given in English (Celce-Murcia, 1991)3.

EFL is the abbreviation for English as a Foreign Language. This term is then used to refer to the teaching of English to people whose main language is not English and who live in a country where English is not the official or main language such as English Students at UQROO. EFL is, in substance, Language Teaching.

2.2 Language Teaching

The Romans were probably the first to study a foreign language formally. Language teaching has constantly changed and evolved ever since these ancient times. It has been affected by various influences, such as the reasons for learning a language, theories about the nature of language, and the nature of learning.

Following, there is a list of the most important currents in the history of language teaching methodology.

The Grammar Translation Method (GTL)

According to Celce-Murcia (1991)4, the main characteristics of GLT are:

---

1 De León, R.M. & R. Vázquez Castro (1999). Identification of Class Activities in Introductory English Courses in the University Program of Languages at UQROO: Tesis Recepcional Para Obtener El Grado de Licenciado en Lengua Inglesa. Universidad de Quintana Roo, División de Ciencias Sociales y Humanidades. México.
2 Celce-Murcia, M. (1991). *Teaching English as a Second or Foreign Language.* Los Angeles: Heinle & Heinle Publishers.
3 Ibid.
4 Ibid.

- Classes are given in the students' native language.
- There is not much use of the target language.
- Students start with difficult classical text.
- Translation of exercises from the target language into the mother tongue is a typical exercise.
- The teacher does not have to speak the target language
- The result of this method is that the student is not able to use the target language to communicate.
- Reading and writing are not introduced until the student has a sufficient lexical and grammatical basis

The Direct Method

According to Celce-Murcia (1991)[5], the main characteristics of the Direct Method are:

- The use of the mother tongue is not permitted
- Lessons start with anecdotes and dialogues in modern conversational style
- To make meaning clear, actions and pictures are used
- The learning of grammar is inductive
- It is important to be a native speaker teacher or have nativelike proficiency in the target language
- Reading in the target language should be taught from the beginning of language instruction
- The teacher does demonstrations to avoid explanations or translations. That makes students learn by direct association
- Communication is the purpose of language learning
- Situations or topics are the basis of the syllabus, not on linguistic structures

The Reading Method/Situational Language Teaching

According to Celce-Murcia (1991)[6], the main characteristics of the Reading Method are:

- Only the grammar useful for reading comprehension is taught
- Vocabulary is controlled at first and then expanded
- Translation is once more a respectable classroom procedure
- Reading comprehension is the only language skill emphasized
- The teacher does not need to have good oral proficiency in the target language

And the main characteristics of the Situational Language Teaching Method are:

---

5 Ibid.
6 Ibid.

- The spoken language is primary
- All language material is practiced orally before being presented in written form
- Only the target language should be used in the classroom
- Efforts are made to ensure that the most general and useful lexical items are presented
- Grammatical structures are graded from simple to complex
- New items are introduced and practiced situationally

Audio-Lingual Method

According to Celce-Murcia (1991)[7], the main characteristics of the Audiolingual method are:

- Lessons begin with dialogues
- Mimicry and memorization are used based on the assumption that language is a habit formation
- Grammatical structures are sequenced and rules are taught inductively
- Skills are sequenced: listening, speaking -reading, writing postponed
- Pronunciation is stressed from the beginning
- Vocabulary is severely limited in initial stages
- A great effort is made to prevent learner errors
- Language is often manipulated without regard to meaning or context
- The teacher must be proficient only in the structures, vocabulary, etc. That s/he is teaching since learning activities and materials are carefully controlled

Methods of the 1970s

By the 1970s the impact of Chomsky's theories on language had blown away much of the behaviorist-inspired orthodoxy of the audiolingual method.

The following methods are considered by Celce-Murcia (1991)[8] as the most recent and the ones that have attracted the English Language Teaching professionals.

Community Language Learning

This method was developed by Charles Curran who had been very influenced by a view of education in which learners in a classroom were regarded as a group in need of therapy and counseling rather than as conventional classroom learners. Emphasis was made on the valuing of each individual's contribution to classroom language production as a way of lowering the defensive anxiety, which impairs the performance of many classroom learners. This method has been criticized from the point of view that the teacher becomes too non-directive- the student often needs direction in the early stages of learning.

---

7 Ibid.
8 Ibid.

Suggestopedia

Suggestopedia is based to a large extent on the work of the Bulgarian psychologist Lozanov. His view was that the by enhancing the state of relaxation under the right conditions, the human brain could process great quantities of material. This draws on work in the area of yoga and extrasensory perception. Students are encouraged to relax to the sound of classical music while attempting to memorize linguistic material. The practicality of using Suggestopedia in certain situations where music and comfortable chairs are not available has also been called into question.

The Silent Way

This method, associated with Caleb Gattegno is founded on more problem-solving principles rather than the humanism of suggestopedia. In this view, learning is facilitated if the learner expends energy in terms of discovering and creating rather than remembering and repeating. The Silent Way is typical of the discovery learning methods which grew out of the 1960s. In the classroom, the method often makes use of Cuisinere rods together with wall charts as props. One criticism of the method is that the teacher is too distant to encourage a communicative atmosphere. However the Silent Way is important in one respect- we as teachers should not just be prepared to serve up everything neatly ordered for our students.

Total Physical Response (TPR)

Over a long period of time, many teachers have recognized the value of associating language with physical activity. In total physical response classrooms, for example, students do a considerable amount of listening and acting, making heavy use of imperative commands. This method appeals to the dramatic and theatrical nature of language learning. TPR has been generally thought to be most effective at lower levels of proficiency.

The Natural Approach

The natural approach was an offshoot Stephen Krashen's theories of second language acquisition. This method stressed the need to delay production of language i.e. production of language should be preceded by a long period of listening. Furthermore the atmosphere inside the classroom should be as relaxed as possible and that the emphasis should be on communication and acquisition as opposed to linguistic analysis. The task of the teacher is to provide comprehensive input i.e. to provide spoken language which is at the level of the learner or perhaps slightly in excess of this proficiency level. One criticism of the natural approach relates specifically to this silent period. If this varies from person to person, how then does the teacher manage the practicalities of a classroom with 30 students?

Krashen's Five Models

The famous linguist, Noam Chomsky, formulated the hypothesis of the LAD (Language Acquisition Device) in 1964 to explain the astounding phenomenon of human language. Today the LAD is universally accepted by psycholinguists. Stephen Krashen

(1995)9 was the first psycholinguist to try to explain, with a model, how the LAD works so we can manipulate the parameters so that adults can optimize their acquisition of languages.

According to Krashen, LAD's behavior is given by five hypotheses. These are: The Acquisition-Learning Distinction, The Natural Order, The Monitor, The Input and The Affective Filter Hypotheses (Krashen, 1995)10.

The *Acquisition-Learning Distinction Hypothesis* makes a distinction between these two. It says that acquisition is a subconscious process to develop a language; it is as children learn. Learning, on the other hand, is a conscious process where knowledge of a language is obtained by rules, being aware of them and also to be able to reproduce the language.

The *Natural Order Hypothesis* says that children acquire linguistic forms, rules and items in a similar order. This is said to show a natural order of development.

The *Monitor Hypothesis* is defined as a little box inserted in the mind with the main purpose of correcting what we have learnt with the rules given in class.

The *Input Hypothesis* says it is necessary for the learner to understand input language, which contains linguistic items that are slightly beyond the learner's present competence. In this situation language is said to emerge naturally.

The *Affective Filter* says everyone has a filter that is composed by one's emotions. While in class, negative emotions (like fear, lack of self-confidence, etc) will prevent the learner from making use of the input and positive emotions will facilitate learning.

Communicative Language Teaching

Central to the development of communicative language teaching has been notion of communicative competence as defined by the sociolinguist Dell Hymes. Hymes was concerned that the concept of linguistic competence put forward by Chomsky i.e. the underlying rule representation of the speaker was too narrow. Hymes' communicative competence on the other hand focuses on the wider factors beyond linguistic competence, taking into account pragmatic aspects governing the use of the language in everyday situations.

Thus creativity is incorporated into communicative competency. Focusing purely on language form i.e. syntactic structures was considered too narrow. Communicative language teaching therefore seeks to bring learners into closer contact with authentic language examples together with the promotion of fluency over accuracy.

Subsequent linguists have attempted to analyze language into a series of communicative categories covering notional concepts such as quantity, space and time and functional categories (e.g. requests and denials)

---

9 Krashen, S.D. (1995). *Principles and Practice in Second Language Acquisition*. Great Britain: Phoenix, ELT Prentice Hall International. 202 pp.
10 Ibid.

2.2.1 Piaget, Vygotsky and Constructivism

Few people have had more influence on schooling in the 20th century than Jean Piaget (1896-1980) and Lev Vygotsky (1896-1934). Their theories form the basis of an important teaching theory known as constructivism. I wanted to take a look at these researchers's main concepts, followed by a brief exposition of ideas central to constructivism which are widely accepted today by educators.

Lev Vygotsky's Proximal Development

According to Lev Vygotsky, a child has two areas of development. The area of current development includes all that the child can do and perform independently at a given point in time. This prepares a child for future learning which takes place outside this area. Surrounding the area of current development is a zone which represents the child's level of development in the near future. Vygotsky calls this area the "zone of proximal development." According to Vygotsky, learning takes place in this zone. "The zone of proximal development is 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)[11]. As a child advances in learning, the zone of proximal development becomes the area of current development surrounded by another area of future development. This pattern continues.

What does this imply for teaching? Teaching is effective when it is based on the next stage of the child's development rather than on the current stage of development. The instructor must be knowledgeable about child development in order to predict the learner's development. The instructor must also provide educational materials and content which go beyond the child's current capabilities. The teacher's role is not that of simplifying the content, but of providing unfamiliar content and the setting for learners to step from their current level to a higher level of understanding. To further understand the zone of proximal development, one must view the individual within the social situation of the learning.

According to Vygotsky, "learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers. Once the process is internalized, they become part of the child's independent developmental achievement" (Vygotsky, 1978)[12]. Children do not develop in isolation. This implies the interdependence of the student and the social situation with a great responsibility on the teacher to establish an interactive instructional situation between the teacher and learner or the learner and more capable peers. Learning is created by both participants in a variety of social contexts. Development does not lead to socialization. Social relations lead to the development of mental functions. Thus, learning could occur through play, formal instruction, or work between a learner and a more experienced learner.

---

11 Vygotsky, L. (1978). Mind in Society - The Development of higher Psychological Processes. Cambridge: Harvard University Press.
12 Ibid.

Vygotsky proposed a holistic perspective which supports the whole language philosophy practiced in classrooms today. According to Vygotsky, "The best method is one in which children do not learn to read and write but in which both these skills are found in play situations. In the same way that children learn to speak, they should be able to learn to read and write" (Vygotsky, 1978)[13]. Whole language is whole, relevant, and involves the context of social interaction. The teacher serves as a mediator between the learner and the rich, literate environment as culture is transmitted through literature. Students interact with text, teacher, peers, and the real world to further their development. In contrast, a reading readiness or mastery approach to literacy contradicts Vygotsky's theory and prevents students from developing the zone of proximal development to reach new levels.

Vygotsky stresses the social interaction between learner and more capable learner as influential in development although he did not specify in detail the nature of the interaction. Cooperative learning holds similarities in that students interact to achieve a common goal which cannot be accomplished without interdependence. A participatory model which emphasizes socializing children into the cultural practices of literacy would include both whole language and cooperative learning.

Vygotsky's theory appears to be compatible with foreign language acquisition theory. To apply Vygotsky's theory to bilingual education today would be to address the broader social and academic issues than imply learning English or remedial skill instruction. The teacher would take a sociocultural approach to education and interweave outside resources and children's own communities to enhance instruction. Sheltered content instruction for students of limited English proficiency is subject to criticism under Vygotsky's theory and may actually serve as a method which provides too much concrete information, thus preventing students from internalizing language and concepts.

Jean Piaget's Process of Cognitive Development

Jean Piaget was mainly interested in the biological influences on "how we come to know." He believed that what distinguishes human beings from other animals is our ability to do "abstract symbolic reasoning.

While working in a I.Q. test lab in Paris, Piaget noticed that young children's answers were qualitatively different than older children which suggested to him that the younger ones were not dumber (a quantitative position since as they got older and had more experiences they would get smarter) but, instead, answered the questions differently than their older peers because they thought differently.

There are two major aspects to his theory: the process of coming to know and the stages we move through as we gradually acquire this ability.

Process of Cognitive Development. As a biologist, Piaget was interested in how an organism adapts to its environment (Piaget described as intelligence.) Behavior (adaptation to the environment) is controlled through mental organizations called schemes that the individual uses to represent the world and designate action. This adaptation is driven by a biological drive to obtain balance between schemes and the environment (equilibration).

---

13 Ibid.

Piaget hypothesized that infants are born with schemes operating at birth that he called "reflexes." In other animals, these reflexes control behavior throughout life. However, in human beings as the infant uses these reflexes to adapt to the environment, these reflexes are quickly replaced with constructed schemes.

Piaget described two processes used by the individual in its attempt to adapt: assimilation and accomodation. Both of these processes are used throughout life as the person increasingly adapts to the environment in a more complex manner.

Assimilation is the process of using or transforming the environment so that it can be placed in preexisting cognitive structures. Accomodation is the process of changing cognitive structures in order to accept something from the environment. Both processes are used simultaneously and alternately throughout life.

As schemes become increasingly more complex (i.e., responsible for more complex behaviors) they are termed structures. As one's structures become more complex, they are organized in a hierarchical manner (i.e., from general to specific).

Many pre-school and primary programs are modeled on Piaget's theory, which, as stated previously, provides part of the foundation forconstructivist learning Discovery learning and supporting the developing interests of the child are two primary instructional techniques. It is recommended that parents and teachers challenge the child's abilities, but NOT present material or information that is too far beyond the child's level. It is also recommended that teachers use a wide variety of concrete experiences to help the child learn (e.g., use of manipulatives, working in groups to get experience seeing from another's perspective, field trips, etc).

Educational Constructivism

The term refers to the idea that learners construct knowledge for themselves---each learner individually (and socially) constructs meaning as he or she learns. Constructing meaning is learning; there is no other kind. The dramatic consequences of this view are twofold:

- We have to focus on the learner in thinking about learning (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.

If we accept constructivist theory, we have to recognize that there is no such thing as knowledge "out there" independent of the knower, but only knowledge we construct for ourselves as we learn. Learning is not understanding the "true" nature of things, nor is it (as Plato suggested) remembering perceived perfect ideas, but rather a personal and social construction of meaning out of the array of sensations which have no order or structure besides the explanations which we fabricate for them.

If we believe that knowledge consists of learning about the real world out there, then we endeavor first and foremost to understand that world, organize it in the most rational way possible, and, as teachers, present it to the learner. This view may still engage us in providing the learner with activities, with hands-on learning, with opportunities to experiment and manipulate the objects of the world, but the intention is always to make clear to the learner the structure of the world independent of the learner. We help the learner understand the world. but we don't ask him to construct his or her own world.

The great triumph of Western intellectual history from the Enlightenment until the beginning of the 20th century rested on its ability to organize the knowledge of the world in a rational way independent of the learner, determined by some structure of the subject. Disciplines were developed, taxonomic schemes established, and all these categories were viewed as components of a vast mechanical machine in which the parts could be explained in terms of their relationship to each other, and each part contributed to making the whole function smoothly. Nowhere in this description does the learner appear. The task of the teacher was to make clear to the learner the working of this machine and any accommodation to the learner was only to account for different appropriate entry points for different learners.

However, constructivist theory requires that we turn our attention by 180 degrees we must turn our back on any idea of an all-encompassing machine which describes nature and instead look towards the learners each of whom creates his or her own model to explain nature. If we accept the constructivist position we are inevitably required to follow a pedagogy which argues that we must provide learners with the opportunity to: a) interact with sensory data, and b) construct their own world.

Principles of learning. What are some guiding principles of constructivist thinking that we must keep in mind when we consider our role as educators? Next a few ideas will be outlined, all predicated on the belief that learning consists of individuals' constructed meanings.

- 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 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 learner s engaging with the world.
- People learn to learn as they learn: learning consists both of constructing meaning and constructing systems of meaning. For example, if we learn the chronology of dates of a series of historical events, we are simultaneously learning the meaning of a chronology. Each meaning we construct makes us better able to give meaning to other sensations which can fit a similar pattern.
- The crucial action of constructing meaning is mental: it happens in the mind. Physical actions, hands-on experience may be necessary for learning, especially for children, but it is not sufficient; we need to provide activities which engage the mind as well as the hands.
- Learning involves language: the language we use influences learning. On the empirical level. researchers have noted that people talk to themselves as they learn. On a more general level. there is a collection of arguments, presented most forcefully by Vigotsky, that language and learning are inextricably intertwined.
- Learning is a social activity: our learning is intimately associated with our connection with other human beings, our teachers, our peers, our family as well as casual acquaintances, including the people before us or next to us at the exhibit. We are more likely to be successful in our efforts to educate if we recognize this principle rather than try to avoid it. Much of traditional education, is directed towards isolating the learner from all social interaction, and towards seeing education as a one-on-one relationship between the learner and the objective material to be learned. In contrast, progressive education recognizes the social aspect of learning and uses conversation,

interaction with others, and the application of knowledge as an integral aspect of learning.

- Learning is contextual: we do not learn isolated facts and theories in some abstract ethereal land of the mind separate from the rest of our lives: we learn in relationship to what else we know, what we believe, our prejudices and our fears. On reflection, it becomes clear that this point is actually a corollary of the idea that learning is active and social. We cannot divorce our learning from our lives.

- One needs knowledge to learn: it is not possible to assimilate new knowledge without having some structure developed from previous knowledge to build on. The more we know, the more we can learn. Therefore any effort to teach must be connected to the state of the learner, must provide a path into the subject for the learner based on that learner's previous knowledge.

- It takes time to learn: learning is not instantaneous. For significant learning we need to revisit ideas, ponder them try them out, play with them and use them. If you reflect on anything you have learned, you soon realize that it is the product of repeated exposure and thought. Even, or especially, moments of profound insight, can be traced back to longer periods of preparation.

- Motivation is a key component in learning. Not only is it the case that motivation helps learning, it is essential for learning. This ideas of motivation as described here is broadly conceived to include an understanding of ways in which the knowledge can be used. Unless we know "the reasons why", we may not be very involved in using the knowledge that may be instilled in us, even by the most severe and direct teaching.

2.3 EFL instruction at the University of Quintana Roo (UQROO)

EFL at the UQROO has two contexts: The English Language Major and the University Program of Languages (PUI). These two different English programs are meant for different purposes but they both have EFL as an integral part of their curricula. The English Language Major's objective is the formation of English language professionals able to design and revise courses, instrument, apply or adapt teaching methods in a flexible way and asses and implement techniques in order to facilitate the teaching-learning process. One of the focuses of this major is the mastery of English language, therefore, a number of EFL subjects have been included in the major's curricula. Among these EFL subjects are English I, English II, etc. The PUI is not restricted to the alumni. People outside the University can join these language programs which have been designed with a different purpose: The use of language for specific situations such as traveling, meeting people, etc. PUI programs are divided into four parts each one corresponding to one of the language's main abilities: reading, listening, speaking and writing. Examples of English courses at the PUI are: Introductory, Basic, Pre-Intermediate and Intermediate.

Both English Language Major's and PUI's English Instruction are to be certified by an International English Examination. In the case of the English Language Major, EFL instruction is certified by Cambridge's CAE. The exams that certify PUI EFL instruction are among others: KET (Key English Test), PET (Preliminary English Test) and FCE (First Certificate in English).

It is important to say that there is a close relation between the English Language Major and the PUI. When the PUI came into being in 1995, it was strongly endorsed by the English Language Coordination. Both English Language Major teachers and PUI English teachers, are experienced professionals with a clear and solid vocation for the teaching of English language.

2.3.1 Supporting Language Teaching Approaches

A recent thesis work by De León & Vázquez (1999)[14] called *Identification of Class Activities in Introductory English Courses in the University Program of Languages at UQROO*, reveals information about the pedagogical theories that a group of EFL teachers at UQROO base their EFL instruction on. This study is by no means complete since it only includes PUI EFL teachers. However, we could somehow use the study findings and generalize them for all EFL teachers, given the close relation and continuous feed back between them.

The study's main objective was to identify the class activities used by PUI introductory English instruction to relate them to a list of language teaching methods. The target population comprised five groups of Introductory English Courses at the University Program of Languages (PUI). The results as expected were that all teachers base their EFL instruction on one or more known language teaching methods.

The most popular Language Teaching theories among PUI EFL instruction at UQROO are: The Direct Method, Situational Language Teaching and Community Language Learning.

> In this sense, the class activities found in the classrooms show a tendency to use in general the following methods: The Direct Method, The situational Language Teaching and The Community Language Learning (De León & Vázquez, 1999)[15].

When taking a look at the popular language teaching theories used by UQROO EFL teachers, we see a lot of similarities.

> We found that predominant methods have something in common. In the Direct Method and the Situational Language Teaching, native language is not permitted and new language topics are practiced orally. Other similarity is that both group work and grammar are taught inductively (De León & Vázquez, 1999)[16].

2.3.2 Compliance with Language Teaching Approaches

The study divided the main aspects of the language teaching theories into a set of categories. We will take a look at each one of them and will see to what extent these categories are complied by UQROO EFL teachers according to the findings of this study.

Class Language.
It is generally accepted that the target language (English) should be used as much as possible. This way students will learn by association. Theories differ on the resources that

---

14 Op. Cit.
15 Ibid.
16 Ibid.

should be used to substitute translation, some suggest mimicry, some demonstration or exemplification.

EFL teachers at UQROO agree on this perception. The study included a questionnaire for teachers where most teachers said that they never give the class totally in Spanish and that they do demonstrations and mimicry for students to infer the meaning of words. The following is an interpretation of the results of the questionnaires:

> The activity of giving the meaning of words through demonstration and exemplification are very common in the classroom (De León & Vázquez, 1999)17.

However, the researchers' direct observation of the classes says the contrary.

> In the category of "class language" most of the time (the five teachers) used the native language when teaching to make the meaning of words and phrases clearer. English language is used to practice dialogs, answer questions, pronunciation in a low percentage. This activity corresponds to the Grammar Translation Method. (De León & Vázquez, 1999)18.

Researchers were not unaware of this contradiction.

> Although we have written that teachers explain their classes in Spanish in our observations, the students' and teachers' questionnaires say the contrary (De León & Vázquez, 1999)19.

From this situation, we can infer that teachers generally accept the use of English in the EFL classroom as something beneficial. Students also have a perception that having an English environment is good. However, teachers still find it difficult to take into practice.

Group Work.

Group Work is usually intended for communication purposes. Students interact and interchange opinions, this way they associate the use of language with factual reasons. The questionnaires and the researchers' direct observation show that all EFL teachers practice group work.

> In the category "group work" the 5 teachers practiced this activity in their classes. All of them gave special importance to make students interact and interchange opinions(De León & Vázquez, 1999)20.

We all agree on groupwork's benefits to communication, however in the traditional classroom context there is only the teacher and some students to talk to. This limits the capacity of communication that can take place and we must not forget that this is not a *real life* communication.

Daily Life Context.

Modern language teaching theories agree that language teaching should be placed in a real life context. Teachers are always insisting that "a bridge must be built between the real

---

17 Ibid.
18 Ibid.
19 Ibid.
20 Ibid.

world and what it happens in the classroom". That is why they are always trying to use examples taken from real life situations.

> In the category of "daily life context" we found that most of the teachers apart from the activities on the book (that are based on context), they shared with students some personal anecdotes or made students represent their lives in certain situations (De León & Vázquez, 1999)21

Grammar Explanation

As said before, these pedagogical methods stress the importance of communication and they lessen the straight introduction of grammatical items. They agree that grammar explanation in the native language should be avoided. Instead, other resources such as mimicry and demonstrations should be used so that students infer grammar rules. So, grammar should be taught inductively.

According to the researchers, this is not totally complied by UQROO EFL teachers and grammar is sometimes taught the old way.

Communicative Practice

Communication is the main purpose of modern language theories. UQROO EFL teachers agree on this and they try to include communicative activities in the classroom.

> In the category of "communicative practice" the results were that most of the teachers made at least one activity in which the students should talk (De León & Vázquez, 1999)22

The study also allowed to compare UQROO EFL performance over a major pedagogical considerations: The student-centered classroom.

Current pedagogical theory encourages the student-centered classroom. The traditional image of the teacher in front of the lecturing and students listening is becoming a thing of the past. According to the study, EFL instruction at UQROO has a teacher-centered model.

> Teacher is a facilitator to develop speaking activities where she/he translates phrases, vocabulary and to make students able to mantain a conversation. This is a center-teacher activity commonly arranged in group work allowing students interact and practice orally what they have learned in class (De León & Vázquez, 1999)23.

From this study's findings we can conclude that EFL instruction at the University of Quintana Roo is following the trend on EFL instruction. This is, teachers understand the importance of communication and learner autonomy in English language teaching and realize the benefits of the new approaches on language teaching. However, these theories have not had much impact on important aspects of language teaching such as Grammar Explanation, student centeredness and Class Language.

---

21 Ibid.
22 Ibid.
23 Ibid.

2.4 Objectives of the English Language Major (ELM) at UQROO

Teaching culture as part of foreign language learning has been given increasing attention during the last three decades. This has gone hand in hand with current views of the communicative nature of language. As Canale & Swain (1980)24 argue, the attainment of communicative competence requires cultural understanding and culture plays an intrinsic role in acquiring second and foreign languages.

When examining the goals of ELM at UQROO, one will soon discover that there is a focus on language and culture among others.

Perfil del Egresado.

El egresado de esta licenciatura es un profesional con conocimiento de la lengua inglesa, así como de:

- La cultura de los Estados Unidos y Gran Bretaña.
- La metodología de la enseñanza de lenguas extranjeras.
- La lingüística general y de otras ramas de la lingüística.
- Los conocimientos básicos de la lengua francesa y/o de traducción Inglés-Español y/o las bases para iniciarse en las actividades de traducción.
- La investigación didáctica, metodológica y lingüística (Universidad de Quintana Roo, 2000)25.

This focus on Culture and Language is evident when we take a look at some of the subjects included in the major's curricula.

Inglés Intermedio A. Preparación para el exámen PET de Cambridge. Practica en la traducción y comprensión del lenguage hablado y escrito para una comunicación adecuada.

Historia de la Lengua Inglesa. Estudio de los aspectos históricos y culturales que han desarrolado a la lengua Inglesa desde sus inicios hasta el período contemporaneo. Análisis de los cambios lingüísticos más relevantes que ha tenido el Inglés como consecuencia de los eventos históricos y socio políticos que han tenido lugar en Gran Bretaña.

Vida y Cultura de los Estados Unidos y Gran Bretaña. Análisis de la cultura estadounidense y británica basado en sus actividades cotidianas, creencias y tradiciones. Análisis y comparación de varios rasgos culturales con las características paralelas de la cultura mexicana.

(Taken from the Plan de Estudios de la Licenciatura en Lengua Inglesa)

2.5 UQROO: The Fundamental Principle of Innovation

The University of Quintana Roo Project began in 1989. Its main purpose was to create "The New Mexican University". From the beginning the basic functions of the UQROO were dictated by four fundamental principles.

Por nuestro modelo educativo centrado en la innovación, la calidad, la vinculación y la multidisciplina, nos hemos convertido en la mejor opción de educación superior en el Sureste Mexicano (Universidad de Quintana Roo, 2000)26.

---

24 Canale, M. & M. Swain (1980). Theoretical basis of communicative approaches to second language teaching and testing. *Applied Linguistics.* [WWW document] URL http://www.linguistic-funland.com/tesl.html
25 Universidad de Quintana Roo. (n.d./2000). *Licenciatura en Lengua Inglesa* [WWW document]. URL http://www.uqroo.mx/uqroo/carreras/c_lenginglesa.htm

This is a brief summary of the four fundamental principles of the University of Quintana Roo, as mentioned by De León and Vázquez (1999)[27].

Linkage: The University needs to establish relationships with society in order to make people participate in the process of its activities and functions and to obtain the benefit of the society and the formation of professional people.

Multidiscipline: It arises to solve problems in real situations through diverse perspectives as academic work, research, diffusion and university extensions.

Innovation: It is assumed that the role of the University will all the time be constantly searching for new methods, techniques and processes of development as its fundamental activities.

Quality: The effort tending to be projected to the society and in the country is the excellence in the results obtained in the activities of the University. At the same time, there will be evaluations to diagnose these results so as to continue with the institutional improvement.

We will later discuss how the Internet incorporation to the EFL instruction at UQROO complies with the Fundamental Principle of Innovation.

---

26 Ibid.
27 Op. Cit.

CHAPTER 3.   The Internet

This chapter will deal with the most important and popular Internet resources. We will first take a look at the history of Internet and some of the current practices and researches on Internet and EFL. Afterwards, we will stop to describe the main resources found in the Internet. We will take a look at the World Wide Web, e-mail and chat. We will discover what they are, their characteristics and some resources.

3.1 History and development of the Internet

The original Internet was set up in the 1960s by the United States Army and consisted of a small computer network that linked four sites, permitting users to share resources and send information from one site to another. To this end, a set of programming instructions, the so-called Internet Protocol (IP), was developed, so that files could be broken down in small 'packets' for transmission. Later, a second protocol, the Transmission Control Protocol (TCP) was created to make sure that packages were not only sent, but also arrived in the right order. Although TCP/IP may not be the best way of transmitting data, they were the first and have become the electronic glue which ever since has held networked computers together.

In the 1970s, the US government, which owned the Internet, decided to link up university computers in the United States. From that point on, the Internet continued to grow and now it does not belong to anyone any more. Individuals, companies, and organizations discovered the benefits of connecting to the Net. Small companies developed Local Area Networks (LANs), connecting computers on a single site or floor. Large corporations developed their own international services. For instance, CompuServe and America OnLine made their private networks available for the general public for a monthly fee. However, not only entire networks were added to the Internet. Individuals could also link up their stand-alone computer to the Internet. At first, this required specific and complex software and knowledge to enable disparate computers to communicate. The World Wide Web, however, has removed the need for much of this expertise. As such, it is probably the most important factor accounting for the startling growth of the Internet over the last decade.

Since the Internet does not have a governing body or central authority, it is difficult to estimate the number of people who have access to the Internet. Therefore, Internet statistics should always be regarded with suspicion; figures are often a matter of informed guesswork. According to Salmon (1999)[28], whose figures are based on various reliable sources, the number of host computers, i.e. computers that have a unique IP address and are directly connected to the Net, has grown steadily from 45,000 in 1987 to over 16 million in 1997. Since this can be measured accurately, these figures are correct. Estimates for the number of users, however, vary wildly. Nevertheless, a reasonable estimate seems to be that in January 1998 there were approximately 101 million people who had access to the Net.

What is beyond doubt, however, is the dominance of the United States. In 1998, a survey of the Georgia Institute of Technology (GVU, 1998)[29] showed that 84.7% of all users

---

28 Salmon, A. (n.d./1999). *Internet Statistics* [WWW document]. URL http://www.dns.net/andras/stats.html
29 Graphic, Visualization, & Usability Center (n.d./1998). *Tenth WWW User Survey* [WWW document]. URL http://www.cc.gatech.edu/gvu/user_surveys/survey-1998-10/graphs/general/q50.htm

could be found in the US, 7.3% in Europe, 2% in Australia, and 1.1% in Asia. The same survey shows that Mexico has only the .1% of the world's WWW users. Although the Internet has grown enormously since then, the proportions remain roughly equal, apart from the fact that Europe and Japan are growing much more quickly than other parts of the world.

In fact, measured by the number of registered domain names, Japan is runner-up to the United States. Nevertheless, although in July 1997 182 countries were fully connected to the Internet and 194 could be reached by e-mail (Salmon, 1999)[30], only a small part of the global population has access to the Net. As the Panos organization points out, non-Western countries seem to miss out:

> In theory the means to handle information are increasingly available and democratic. In practice there is a danger of a new information elitism which further disenfranchises the majority of the world's population. In the short term, the North-South information gap looks set to increase, particularly for Africa. (Panos, 1995)[31]

The North-South divide is as real on the Internet as it is elsewhere. This also has consequences for the number of EFL students that can use the Internet. Although the Internet itself may continue to grow explosively, the number of potential students in key markets is restricted. Whether or not learners will connect to the Net depends on a number of factors, including:

- National policies on telecommunications;
- International agreements on areas such as copyright and censorship;
- Technological developments at the hardware and software level;
- The attractivity and pricing of learning materials and services available.

3.2 Internet Tools and Resources

The most popular Internet resources are the World Wide Web, Email and IRC (chat). Most of the Internet's activities is based on the use of these resources. Following there is a brief explanaionon what these resources are:

3.2.1 The World Wide Web

The World Wide Web is the most recent arrival on the Internet scene. It is just one part of the Internet, along with email, ftp, gopher, and other services. The WWW is based on hypertext which is a system for displaying information. Although initially just for text, now you can see many formats of media: graphics, animations, video and sound.

A broader definition comes from the organization that Web inventor Tim Berners-Lee helped found, the World Wide Web Consortium (W3C):

> 'The World Wide Web is the universe of network-accessible information, an embodiment of human knowledge' (Berners-Lee, 2000)[32]

---

30 Op. Cit.
31 Panos (n.d./1995). *The Internet and the South: Superhighway or Dirt-track?* [WWW document]. URL
http://www.oneworld.org/panos/briefing/internet.htm

Some of the general advantages the WWW has are its flexibility, power and easy of use. That is why it is the most popular Internet resource today. According to the Internet Software Consortium, by January 2000 there were 72,398,092 registered domain names that belonged to the same number of web sites. It is important to point out that from the total of registered domain names, only 404,873 are Mexican domain names (ISC, 2000)[33]. Thus, with the help of a simple program, a web browser, one can access any of these web sites that can contain multimedia, text, images, sounds, moving pictures and offer the possibility to interact (LeLoup & Ponterio, 1995)[34]. Hypertext Markup Language (HTML), the language of the Web, amplifies the WWW's flexibility and offers possibilities that are unparalleled in other utilities. Context in communication is of major importance in language learning and the presence of various kinds of multimedia on the Web makes the comprehension of authentic texts a lot easier to learners.

To use the WWW, one needs an Internet connection and a WWW client program. These so-called web browsers communicate with the web server of one's Internet Service Provider (ISP), which in turn is indirectly connected to computers and networks all over the world. This way information can be retrieved from every computer that is linked to the Internet. WWW pages are sent using Hypertext Transfer Protocol (HTTP). This means that the files that are being transferred are formatted in HTML, the Web standard. The first thing a browser does when a specific page is requested is sending a request in the form of a Uniform Reference Locator (URL). This is an address that specifies a type of file, a host machine and the location of the file on the machine (LeLoup & Ponterio, 1995)[35]. For instance, the URL *http://www.uqroo.mx/alumnos/listadealumnos.html* means that this is a hypertext file (http) that can be found on a computer named uqroo.mx and that the page itself (listadealumnos.html) can be located on that machine in the folder alumnos/. If this URL is correct, the host machine will send the file to the computer that requested it. This file can contain references to other pages on the server or sites all over the world. These references are called hyperlinks. By clicking on them, one is automatically taken to the page requested. This non-linear hypertext is one of the big advantages of the WWW. It makes navigating the Web intuitive and easy.

3.2.1.1 Searching the WWW

Finding the Web documents (a.k.a. Web "pages" or "sites") they want can seem impossibly difficult for EFL teachers with little Internet experience. This is in part due to the sheer size of the WWW, currently estimated to contain 1 billion documents. It is also because the WWW is not indexed in any standard vocabulary (unlike a library's catalogs which assign Library of Congress or some other widely accepted standardized subject descriptors to their documents, or a journal-article index which uses its standardized subject descriptors).

When you do what is called "searching the Web," you are NOT searching it directly. It is not possible to search the WWW directly. The Web is the totality of the many web pages which reside on computers (called "servers") all over the world. Your computer cannot find

---

32 Berners-Lee, T. (n.d./2000). *Tim Berners-Lee: WWW and UU and I* [WWW document].
http://www.w3.org/People/Berners-Lee/UU.html
33 ISC. (n.d./2000). *Distribution by Top-Level Domain Name by Host Count*
January 2000 [WWW document]. http://www.isc.org/ds/WWW-200001/dist-bynum.html
34 LeLoup, J.W. & R. Ponterio (1995). Basic Internet Tools for Foreign Language Educators. In M. Warschauer (Ed.), *Virtual Connections: Online Activities & Projects for Networking Language Learners.* Honolulu, HI: University of Hawaii Press.
35 Ibid.

or go to them all directly. What you are able to do through your computer is access one of several intermediate databases and web pages which contain selections of other web pages organized to allow you to find other web pages and sometimes other databases. You search these intermediate "search tools," and they can provide you with hypertext links (URLs) to other pages. You click on these links, and retrieve documents, images, sound, and more from individual servers around the world. There are several kinds of search tools but we will focus on the most popular and effective ones: Search Engines, Internet Directories and Meta Search Engines.

3.2.1.2 Search Engines

These search tools are actually web pages themselves and they use 'crawlers' or 'spiders' to scan the Web for new sites. They can search through the entire text in a page and make indices of found words. When someone performs a search, the keywords are matched with the words in the index and the engine comes up with a list of web pages that contain the keywords. Obviously, search engines vary in quality depending on the size of their index, frequency of updating the index, search options, and speed (Whatis.Com, 2000)[36]. There are also other search engine approaches, for example:

- Specialized content search engines that are selective about what part of the Web is crawled and indexed. For example, TechTarget sites for products such as the AS/400 (http://www.search400.com) and Windows NT (http://www.searchnt.com) selectively index only the best sites about these products and provide a shorter but more focused list of results.
- Search Engines that allow you to enter a search request in natural language, such as "What's the weather in Seattle today?" Ask Jeeves (http://www.askjeeves.com) is an example.
- Special tools such as WebFerret (from http://www.softferret.com) let you use a number of search engines at the same time and compile results for you in a single list.
- Individual Web sites, especially larger corporate sites, may use a search engine to index and retrieve the content of just their own site. Some of the major search engine companies license or sell their search engines for use on individual sites.

Examples of good search engines are:
- AltaVista (http://www.altavista.com)
- Excite (http://www.excite.com)
- Hotbot (http://www.hotbot.com)
- Infoseek (http://www.infoseek.com)
- Lycos (http://www.lycos.com)

3.2.1.3 Internet Directories

The second category consists of Internet directories. Humans create these. Sites have to be submitted and they are then categorized and sometimes judged by editors. Because of

---

36 Whatis.com (n.d./2000). *Whatis.com* [WWW document]. URL http://whatis.com/

the human role, these search tools often produce better results. To perform a search, one can browse through subject trees and hierarchies of categories until finally a list of sites that belong to a specific category can be consulted. For more information, see: Yahoo (http://www.yahoo.com).

3.2.1.4 Meta Search Engines

Meta-search engines make up the last category. These enable users to submit keyword searches to more than one engine at the same time. In other words, these engines do not have indices themselves, but rely on others to produce results. Meta-search engines only combine the results of other search tools. Some of the best meta-search engines are www.metacrawler.com, www.mamma.com and www.highway61.com.

3.2.1.5 Other search tools

There are other options for doing a search but these are tedious to use and not very recommended. But of course it is up to the user whether to give them a try or not. Usually, any of the search tools described above will take you to the information you are looking for. If you have exhausted these search tools, you may want to ask someone through a *Discussion Group*. You could look up in a *Subject Guide* or even a *Database*.

3.2.1.6 Search Strategies

Most of these search tools offer special features to facilitate searching. Often a simple keyword search produces too many hits. In that case, it is sensible to use the advanced search options that a search tool provides. These options differ according to what tool is used, but there are some general options most of them support (for specific information, see the help pages of each tool). The first is Boolean logic. When searching for keywords, one can use 'AND', 'OR', and 'NOT'. For instance, *teaching NOT language* will retrieve all documents that contain the keyword teaching, but not language. Second, there is phrase searching. This enables users to search for a specific phrase with the exact words in the order as keyed. For example, *'foreign language teaching'* (in inverted commas) will produce only documents with these three words in this word order and not documents that for instance only contain the word *foreign*. Third, it is useful to know if a certain search tool discriminates between letters in upper or lower case. This can influence the results of a search. Fourth, certain search tools provide field searching. This enables the user to search a specific field within web pages. For instance, *domain:mx* will retrieve all sites that have *mx* as domain name in the URL (i.e. Mexican web sites, such as http://www.prodigy.net.mx. This is an especially convenient option for narrowing down searches. Lastly, the truncation or wildcard option offers the ability to insert a symbol in a keyword to enhance searching capabilities. For example, *teach** will retrieve documents that contain *teach, teacher, teaching, teaches,* etc. All these options make it possible to narrow down a search, so that a tool will not produce an enormous amount of hits; using them is highly recommended. Unfortunately, every search tool has different options and uses different commands. Therefore, it is necessary to consult the help pages first to make the most out of a particular tool.

Using search tools is just one of the strategies someone can use to locate information on the World Wide Web. Some people suggest a going-straight-to-the-source and guessing strategy first. Going straight to the source means that a searcher should first of all identify a likely source organization for specific information. Then one can try to find the organization by guessing the URL. This involves typing *www* (most URLs start with this), the name of the organization, and the domain (*com.mx* for Mexican sites, *com* for commercial organizations, *edu* for educational institutions, etc.). Because many organizations often have very straightforward URLs, this strategy works in many cases. For instance, if a searcher is looking for American newspaper articles, a likely source is the Washington Post. And indeed the URL http://www.washingtonpost.com refers to the web site of the Post. If this fails, one should go on to search engines and directories. This is often a good strategy. If the subject is narrowed down as much as possible and the searcher makes good use of the features search tools have to offer, the World Wide Web is no labyrinth, but a vast realm of useful and accessible information.

3.2.1.7 Resources

The Web abounds with authentic material that can be used in various ways in the EFL classroom. Some even argue that specific EFL sites do not have much to offer at and that it is the non-EFL sites that make the WWW so valuable for language teachers and students.

The following links are only an indication of what is available on the Web. Appendix B contains a more comprehensive list of hyperlinks.

Authentic materials

Newspapers

The New York Times.
URL http://www.nyt.com
Magazines

Reference materials

There are many dictionaries, thesaurus and grammars available on the World Wide Web. In most cases, however, they do not add much to their written counterparts. Examples are:

Dictionaries

Merriam-Webster Online.
URL http://www.m-w.com
Grammars

Hughes, A. On-line English Grammar.
URL http://www.edunet.com/english/grammar/index.html

Literature

Literature sites can be divided into two groups: those containing information about books and writers and those containing on-line texts. A good example of an extensive collection of literature links is Liu's English Literature Page. Ockerbloom's On-line Books Page contains many on-line texts, which can easily be searched.

Literature Links

Bibliomania. Classic Fiction.
URL http://www.bibliomania.com/Fiction

Hylton, J. The Complete Works of William Shakespeare.
URL http://www-tech.mit.edu/Shakespeare/works.html

Collections of links

The following web pages are extensive collections of links that can be used by students to access information on just about anything regarding the English-speaking world.

Britannia.Com
URL http://www.britannia.com

English Language & Literature.
URL http://www2.prestel.co.uk/wispers/edunet/english.htm

Links for teachers

The following web sites are specifically designed for EFL teachers. They contain both theoretical information about the integration of the Internet into the EFL classroom and practical suggestions for Internet activities.

The Internet for English teachers.
URL http://edvista.com/claire/internet-esl.html

Center for Internet technology in teaching. Using Internet in Education.
URL http://citt.marin.cc.ca.us/using.html

3.2.2 E-mail

E-mail simply means electronic mail and from a user point of view it is very straightforward. As Haworth (1995)37 points out, it is a 'bread-and-butter Internet application'. Its first and foremost advantage is its ease of use. Everyone who has an Internet account, also has an e-mail address (e.g. pablo@prodigy.net.mx). All one needs is an e-mail client program and an Internet Account which is given by an Internet Service Provider (ISP). These e-mail applications allow users to compose messages off-line and then send them. This makes e-mail one of the cheapest Internet tools. Moreover, it makes traditional mail more or less redundant and compared to it, e-mail is fast and there are no material costs, such as paper or envelopes. In addition, e-mail programs include several useful functions that enhance effective communication. Amongst other things, e-mail applications can: send and receive new mail, save mail to a file system, reply to a message received, include parts of previously received messages in responses, forward mail, and send (blind) carbon copies (LeLoup & Ponterio, 1995)38. Another useful aspect is the possibility to send file attachments with e-mails. This means that any file on one's computer, such as a Word document, can be send to anyone who has an e-mail address too.

3.2.2.1 Resources

There are many organizations on the World Wide Web that provide pen pal services. Students can register and wait until someone writes them or pick someone themselves who has similar hobbies and interests. The only problem is that these e-mail exchanges can be rather noncommittal for the other party. However, there are projects, such as the Intercultural E-mail Classroom Connections Project (IECC), that enable teachers to engage in an e-mail exchange with an entire class from a foreign country, so that the students can count on their pen pals.

Intercultural E-mail Classroom Connections.
URL http://www.stolaf.edu/network/iecc/intro.html

Key Pals.
URL http://www.ziplink.net/users/tlipcon/keypals

3.2.3 Real-time communication (CHAT)

Internet Relay Chat (IRC) is the best known example of what the Net has to offer with respect to real-time communication. It is a multi-user chat system written by Jarkko Oikarinen, in 1988. IRC allows people to gather in groups, called 'channels' (#<name of channel>, e.g. #EFL), to talk about specific subjects. Private conversations are also possible. IRC allows users to communicate by splitting the screen into two parts. In the bottom half the user writes his or her contribution and after hitting the Enter key, the message appears in the top half so that the others who are on that particular channel can read it and react to it.

---

37 Op. Cit.
38 Op. Cit

The organization of IRC is rather arbitrary. Users can become 'channel operators' by creating a new channel or by being 'opened' by another operator. An operator can lock a channel, invite a user to or kick him off the channel, as well as other administrative functions.

Although certain channels are owned by a small group of operators, any user can create a new channel and become its operator by simply joining a non-existent channel (e.g. /join #EFL). To use IRC, there is special, free software widely available on the WWW, e.g. mIRC, ICQ and Microsoft Chat. These programs automate most IRC commands, such as /join (join a channel), /nick (change nickname), /list (list all channels), /msg (send a private message to someone), and /whois (reveals the 'true' identity of someone).

3.2.3.1 Resources

Channels on the IRC cease to exist once there are no people in them any more. This means it is impossible to give a list of channels that are of potential interest to EFL students. The best thing students can do is request a list of all channels and choose one of their liking. Another possibility for teachers is to create a channel and arranging other students from a foreign class, for instance, to meet there.

The following links provide more information about Internet Relay Chat and give a deeper insight into the medium.

Pioch, N. A short IRC primer.
URL http://cbl.leeds.ac.uk/nikos/tex2html/examples/IRCprimer1.1/IRCprimer1.1.html

ICQ
URL http://www.icq.com

CHAPTER 4.   Internet and EFL instruction.

As Celce-Murcia (1991)39 explains, "As a tool for language learning/teaching, media have undoubtedly always been present and have facilitated the task of language learning for both instructed and non-instructed learners. Whatever the approach, language teachers seem to universally agree that media can and do enhance language teaching".

The benefits of media are out of discussion.

> Media assists the teacher in his job, brings the outside world into the classroom, makes the task of language learning a more meaningful and exciting one (Celce-Murcia, 1991)40.

The following chapter will deal with a very particular type of media: the one that is generated by computers.

Teachers have been using computers for Language Instruction for many years, but so far there isn't much information and research on the subject. The following is a presentation of the theory that has been generated around the Incorporation of the Internet to the FL and EFL curricula. First, we will take a look at the History of CALL, which is the first attempt to use computers in Language Learning. We will continue with a general description of what the current research and practices on Internet and EFL are. Later, we will get into more concrete issues such as Why using the Internet in the EFL classroom? We will take a look at the pros and cons. We will also do a comparison between the Incorporation of the Internet to the EFL classroom and the Traditional Teaching Methods by discussing a research by Warshauer (1996)41 who compared face-to-face and electronic discussions in a second language classroom. Afterwards we will take a look at the theories around the use of Internet in the EFL classroom and important pedagogical considerations such as The Student Centered Classroom and The Changing Role of the Teacher.

This theory was scattered in the Internet and a very few books and it has been compiled after a deep exploration of written and electronic materials. In the case of the electronic documents, these were selected following the SCAD checklist. Later on, we will try to adjust this somehow general information to the UQROO context.

4.1 CALL (Computer Assisted Language Learning)

CALL stands for Computer Assisted Language Learning. It is the term most commonly used by teachers and students to describe the use of computers as part of a language course (Hardisty & Windeatt, 1990) 42. Computers have been used for language teaching ever since the 1960s. According to Warschauer & Healey (1998)43, this 40-year period can be divided into three main stages: behaviorist CALL, communicative CALL, and integrative CALL. Each stage corresponds to a certain level of technology and certain pedagogical theories.

---

39 Op. Cit.
40 Ibid.
41 Op. Cit.
42 Hardisty, D. & S. Windeatt (1990). *CALL.* Oxford University Press.
43 Warschauer, M. & D. Healey (1998). Computers and language learning: An overview. *Language Teaching.*

In the 1960s and 1970s the first form of computer-assisted language learning featured repetitive language drills, the so-called drill-and-practice method. It was based on the behaviorist learning model and as such the computer was viewed as little more than a mechanical tutor that never grew tired. It was mainly used for extensive drills, explicit grammar instruction, and translation tests (Ahmad, et al., 1985)[44].

Communicative CALL emerged in the 1970s and 1980s as a reaction to the behaviorist approach to language learning. Proponents of communicative CALL rejected behaviorist approaches at both the theoretical and pedagogical level. They stressed that CALL should focus more on using forms rather than on the forms themselves. Grammar should be taught implicitly and students should be encouraged to generate original utterances instead of manipulating prefabricated forms (Jones & Fortescue, 1987)[45].

The last stage of computer-assisted language learning is integrative CALL. Communicative CALL was criticized for using the computer in an ad hoc and disconnected fashion where marginal rather than central elements' of language learning were taught (Kenning & Kenning, 1990)[46]. Teachers have moved away from a cognitive view of communicative language teaching to a socio-cognitive view that emphasizes real language use in a meaningful, authentic context. Integrative CALL seeks both to integrate the various skills of language learning (listening, speaking, writing, and reading) and to integrate technology more fully into language teaching (Warschauer & Healey, 1998)[47].

The Internet and the rise of computer-mediated communication (CMC) in particular have reshaped the uses of computers for language learning. The recent shift to global information-based economies means that students will need to learn how to deal with large amounts of information and have to be able to communicate across languages and cultures. At the same time, the role of the teacher has changed as well. Teachers are not the only source of information any more, but act as facilitators so that students can actively interpret and organize the information they are given, fitting it into prior knowledge (Dole, et al., 1991)[48]. Students have become active participants in learning and are encouraged to be explorers and creators of language rather than passive recipients of it (Brown, 1991)[49]. Integrative CALL stresses these issues and additionally lets learners of a language communicate inexpensively with other learners or native speakers. As such, it combines information processing, communication, use of authentic language, and learner autonomy, all of which are of major importance in current language learning theories.

4.2 Current research and practices

With the advent of the Internet the computer is no longer just a tool for information processing, but also a tool for communication. This communication can either be synchronous (real-time communication) or asynchronous (e-mail) (Warschauer & Healey, 1998)[50]. Synchronous communication can be achieved either by specific software programs

44 Ahmad, K., G. Corbett, M. Rogers & R. Sussex (1985). *Computers, language learning and language teaching.* Cambridge, Great Britain: Cambridge University Press.
45 Jones, C. & S. Fortescue (1987). *Using computers in the language classroom.* London: Longman.
46 Kenning, M.-M. & M.J. Kenning (1990). *Computers and language learning: Current theory and practice.* New York: Ellis Horwood.
47 Op. Cit.
48 Dole, J.A., G.G. Duffy, L.R. Roehler & P.D. Pearson (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research.*
49 Brown, H.D. (1991). TESOL at twenty-five: What are the issues? *TESOL Quarterly.*
50 Op. Cit.

for local area networks, such as Daedalus InterChange or CommonSpace, or via the Internet, using Internet Relay Chat (IRC), for instance. Computer-assisted discussion has been especially popular in the United States for teaching foreign languages and English composition classes. Research in this area has concentrated on the questions of participation, language use, and writing improvement. Various studies have shown that one of the effects of computer-assisted discussion is a more balanced participation than in face-to-face discussions (Chun, 1994; Kelm, 1992; Kern, 1995)[51]. This is probably due to the fact that learners do not feel inhibited by their emotions, such as shyness. With regard to language use, it has been shown that CMC is lexically and syntactically more complex than face-to-face discussions (Warschauer, 1996)[52]. The reason for this is that students have more time to plan what they are going to say in CMC than in oral discussions.

Asynchronous communication is usually carried out by e-mail, although other tools may be used, such as bulletin boards and newsgroups. Nevertheless, e-mail is the most convenient and direct way of asynchronous communication. Therefore, many teachers have used it to offer students opportunities for authentic communication and for carrying out collaborative projects. However, there has not been much extensive research in this field. An ethnographic study by Tella (1991)[53] that concentrated on the processes and results of using e-mail showed that the classes involved in an e-mail exchange became much more learner-centered compared to their traditional counterparts. The learners devoted much time and effort to authentic reading and writing tasks related to the authentic communication with their partners. Finally, studies comparing electronic dialogue journals with their paper-and-pencil counterparts have shown that students using e-mail communicate more frequently, ask more questions, and use a greater variety of language functions (González-Bueno, 1998; Wang, 1993)[54].

The World Wide Web is the most recent medium of computer-mediated communication that has been introduced in the foreign language classroom.

> 'Part library, part publishing house, part telephone, part interactive television, the Web represents one of the most diverse and revolutionary media in human history. It is already starting to transform academia, business, and entertainment; there seems little doubt that it will eventually have a profound impact on education as well.' (Warschauer & Healey, 1998)[55]

Teachers have been using the WWW in several ways for language teaching. The Web can be used for providing linguistic exercises (Li, 1995)[56], for accessing authentic language materials (Lixl-Purcell, 1995)[57], for stimulating communicative exercises (Rosen, 1995)[58], and

---

51 Chun, D. (1994). Using computer networking to facilitate the acquisition of interactive competence. *System*.

Kelm, O. (1992). The use of synchronous computer networks in second language instruction: A preliminary report. *Foreign Language Annals*.

Kern, R. (1995). Restructuring classroom interaction with networked computers: Effects on quantity and quality of language production. *Modern Language Journal*.

52 Op. Cit.

53 Tella, S (1992). Talking shop via e-mail: A thematic and linguistic analysis of electronic mail communication. Research report No. 99. Department of Teacher Education

54 González-Bueno, M. (1998). The Effects of Electronic Mail on Spanish L2 Discourse. *Language Learning & Technology*.

Wang, Y.M. (1993). *E-mail dialogue journaling in an ESL reading and writing classroom*. Unpublished doctoral dissertation, University of Oregon at Eugene.

55 Op. Cit.

56 Li, R.-C. (1995). English as a second language home page. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners*. Honolulu, HI: Second Language Teaching & Curriculum Center.

57 Lixl-Purcel, A. (1995). German area studies on the net. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners*. Honolulu, HI: Second Language Teaching & Curriculum Center.

58 Rosen, L. (1995). City net: Travel the world from your desktop. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners*. Honolulu, HI: Second Language Teaching & Curriculum Center.

as a medium of student publishing (Bowers, 1995)[59]. Unfortunately, little research has been conducted so far into the effects of using the WWW in the EFL classroom, principally because of its relative newness and its complexity. Nevertheless, anecdotal evidence from individual teachers seems to indicate that the Web can be a stimulating asset to the foreign language classroom.

4.3 Reasons for using the Internet in the EFL classroom

The first question that underlies the educational use of the Internet proposed by this paper is of course *Why EFL teachers at UQROO should abandon their traditional methods and participate in what some still call a craze?* By now, however, it should be evident that the Internet is here to stay and that it will influence society as we know it. It is impossible to predict exactly what effects the Internet will have in the future, but based on the experiences so far it would be reasonable to conclude that it will acquire great significance. Moreover, nobody is asking teachers to abandon traditional teaching methods. The Internet should be seen as a very useful complement to conventional teaching.

4.3.1 General reasons

In 1991, Celce-Murcia said:

> The advent of computer networks now allows exchanges to take place. Native American children in Arizona correspond with Athabaskan students in Alaska and Chicano children in San Diego can send messages to students in Spain and Mexico. While it is too early to tell what kinds of effect such innovations will have over time, it is certain that, in creating another channel for meaningful use of language, they create settings in which mastery of language can be developed (Celce-Murcia, 1991)[60].

Mexican society is following the trend and is becoming an information society in which Information and Communication Technology (ICT) plays an ever-increasing role. By March 2000, the total of registered domain names in Mexico rounds the 38,000. This means that in only three years the number of people having a presence in the Internet has multiplied five times (Prodigy Web, 2000)[61]. As Janis Folkmanis (1998)[62] points out, the question arises as to whether schools 'can be allowed to fall behind in its role of educating our population in things that are becoming a core element of economic and social life.' It is self-evident that schools cannot ignore these developments. In the information society, there is a need for new skills and a basic understanding of the underlying technology (Janis Folkmanis, 1998)[63]. To achieve this, it is imperative that learning to work with computers and understanding new technologies is assimilated into the curriculum and into teaching methods.

So the UQROO is facing two major challenges in the 21st century. First of all, it will have to prepare their students for the information society and second it will have to make

---

59 Bowers, R. (1995). Web publishing for students of EST. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners.* Honolulu, HI: Second Language Teaching and Curriculum Center
60 Op. Cit.
61 Prodigy Web (n.d./2000). *Internet en Mexico* [WWW document]. URL http://prodigyweb.com.mx/
62 Janis Folkmanis, A. (n.d./1998). *Technology, the World-Wide-Web and the School* [WWW document]. URL http://wfs.eun.org/about/context/wfs/technoframe.html
63 Op. Cit.

effective use of ICT to provide better education. It is impossible to ignore the Internet. At the moment it is used by an estimated 50 million people in 152 countries. It is an invaluable source of information, which can be very useful in education.

Van Assche (1998)[64] argues that the use of the World Wide Web and the Internet can have several potential results and benefits.

- Schools will be able to cope better with the challenges of preparing the students for the information society. Learning to work with the information highway is a prerequisite today. In this context a new term has been coined: ICT illiteracy. In our society a division can be observed between people who are ICT literate and those who are not. Schools cannot afford to produce ICT illiterate students in a society in which expressing oneself in any multimedia form is a prerequisite.
- Schools and teachers that will exploit ICT to the fullest will dramatically improve the effectiveness of the education process. Education will shift from 'being told' to 'exploration' with a much deeper understanding as a result.
- Educational purpose of promoting the values we live by, such as tolerance and respect for other cultures, are more easily obtained. The Internet can pre-eminently be used for exchanging ideas with other cultures and eradicating prejudices against minorities.
- Finally, the use of the Internet will link the abstraction of teaching material with real life in the outside world. One of the reasons why many students fail at school is the dramatic lack of links between these two aspects (Roger, 1998)[65]. For instance, what is the use of learning to speak a foreign language if you can only talk to your teacher, who by the way speaks your mother tongue anyway? It is another kettle of fish when the Internet brings the world to your doorstep and opportunities to communicate are ample. All of a sudden languages change from being school subjects to exciting challenges for communication.

As said before, current pedagogical theories are focused on communication more than in grammar structures. But if there is only the teacher and 9 or 10 classmates to talk to, then engaging into real and meaningful conversations is virtually an unattainable goal. This is where the Internet comes in. Through various applications, such as e-mail and Internet Relay Chat (IRC), an exchange of ideas and opinions can take place.

By having access to vast resources of authentic material about foreign cultures, students will be able to gain knowledge and understanding of these cultures. The Internet enables them to participate in multilingual communities at home and around the world, so that they will use the language both within and beyond the UQROO.

Raimes (1983)[66] views teaching language as a paradigm which:

- sees language as communication;
- emphasizes real language use;
- recommends a student-centered classroom;
- encourages real language acquisition instead of just learning a set of grammatical rules;

---

64 Assche, F. van (n.d./1998). *The Web for Schools Project* [WWW document]. URL
http://wfs.eun.org/about/context/wfs/projectframe.html
65 Roger, C. (n.d./1998). *Comenius likes the Web* [WWW document]. URL
http://wfs.eun.org/about/context/wfs/comeniusframe.html
66 Raimes, A. (1983). *Techniques in Teaching Writing*. Oxford, Great Britain: Oxford University Press.

- develops humanistic, interpersonal approaches, and
- considers the nature of the learner, the learning process, and the learning environment.

The Internet can play an important role in each of these categories. The Internet is all about communicating and offers possibilities that would never be feasible in a traditional classroom setting. The language used on the Internet is real language and not especially designed for textbooks. Furthermore, the use of the Internet supports the shift from the traditional teacher-centered classroom to one in which the student is in the center. Students are motivated by using computers and talking 'live' to others. Without being conscious of it, the students will no longer consider learning a language a boring enterprise. They will be encouraged to learn more. Finally, since conveying messages plays a paramount role on the Internet, students will learn social skills and as such the Internet can be seen as an agent for socialization (Berge & Collins, 1995)[67].

In the end, it will be up to the teacher to integrate the application of the Internet into the curriculum. Since target language communication and cultures are well within reach through these new technologies, this will make a tremendous impact on the ability of students to communicate directly with native speakers (LeLoup & Ponterio, 1998)[68]. With the advent of the Internet, old-fashioned teaching methods, such as teaching grammar for the sake of grammar, will hopefully become a thing of the past, if this is not already the case.

4.3.2 Other reasons

As LeLoup & Ponterio (1996)[69] point out, there are a number of aspects that are inherent to the Internet which make it particularly suitable for teaching foreign languages. First of all, the World Wide Web is a 'veritable treasure trove of authentic materials for the FL teacher' (LeLoup & Ponterio, 1996)[70]. For instance, a myriad of tourist information can be found on the Net: photos of daily life in London, museums such as the Louvre, cathedrals, underground guides to the London tube, etcetera. Teachers are always looking for authentic materials, but their resources are limited. Some have neither the time nor the money to make regular trips abroad. UQROO teachers are especially geographically isolated from any target language contact. For them the Internet would be a real blessing.

Second, this information on the Internet will be up-to-date, so that teachers are no longer forced to use old fashioned and outdated material like the ones found at the SAC. Most web sites have so-called webmasters – people maintaining the page – who will make sure that the information is up-to-date.

Lastly, the students of this day need something more than books, whether we like it or not.

'Students who have been weaned on Nintendo, Sega, and a myriad of video and electronic games are simply not very excited by mere textbooks, no matter how colorful they have become. Many students also are quite

67 Berge, Z. & M. Collins (1995). *Computer-mediated communication and the online classroom in distance learning.* Cresskill, NJ: Hampton Press.
68 LeLoup, J.W. & R. Ponterio, (n.d./1998). *Internet Technologies for Authentic Language Learning Experiences* [WWW-document]. URL http://www.cal.org/ericcll/digest/leloup01.html
69 LeLoup, J.W. & R. Ponterio, (1996). Choosing and Using Materials for a 'Net' Gain in Foreign Language Learning and Instruction. In V.B. Levine (Ed.), *Reaching Out to the Communities We Serve.* NYSAFLT Annual Meeting Series, 13: 23-32.
70 Ibid.

computer-literate and they enjoy and prefer the challenge of finding TL (target language – JG) information on the web to filling out worksheets, writing in workbooks, and reading textbooks. ... Motivation for language study can benefit from the association with new technological tools, showing the students that language is also a tool for the future.' (LeLoup & Ponterio, 1996)[71].

And we should not overlook one important aspect of all this: Students who surf the Web are reading. That fact alone can be a benefit in our less literate society.

4.4 Positive and negative aspects of using the Internet

It is needless to say that besides positive aspects of the Internet as a language learning medium, there are also many negative aspects. In fact, many of the pros can also be seen as cons. For instance, it is argued that one of the benefits of the Internet is that it offers authentic language to the students. Although this is undoubtedly a positive aspect, there are some who say that this will cause students to be exposed to bad language and spelling, which of course is a considerable drawback.

However, most of the drawbacks are counterbalanced by the benefits that the Internet brings to the EFL classroom. In the following sections, both the advantages and the disadvantages of the Internet as a language learning medium will be discussed. They can be classified into three groups: pros and cons with respect to organizational features, accessibility and pedagogical features.

4.4.1 Advantages

Haworth (1995)[72] has compiled a comprehensive list of positive features of using the Internet in an educational context. A number of these pros will be discussed below.

4.4.1.1 Organization

The Internet is a living thing. It is 'dynamic, open-ended, unconstrained' (Haworth, 1995)[73]. This means that there are endless possibilities for using it. The Internet has vast resources for language teachers. These resources can be accessed through various and constantly improving search tools.

4.4.1.2 Access

Not much technical knowledge is necessary to browse the Web, for instance. Web browsers are constantly improving and getting user-friendlier. So not much effort will have to be put into learning to use the Internet. Moreover, if anyone has a problem, he or she can ask other users for help. Most of the Internet services and the information found on it have been contributed on an entirely voluntary basis. Experienced users are generally willing to help others who are just starting out.

---

71 Ibid.
72 Op. Cit.
73 Ibid.

Another advantage is that users can participate actively. Besides reading, looking at graphics, listening to audio files and other receptive activities, several Internet facilities, such as e-mail, Internet Relay Chat and newsgroups, offer the possibility of interaction.

4.4.1.3 Pedagogy

The most obvious pedagogical advantage of the Internet is the availability of authentic material. Teachers are always looking for authentic reading material to make classroom teaching more real and attractive for their students. The Net offers this possibility and using it will result in more motivated learners. Another consequence of the fact that there is so much material to be found on the Internet is that everyone can find something to his or her liking. These does nothing else than promoting learner autonomy.

One of the drawbacks often mentioned is that the language found on the Internet may not be correct in terms of grammar, spelling or style. However, it does reflect the needs of the users and to an extent prioritizes content over form. This development can also be observed in language teaching theories in recent years. Communicative proficiency is considered much more important than knowledge of grammatical rules alone. Nevertheless, students will be exposed to language that is not traditionally acceptable in English. The solution would be to provide the students with 'the knowledge that this type of language exists before they actually see it' (Frizler, 1995)[74]. Cyber-English is steadily becoming a dialect of English, but this need not pose a problem as long as students know when to use it appropriately (on-line) and when it is not acceptable. in traditional written English. The teacher will have to play a vital role in this process.

Furthermore, the need to train students in information technology will decrease, if ICT is integrated into the curricula. As part of a project, students may even learn how to make web pages themselves. This is becoming increasingly easier anyhow, since web publishing tools are becoming easier to use and are better integrated into other software.

Finally, learning to work with the Internet will contribute to the development of students' general academic skills. As mentioned above, the Internet is a vast place where it is easy to get lost. One of the skills that students will have to develop if they want to use the Net effectively is discrimination. They will have to be trained in separating the important and relevant material from distracting and less relevant – although often very interesting – pieces of information. This is an 'increasingly essential skill in an information-overloaded environment' (Haworth, 1995)[75].

4.4.2 Disadvantages

Haworth (1995)[76] counterbalances most of the positive features with negative features. It is often hard to say, though, what is of greater importance: the pros or the cons. He correctly remarks that 'in many cases there is no clear answer, and specific circumstances will lend weight to a particular interpretation.' What follows is a list of drawbacks of using the Internet in the FL classroom as presented by Haworth (1995)[77].

---

74 Frizler, K. [a.k.a. Frizzy] (1995, December 6). *The Internet as an Educational Tool in ESOL Writing Instruction* [WWW document]. Unpublished Master's thesis, San Francisco State University. URL http://thecity.sfsu.edu/~funweb/thesis.htm
75 Op. Cit.
76 Ibid.
77 Ibid.

4.4.2.1 Organization

On the Internet there is a lack of coherent structure. There is such an overwhelming amount of information to be found, that finding your way on the Net can be an intricate undertaking.

> 'Finding information on some topics can be difficult, conversely too much information can be supplied to you, necessitating the need to acquire a detailed personal view of the Web and good search skills.' (Corbett, 1998)[78]

Haworth (1995)[79] compares the Internet with an enormous library with all the contents spread at random around the building. The Internet can be a chaotic and disorganised place where you may well come across something you are looking for, but there are no guarantees. Although search tools are getting better, they often still come up with too many irrelevant hits. A thorough knowledge of search tools and the possibilities they offer, such as the use of Boolean operators ('AND', 'OR' and 'NOT'), is a necessity for productively searching the Internet.

Because it is so easy to publish material on the Internet, many people who do not have much to contribute do have their own homepage. This produces clutter and the Internet is getting overcrowded with useless material. Sometimes the name of site can be very promising, whereas the contents turn out to bear little relation to its name. This is the natural consequence of the fact that the Internet does not have some sort of regulatory presiding authority that checks the contents of pages or validates resources, which in many cases would be a great help when searching the Net. The result of this is that a search on the Internet often produces little more than 'dross on demand' (Haworth, 1995)[80].

4.4.2.2 Access

Due to the increasing popularity of the Internet, speed can be a real problem. The information highway is getting congested. In limited lesson time slots, response times can be long and downloading large files or graphics can be very time consuming (Corbett, 1998)[81]. Especially beautifully designed pages with lots of graphics and fancy fonts take a lot of time downloading to your computer and students can easily get bored. Most browsers, however, offer the possibility to view only the textual contents of a page and not the pictures, which considerably reduces the time it takes to download the web page. Students should be pre-warned about the fact that the Internet can be a lot slower than their own hard disc systems, so that they can make a conscious choice whether or not to view the graphics.

The Internet started out as a completely free place that was maintained and contributed to by enthusiastic volunteers. However, 'an increasing commercial presence will change the ethos of the Net' (Haworth, 1995)[82]. Some services that have always been free may start charging their visitors. As more people will start to use the Net, development, infrastructure,

78 Corbett, A. (n.d./1998). *Internet at Brakenhale School* [WWW document].
URL http://wfs.eun.org/about/context/gp/brakeframe.html
79 Op. Cit.
80 Ibid.
81 Op. Cit.
82 Op. Cit.

and running costs, which have traditionally been borne by education and the research establishment, will rise and services will no longer be free of charge.

4.4.2.3 Pedagogy

'Not all the information available on the Internet is desirable, appropriate or relevant' (Corbett, 1998)[83]. This is certainly a problem. Much media attention has been focused on the availability of pornography on the Net, but there are also other problematic areas, such as texts containing racist propaganda or overt subversion (Web for Schools, 1998)[84]. It is frequently argued, though, that such undesirable material can be found in everyday life as well and that students do not need the Internet to come into contact with these resources. This is certainly true, but in a traditional school setting children would not be able to access these materials and school computers are not supposed to be used for this kind of activities. It is, however, extremely difficult to prevent this. There is software on the market that to an extent assists parents and educators in protecting children against undesirable or 'less tasteful' material, but it is not foolproof. Other software can trace an individual's 'footprints', so that the pages that have been visited can be monitored. However, it is just a fact of life that censorship on the Internet is unenforceable. It is impossible to give only access to part of the Internet. Therefore, other strategies must be adopted. When the Internet is used in the classroom, there should be careful supervision. Teachers should be made aware of the potential problems and procedures for resolving them should be developed. These procedures could include for instance making a school-wide policy on undesirable texts

Another major problem area is that of plagiarism.

'The spirit of open access to all for all which has characterised the early period of development of the Internet (early meaning until the present) and which is manifest in the huge volume of ftp traffic on the Internet, and the proliferation of Web resources, creates a perception that there are no restrictions applicable in this bright new world.' (Haworth, 1995)[85].

Teachers should make their students aware of this problem and tell them it is unacceptable to use work of others without referring to it. Unfortunately, with modern software and the straightforward possibility to cut and paste, 'the temptation for students to resort to plagiarism is no doubt greater because it is so much easier' (Haworth, 1995)[86].

Lastly, there are a number of practical considerations that can make it difficult for schools to start using the Internet. The Internet means expensive hardware and software. Telephone costs will have to be budgeted for. The teachers will have to be trained, which costs a lot of money and valuable time. Wisely, the UQROO has removed this drawback by charging students a periodical fee for the use of the Internet.

Regardless of all the drawbacks of the educational use of the Internet, it still seems a valuable asset to the learning experience of students. It will take a lot of effort from teachers and a change in attitude. Still now, in the 21st century there is a wrong idea that computers and Internet are a fragile thing. I still see people thinking that just by touching a keyboard, a computer can break down. This has to do with pure ignorance and it will be one of the most

---

83 Op. Cit.
84 Web for Schools (n.d./1998). *Internet in Schools: Question and Answers* [WWW document]. URL
http://wfs.eun.org/about/context/school/schoolframe.html
85 Op. Cit.
86 Ibid.

important obstacles the Internet will find on its way to being part of the EFL curricula. However, although history has shown that every major change encounters resistance, the possibilities of this new medium are so enormous that it is inevitably going to affect learning and teaching.

4.5 A comparison to traditional teaching methods

Using the Internet in the EFL classroom is only useful if it has truly something to contribute to traditional teaching methods or if it can take away some of the drawbacks of traditional teaching. Almost all teachers I know have complained about a particular textbook. Chetumal is far away from he big cities and it is very difficult to find good textbooks. They usually have to be brought from other cities like Mérida or Mexico City. This increases the prices a lot. So buying new books always takes some time to happen. That is why we are usually obliged to work with old-fashioned books which seem boring, incomplete and have an artificial style. I have seen English courses based on the use of a book that was used ten years ago. These books present several deficiencies, the pictures are too old and the material used is not authentic and terribly outdated. That is why EFL teachers can't rely exclusively on a textbook for his class.

The Internet can help solve many of these problems. The Internet abounds in authentic material. It provides teachers with an inexhaustible source of resources they can use in their classes. In this way, technology can be used to supplement what we do in the classroom and to help in doing what we can't do very well now. For instance, if one considers the time it takes to compile a handout (looking for material, typing it, printing it, duplicating it and distributing it), it would save a lot of time if these handouts could be turned into their electronic counterparts. They are easy to update and in the end it will save the teacher a lot of work.

CHAPTER 5.   The Internet in Practice

This chapter is a continuation of Chapter four, only that this time we will go more concrete and will deal with the ways in which the various Internet applications (the World Wide Web, e-mail and Internet Relay Chat) can be used in an educational context, according to the researchers. Particularly, we will assess the usability of Internet tools in the EFL classroom. For instance, there are numerous EFL sites on the World Wide Web, but often these represent a triumph of form over content. Non-EFL sites are in most cases much more valuable. Compared to the World Wide Web, non-web facilities have much to offer to the foreign language classroom as well. Furthermore, a number of strong and weak points of each of the Internet facilities discussed will be presented. For a comprehensive list of Internet resources, see Chapter three and Appendix B.

5.1 The World Wide Web

The possibilities of the World Wide Web are limited only by imagination. As such, the WWW also has many benefits to offer to any FL classroom. Frizler (1995)[87] has identified a number of these benefits. The Web

- offers real world examples of integrated knowledge;
- is a rich source of authentic language & culture material;
- offers possibilities for collaborative working;
- enables users to retrieve up-to-date and abundant information;
- appeals to learners with visual/tactile learning styles;
- offers the opportunity to write with real purpose for a real audience;
- builds critical thinking skills;
- develops users' skills to skim and scan through vast amounts of information;
- offers the opportunity for on-line publishing.

The first and most obvious advantage, of course, is the presence of authentic texts. FL teachers are always looking for authentic material to support the often artificial textbook examples. Teachers can also use the Web to expand their students' knowledge about foreign culture. Furthermore, students will be able to develop general abilities such as skimming and scanning skills. They will also need to critically evaluate the material they are presented with, since there is also much poor quality information available. Finally, the potential for on-line publishing can motivate students, because they are no longer writing for an audience of one, but for the entire world. Moreover, web publishing tools are becoming increasingly easy to use and specific knowledge of HTML is no longer necessary to publish on the WWW. Therefore, 'global writing' can result in greater enthusiasm and better results.

Of course, the World Wide Web also has its limitations. For instance, the Web is not interactive itself and it does not promote interactivity between students. Although web pages can contain interactive elements, such as forms or Java applications, these do not abound on the Web and the level of interactivity is often limited. Another problem is the often slow

---

87 Op. Cit.

connections to pages and links when Internet traffic is high. This can be a problem in limited lesson time slots. A possible solution is downloading the page to the school intranet in advance, but to exploit all the benefits of the WWW an Internet connection is a prerequisite.

For EFL teachers WWW resources can be divided into two groups: specific EFL sites and non-EFL material. At the moment, there are many web sites that contain specific information for foreign language teachers or students. There are sites that concentrate on reading, listening and writing skills for EFL students. There is also much reference material to be found on the Web. For instance, there are on-line grammars, dictionaries, and electronic magazines on EFL teaching. However, as the British Council (1996)[88] points out, EFL materials on the Web often represent a triumph of form over content. EFL sites are in most cases a product of individual enthusiasm. Although these hobby sites are often interesting to look at, they do not have much to contribute to the EFL classroom. On the other hand, EFL sites are added each day and professional organisations are also beginning to maintain pages on the Web. In other words, the situation is slowly improving. However, there is still a shortage of good EFL sites that offer activities, interactivity, and useful material for the EFL classroom.

At present, it is the non-EFL materials that make the WWW such an interesting and valuable source for EFL teachers and students. 'Their range, their topicality and their authenticity make them invaluable for the preparation of handouts and worksheets, and for students engaged in project work or other task based learning activities' (British Council, 1996)[89]. For practical guidelines about creating web activities, see APPENDIX D, which contains suggestions for creating web activities for the FL classroom as proposed by Osuna and Meskill (1998)[90].

In the future, the Web is likely to become even more important for EFL education. The great strength of the WWW is its ease of use and the facilities that are accessible through browsers. The World Wide Web is developing from a set of rather static resources to an increasingly interactive and dynamic medium. With the myriad of authentic materials available and the probable increase in good EFL sites, it is an invaluable source for EFL teachers and students alike.

5.2 E-mail

When people talk about the Internet, they usually mean the World Wide Web. Indeed, the Web is the most frequently used Internet utility. However, e-mail follows close behind and several studies have shown that it is used almost as often as the WWW. This is not strange considering the ease with which one can communicate with everyone around the world. Therefore, it is an especially useful tool for the FL classroom. This section will deal with electronic mail and its application as a language learning medium. A number of general considerations will be discussed, such as the possibilities e-mail offers and its benefits in an educational context. In the last subsection several ideas for e-mail activities in the EFL classroom will be presented.

---

88 British Council (n.d./1996). *The Internet and English Language Teaching* [WWW document]. URL
http://www.britcoun.org/english/internet/engcont.htm
89 Ibid.
90 Osuna, M.M. & C. Meskill (1998). Using the World Wide Web to Integrate Spanish Language and Culture: A Pilot Study. *Language Learning & Technology*, 1(2): 71-92.

5.2.1   General considerations

E-mail is becoming so common that soon it will be just as essential as real mail and the telephone. Because it is such an international phenomenon, it is of particular interest to FL educators (LeLoup & Ponterio, 1995)[91]. Belisle (1996)[92] has identified a number of general reasons why using e-mail in the FL classroom can be beneficial. First of all, by using e-mail students will become familiar with a means of communication that is vital to their survival in the 21st century. It is very likely that e-mail will to an extent replace traditional means of communication, such as fax, telephone, and ordinary mail. Second, contact between teachers and students is no longer limited to the time they spend in the classroom. They can communicate whenever it is most convenient to them. The teacher can give written feedback and these messages are very important to students. This way e-mail supports two important functions of feedback in FL language instruction: reinforcement and information (Lee, 1998)[93]. A further advantage is that students sometimes actually do more writing when using e-mail. 'Electronic blips on the screen are perceived to be more changeable, more ephemeral, and less indelible than traditional pen and pencil writing' (Belisle, 1996)[94]. Writing is a process and not even the best of writers get it right the first time. Once students become aware of this, their writing becomes less static and is perceived more as a process. A final advantage of e-mail is that students have a forum for expressing themselves and asking questions. Some students who are shy and do not like expressing themselves in a group, simply do better in writing.

Warschauer (1996)[95] presents another benefit of using e-mail that has to do with the nature of FL instruction. E-mail is all about real communication and since that is the ultimate objective of FL education, it can prove very useful. E-mail provides students with an excellent opportunity for real and natural communication. Teachers are always looking for these opportunities, since most EFL classroom situations lack sufficient chances to really communicate in a foreign language. E-mail is the perfect tool for this. One could argue, however, that this could also be achieved through traditional mail ('snail mail'). This statement could be justified if the sole purpose was an ordinary pen pal exchange. However, as Hagen & Ring Knudsen (1998)[96] argue, the speed with which the information can be spread distinguishes it from traditional mail. E-mail is instantaneous and this stimulates students to write to one another. If a pen pal project is not to fizzle out, it is of major importance that the students can reply fast to each other's e-mails. This also enables them to engage in a much more intense communication that might create a real bond between them. Moreover, e-mail can be used not only for simple pen pal projects, but in many more ways in the FL classroom (see next section).

As mentioned above, e-mail can be used as a tool for FL instruction or as a more general means of communication between the teacher and his or her students. In both cases, it has many pedagogical advantages. As Kroonenberg (1995)[97] points out, by using e-mail,

---

91 Op. Cit.

92 Belisle, R. (n.d./1996). E-mail Activities in the ESL Writing Class [WWW document]. *The Internet TESL Journal*, 2(12). URL http://www.aitech.ac.jp/~iteslj/Articles/Belisle-Email.html

93 Lee, E.-K. (n.d./1998). Using E-mail in EFL Writing Classes. *The Internet TESL Journal.* [WWW document] URL http://www.aitech.ac.jp/~iteslj/Techniques/Lee-EmailWriting.html

94 Op. Cit.

95 Op. Cit.

96 Hagen L. & A. Ring Knudsen (n.d./1998). *Das Bild der Anderen – Use of e-mail for beginners in German* [WWW document]. URL http://wfs.eun.org/about/context/en/dasbildframe.html

97 Kroonenberg, N. (1995). Developing communicative and thinking skills via electronic mail. *TESOL Journal.* [WWW document]. URL http://www.aitech.ac.jp/~iteslj/

students develop writing skills, reading comprehension, and thinking skills. They are engaged in real communication and as such it is very motivating. In addition, using e-mail can be beneficial to the student-teacher relationship, because of the elimination of time and distance constraints and the immediacy of response (Frizler, 1995)[98]. Therefore, e-mail can be a useful tool not just in the FL classroom, but in the entire educational environment.

5.2.2 E-mail activities

Electronic mail can be used in many ways in the FL classroom. First of all, it can be a tool to improve teacher-student communication. This covers the most basic way to use e-mail and it will probably result in an increase of the frequency of communication between teacher and student. For instance, students can ask and answer questions by e-mail, send progress reports and updates, etc. Teachers can mail assignments and homework. Often, students will also begin using e-mail to send each other notes. Although these will be written in their native tongue and often deal with relatively trivial subjects, students will at least learn how to use an e-mail program and get used to the medium.

A second way of using e-mail is starting a pen pal project. This seems to be a very straightforward activity, but there are a number of points teachers should keep in mind. First, they should consider the level of the students. If they are not advanced yet, it is best to look for pen-friends who do not have the FL as their native tongue either. Native speakers are likely to get bored writing to students with very limited language skills. The correspondence should be organized so that the students learn and use the linguistic expressions they need the same time as they write and receive e-mail. If the students are more advanced, it is very good to team them up with native speakers, so that they will be exposed to authentic language and both parties will benefit from the correspondence.

The teacher has an important role to play in these projects. It is important that the projects are well structured and that the students know what is expected of them. For instance, the teacher can come up with topics to write about. At first, this probably will not go any further than name, address, looks, family, friends, pets, interests, school, etc. However, once the students get to know one another better, e-mail can be the perfect tool to convey cultural awareness. It is a perfect way of exploring similarities and differences between cultures. Furthermore, the teacher has to check if the letters that are written do not contain basic spelling mistakes and grammatical errors.

There are many international pen pal projects to be found on the Internet. People can register there and students can pick someone with similar interests, etc. However, it is often better to team up with a class in a different country. As Hagen & Ring Knudsen (1998)[99] point out, a number of preconditions need to be present to make the exchange a success.

The students should have about the same age and the number of students in both classes should be roughly equal. In addition, teachers have to be aware that they are going into a communication situation themselves. They have to plan the project together with their colleague and in a way they will become pen-friends too.

Besides pen pal projects, there are many more ways to use e-mail in the FL classroom. Some do not even require an Internet connection. Belisle (1996)[100] presents a number of e-

---

98 Op. Cit.
99 Op. Cit.
100 Op. Cit.

mail assignments and activities that can be used during 45-minute sessions. They are all ways of getting students to write in a foreign language.

Real-time teacher-to-student dialoguing. This is a good first-day activity to introduce e-mail to students. It works best with small groups. Before the lesson, the teacher sends a message to the group (a simple question, such as 'What is your favorite food?'). When the students open their e-mail, a welcome message awaits them. They have to reply to the question and send it back to the teacher. The teacher has to respond immediately to each student, often just pasting an appropriate answer plus a follow-up question.

An interactive process writing assignment. Two students have to do a short research project of about two paragraphs. They have to write this together, but they can only communicate via e-mail. The teacher monitors this process by receiving copies (cc) of all the correspondence.

One perfect paragraph. The teacher prepares one practice paragraph with several mistakes and sends it to the group. The students have to find the mistakes and send it back. If they have not found all the mistakes yet, the teacher sends it back and this continues until the paragraph is perfect.

Chain stories or sentences. Students have to have to add to a story or sentence and forward it to an assigned partner. This simple exercise helps intermediate students reinforce their grammatical knowledge. This activity can also be used for advanced learners, though they will have to write a real story together and pay special attention to more advanced aspects of story writing such as linking words and other cohesive markers (Lee, 1998)[101].

Story puzzles. These are stories in which sentences are randomly mixed and rearranged. Students use copy and paste to rearrange them again into a story and then send it to the teacher.

Cloze exercises. Students have to fill in sentences in which words are omitted. The teacher checks it and sends it back if there are still errors. This exercise can be used to reinforce the use of certain words such as adjectives, articles, or to test vocabulary.

There are many more ways to use e-mail in the FL classroom. However, they all have in common that they make students write. The difference with traditional methods is that students are now actually writing for a real audience and not just for the teacher. This has proved to be a huge stimulus for students to make writing a fun rather than a boring activity.

5.3 Real-time communication activities

Although Internet facilities such as e-mail, discussion lists and newsgroups can offer opportunities for communication, they are nonetheless examples of deferred or asynchronous communications. For instance, although the name indicates otherwise, discussion lists are not suitable for holding *real* discussions. E-mail is extremely fast, but even good systems can delay e-mail messages by two to ten minutes. However, the Internet is not

---

101 Op. Cit.

restricted to e-mail. Software has been developed that allows real-time communication and enables users to really talk to each other.

Since IRC offers ample opportunities for communication with native speakers, it can be very useful in the EFL classroom, especially for more advanced students. IRC appears to be extremely appealing to many students (British Council, 1996)[102]. Students become fascinated by the simple act of 'chatting' around the world. This might be because IRC is even more instantaneous than e-mail and students get 'instant gratification'. In addition, IRC is completely anonymous, so users are inclined to be more open in giving their opinion. This is especially beneficial to shy students, who may thus get the chance to express themselves freely.

However, from a control point of view the inherent uncertainty of any IRC session is a problem (Haworth, 1995)[103]. IRC is anonymous and every conversation on IRC is unpredictable. The quality of the exchange largely depends on whether individual students feel at ease in the context and on the intentions or goodwill of their interlocutors. To bypass these drawbacks, it is also possible to team up with a class from a different country and go on-line at the same time, since IRC enables users to create channels at random. This will, however, require some organizational efforts of the teachers involved.

IRC is not the only tool available for real-time communication. ICQ (I seek you) and AOL's Instant Messenger offer more or less the same, although they are more suitable for private conversations between two people. There are even programs that enable users to actually talk to each other (Internet telephony) or see each other (video-conferencing). The problem, however, is that these applications require much bandwidth and extra equipment, such as microphones and video cameras. The result is often slow connections and poor quality. Nevertheless, it is likely that in the future these applications will improve drastically, so that international communication at the cost of a local call will become reality. Real-time communication in the EFL classroom will then become even more real.

Real-time Internet communication can never replace human contact and it lacks the richness of classroom interaction. Nevertheless, since in many cases students hardly ever come into contact with native speakers, IRC can offer them the chance to interact and use the knowledge they have gained in class in a real communicative situation. This is not only extremely motivating, but it can also be a beneficial middle stage in the students' development of speaking skills. IRC is a mixture between writing and speaking. Just like speaking, it is an instantaneous way of communicating, but it gives students just a few extra seconds to think about how to express themselves and as such it can be a useful leg up to real face-to-face conversation.

5.4 Assessment of non-Web facilities

As mentioned before, although the WWW is the most frequently used Internet utility, the number of specific, useful EFL sites is still limited. The strength of the Web lies in the wealth of authentic materials that can be used to support existing EFL teaching. However, the Internet is much more than a repository of – sometimes dubious – information. For the FL teacher it is the communication possibilities the Internet offers that are often most interesting. In today's foreign language classrooms communication is the prime objective, but

102 Op. Cit.
103 Op. Cit.

due to restricting classroom conditions it remains difficult even for the best of teachers to involve all students in real communication.

The British Council (1996)[104] remarks that the real importance of the Internet is that it is a means of getting like-minded individuals in contact with each other. The best example of this is e-mail. As far as the EFL classroom is concerned, e-mail can be useful tool to get FL students to communicate either with other FL learners or with native speakers. Moreover, e-mail can bring teachers and students closer together, since it gives students the opportunity to consult their teacher also outside the classroom.

Finally, real-time communication, such as Internet Relay Chat, offers students an instantaneous way of 'chatting'. IRC has turned out to be a rewarding and motivating means of Internet communication for students and as such it can be very useful in the EFL classroom. It is the closest students can ever get to real communication with natives without leaving the classroom. In the future, Internet telephony and videoconferencing may also be used in an educational context, so that students will actually be able to practice their speaking skills and pronunciation.

The advent of the Internet has reduced the cost of world wide communication to the cost of a local call. This is indisputably one of its greatest merits and it is already influencing modern education. However, in an educational context, much of all Internet communication is between non-native speakers and often it is difficult or even impossible for FL teachers to monitor it or give directions. Therefore, computer-mediated communication is not automatically 'a good thing' and giving students access to the Internet does not equal teaching. A great deal more research is needed into this field, but it is an irrefutable fact that if used properly, the Internet can have many benefits in helping students communicate in the foreign language classroom.

---

104 Op. Cit.

CHAPTER 6. Internet and EFL Instruction at UQROO

In Chapter number 2, we discussed a study by De León and Vázquez (1999)[105] to determine the language learning theories that are the base of the EFL instruction at the University of Quintana Roo. We analyzed to what extent EFL teachers comply with the general characteristics of these theories, we saw the strengths and weaknesses. We also gave a look to the objectives of EFL instruction at UQROO. We talked about the objectives of the English Language Major which is one of the contexts where EFL instruction takes place at UQROO and finally we gave a look at the 4 fundamental principles that rule the functions of the University of Quintana Roo.

In chapter number 3, 4 and 5, we knew the basic aspects of the Internet and its resources. We wandered around what it has been said and researched about the benefits of using the Internet in the FL classroom.

In this chapter we will confront all this information to find out the possibilities of incorporating the Internet the EFL curricula at UQROO. We will refer to the 6 category division of language teaching proposed by De León and Vázquez (1999)[106] and we will recap what the current theories say about them, what the EFL teachers at UQROO do in practice and what the researchers say the Internet can contribute to these aspects. We will also figure out how the Internet contributes to the objectives of EFL instruction at UQROO and the objective of the English Language Major. Finally we will determine how the incorporation of the Internet in the EFL classroom fits into the four fundamental principles that rule the functions of the University of Quintana Roo.

6.1 Contributions of the Internet to EFL instruction

In Chapter numer two, we said that the main language learning theories that support the EFL instruction at UQROO were: The Direct Method, Situational Language Teaching and Community Language Learning. We also mentioned a set of categories EFL instruction was divided into. We will see now how the Internet can contribute to each of these categories.

Class Language

Current pedagogical theories stress the importance of a target language environment in the classroom. When the student is exposed to English as mush as possible, language is acquired as opposed to learned. There is a general perception that acquisition is better than learning. UQROO EFL Teachers generally accept the use of English in the EFL classroom as something beneficial. Students also have a perception that having an English environment is good. However, teachers still find it difficult to take into practice.

With the use of Internet in the EFL classroom, the teacher will get an important aid to promote a mainly English environment. Although the Internet can be used for Language Learning in general, its incorporation to EFL is obliged because of the benefits to the EFL itself. English is the Lingua Franca of the Internet and students will be exposed to it.

---

105 Op. Cit.
106 Ibid.

The Internet gives the opportunity to access millions of Internet sites that can contain multimedia, text, images, sounds, moving pictures and offer the opportunity to Interact, all in English. Moreover, the language used will be Real language and not language especially designed for textbooks.

Group Work

The benefits of group work are out of question by current language teaching theories. In general group work is practiced by all EFL teachers, however the classroom setting limits the possibilities to do effective group work activities because ther eis only the teacher and a few students to talk to.

Internet has the possibility to interact not only within the classroom setting but with students around the world.Most important this group activities will be meaningful and will involve real life communication.

Daily Life Context

Teachers are always insisting that "a bridge must be built between the real world and what it happens in the classroom. Most teachers apart from the activities on the book (that are based on context), they shared with students some personal anecdotes or made students represent their lives in certain situations. So theachers are always looking for authentic material. The Internet offers a vast source of possibilities to collect authentic materials. By visiting a web page we can get photos of daily life in London, museums, etc. The Internet links the abstraction of teaching materials with real life outside the world. Very important is that these material will be up to date. As we said before, web sites are usually administered by webmasters who make sure the information there contained is up to date. Getting material of this quality is without the aid of the Internet, and taking into account the characteristics of the geographical location of the UQROO setting, would be very difficult.

Grammar Explanation

As said before, current pedagogical methods stress the importance of communication and they lessen the straight introduction of grammatical items. They agree that grammar explanation in the native language should be avoided. Instead, other resources such as mimicry and demonstrations should be used so that students infer grammar rules opposed to just memorizing them. So, grammar should be taught inductively.

With the focuss on communication and culture and with such opportunities to use language in meaningful situations, the impact of the Internet on the old fashion teaching methods will be enormous. Teaching grammar will hopefully become a thing of the past.

Communicative Practice

Communicative competence is central to modern language theories. They seek to bring learners into closer contact with authentic language examples together with the promotion of fluency over accuracy. UQROO EFL teachers agree on this and they try to include communicative activities in the classroom. One again, it is important to point out that if there is only the teacher to talk to, then engaging into real and meaningful conversations is virtually an unattainable goal. Through various applications such as email and chat, the Internet allows an exchange of ideas.

The Internet is all about communicating and offers possibilities that would never be feasible in the traditional classroom setting.

6.2 Other pedagogical considerations

Krashen's Five Hypotheses

Acquisition/Learning Hypothesis. Universally, there is the belief that acquisition is better than learning in terms of effectiveness. Krashen says that acquisition is characterized by the student not knowing how they start to speak, they just take it from what they hear (Krashen, 1995)[107]. Therefore a classroom where English is the only language used would help to promote acquisition instead of learning. However, although this belief is shared by UQROO EFL teachers, Spanish still predominates in class.

In this context the Internet would be an excellent aid for EFL teachers at UQROO. English is the Lingua Franca of the Internet so what students will read, write and hear while on line is English. They will be exposed to English language and eventually they will incorporate to their knowledge what they see in the net.

Krashen's *Input Hypothesis* says that it is necessary that the language input the learner gets, contains linguistic items that are slightly beyond the learner's present linguistic competence (Krashen, 1995)[108]. Once again the Internet is an excellent source of language with this particular characteristic. The more students use the net, the more they will be exposed to language containing more complex items, which eventually improve the students' self-linguistic competence.

Finally, Krashen's description of the *Affective Filter Hypothesis* says that learning is proportional to the positive or negative feeling the student experiences at the moment of learning (Krashen, 1995)[109]. The use of Internet naturally decreases students' negative feelings. Let's take motivation for instance. Students feel motivated when using the Internet because it is an innovative and attractive technology. Nowadays, students are not impressed by just a book, no matter how colorful it is. They have been playing Nintendo for years so they feel more attracted to monitors and objects in motion. We could also talk about anxiety and fear to making mistakes. Since communication through Internet is somewhat private students don't fear to make mistakes. Let's take the case of IRC for example, the student can engage in a conversation by using a nickname. The fact his identity is protected increases his self-confidence a lot. He will not fear to make a mistake in this situation, which doesn't happen in class when he is among the other pupils. Another positive feeling that gets promoted with the use of the Internet is self-confidence. When students are writing an email for example, they usually have time to re- read what they write before sending it. Usually most activities give the student the opportunity to first evaluate what they have done and correct it when needed. This gives them a sense of self-confidence because this opportunity to check and correct, makes them feel confident that what they did they did it well.

The student-centered classroom

Current pedagogical theory encourages the student-centered classroom. The outmoded and traditional image of a teacher standing in front of the classroom and lecturing his or her students while all they do is listen is becoming more and more a thing of the past. By now,

---

107 Op. Cit.
108 Ibid.
109 Ibid.

49

the belief that the student-centered, communicative classroom has many advantages over the traditional one is firmly established.

EFL instuction at UQROO, according to De León & Vázquez (1999)110 has a teacher-centered model.

When the Internet is used in an educational context, however, the shift to a student-centered classroom is not optional, but a prerequisite (Frizler, 1995)111. The students work on projects and bear responsibility over their own work and learning. As such the advent of the Internet in the EFL classroom supports current pedagogical theories and the shift to the student-centered classroom. Teachers convinced of the benefits of the student-centered classroom will find that the Internet will help them to develop this style of teaching perfectly.

Changing role of teacher

The shift from teacher-centered classroom to a student-centered one has its bearing on the role of teachers as well. As they are no longer the center stage protagonists, they are demoted to the position of stagehand in the wings (Haworth, 1995)112. So teachers must be willing to put aside their own egos and 'remove themselves from the classroom limelight, and place the focus of the class on the students' (Frizler, 1995)113. The teachers have to become coaches who will stimulate their students to learn themselves. Helping students learn to learn is a necessity in this system (Mörth, 1998)114. Teachers who were used to explaining and repeating things over and over again, will have to get used to the new paradigm where the more students do for themselves, the more they will learn (Berge & Collins, 1995)115. However, teachers should not consider this new supporting role a demotion, since it can be every bit as demanding as their traditional role (Haworth, 1995)116.

A result of the change in the traditional classroom hierarchy is a more balanced relationship between teachers and their students. 'The medium … can foster a surprisingly close relationship between them' (Kilian, 1994)117. The teacher is no longer the person who tells the students what they have to do and how to go about it. He or she helps individual students achieve the most they can and can only do this if the basis of the teacher-student relationship is far more balanced than in the traditional classroom.

Furthermore, as Frizler (1995)118 argues, teachers must be willing to take risks. Teachers should always have a backup plan, if for example students cannot connect to a web site. This means they will have to be even more innovative and flexible than in ordinary classroom situations. Although teachers should always expect the unexpected, the chances that something will go wrong when using computers and the Internet are remarkably bigger. In short, the entire traditional learner-teacher relationship will have to change if the Internet is to be integrated into school curricula. However, according to the modern pedagogical theories of the student-centered classroom, this will only be beneficial to the students' learning process.

---

110 Op. Cit.

111 Op. Cit.

112 Op. Cit.

113 Op. Cit

114 Mörth, T. (n.d./1998). Eriksdal's School: A Fully IT-Integrated School [WWW document]. URL. http://wfs.eun.org/about/context/gp/erikframe.html

115 Op. Cit.

116 Op. Cit.

117 Kilian, C. (n.d./1994). How an online course works [e-mail document]. Toronto Globe and Mail, November issue ckilian@hubcap.mlnet.com

118 Op. Cit.

6.3 Internet and the objectives of ELM at UQROO

In previous chapters we determined that the objectives of the English Language Major are focussed on language and culture among others. The *Plan de Estudios de la Licenciatura en Lengua Inglesa* is clear on this. This is coherent with the general perception that language learning should take into account the cultural background of the target language. However, this insight has not always led to increased practical implementation of meaningful cultural components in FL education. As a result, many students have little knowledge about the FL culture (Sadow, 1997)[119]. Some suggest this is caused by FL teachers' lack of knowledge, while others attribute it to inappropriate training of students. For instance, mainstream textbooks are often deficient in this regard and offer one-sided views of the target culture. One solution to this problem is to incorporate authentic materials in the FL classroom to support language in context and help learners develop the range of communicative competences.

Osuna & Meskill (1998)[120] carried out a study to assess the potential role of the Internet as a means for students of Spanish to gain a deeper sense of the culture of the Spanish-speaking world. The study was focused on the assessment of learners' perceptions of their experiences in terms of both the language and cultural knowledge they acquired with the help of the Internet. Thirteen undergraduate students enrolled in their first college trimester of Elementary Spanish were asked to complete questionnaires for assessing five activities they had been assigned. These activities concentrated on language forms, language functions, historical information, tourist information, etc., and involved students having to access one specified web site for each task. The types of activities were diverse and varied in terms of purpose. With the help of the Web, students had to plan a family trip to Madrid, describe photographs from Argentina, compare the Universidad Autónoma de México to their own college, find place for leisure activities in Chile, and create an authentic Mexican meal. Apart from post-activity questionnaires, the students were also asked to complete an additional survey at the end of the term that probed their reactions to the activities as a whole. Both questionnaires were designed to measure perceived learning outcomes, reaction to the medium, and assessment of the task in a 6 point Likert-type format.

According to the researchers, the results of this study, as shown in Table 6.1 and 6.2, demonstrate that the Internet seems to be an excellent tool for teaching foreign language and culture. Osuna & Meskill (1998)[121] point out that it is important, however, to integrate the use of the Internet into ordinary classroom activities, so that students perceive the Internet as an integral part of the class instead of as an add-on.

N=13	Act. 1	Act. 2	Act.3	Act. 4	Act. 5	Mean
Language knowledge increased	62%	69%	77%	77%	100%	77%
Cultural knowledge increased	85%	69%	77%	62%	100%	81%
Language and cultural knowledge together increased	100%	85%	85%	85%	85%	88%

119 Sadow, A.S. (1987). Experiential techniques that promote cross-cultural awareness. Foreign Language Annals [WWW document]. URL http://vtc.ngfl.gov.uk/resource/linguanet/cilt/search/233.html
120 Op. Cit.
121 Ibid.

Subject enjoyed using the Web for this activity	85%	77%	77%	85%	92%	85%

Table 6.1: Perceived learning and technology outcomes per activity (% yes)
Source: Osuna & Meskill (1998)[122]

Table 6.1 shows a number of the results of the post-activity questionnaires. The researchers explain the slightly lower results for language learned compared to cultural gains by pointing out that culture and language are complementary components of communication. One without the other will always be deficient. In addition, students generally associate language learning with explicit teaching. Therefore, some subjects simply did not recognize the fact that language learning was taking place. The best outcome was obtained when language and culture were integrated. According to Osuna & Meskill (1998)[123], 'this strengthens the importance of teaching language and culture *in context*, a point that cannot be overemphasized.'

N=13	% Yes
Attitudes and beliefs	
I liked using the Web for this course	100
This course was more interesting because of Web use	100
I would take another course that included use of the Web	92
Web use is a necessary component of instruction	83
I am comfortable using the Web to find information	92
I will get a better grade in this course because I used the Web	67
Language learning	
I learned more Spanish using the Web	92
The Web as a learning tool	
Overall, the World Wide Web is a valuable learning tool	100
The Web provided more current information than print resources	100
I learned additional technical skills as a result of using the Web	50
The browser program I used is an easy program to learn	92

Table 6.2: Post-course survey results
Source: Osuna & Meskill (1998)[124]

Table 6.2 shows that there is a relation between satisfaction and level of interest. The mark for satisfaction with the medium (mean of 85%; see Table 6.1) obtained after each of the five activities increased to 100% (see Table 6.2) in the final retrospective questionnaire. Subjects perceived Web information as being current, interesting, varied, and useful in real life. They also categorically referred to the visual element, one of the medium's intrinsic characteristics, as something they enjoyed very much. Data presented suggest that the incorporation of visual stimuli in instructional materials can foster positive attitudes and can become memory-assisting devices as well as comprehension scaffolds, although of course not only the WWW, but also other media, such as textbooks, make extensive use of graphics, photographs, and images. Furthermore, 32% of the subjects reported that they returned to

122 Ibid
123 Ibid.
124 Ibid.

the sites on their own after having completed the activities. Osuna & Meskill (1998)[125], admit this is a modest outcome, but nonetheless they infer it supports integrating the WWW in FL education, since it seems to increase motivation and brings students a step closer to becoming life-long learners of a foreign language.

A problematic aspect of this research is that it is just a pilot study. Only a small group of thirteen students participated in this experiment. Moreover, they were queried about their perceptions and beliefs. In other words, no empirical data are presented suggesting that students indeed do better when they use the Internet instead of more traditional methods.

Notwithstanding these reservations, Osuna & Meskill's study does affirm that the Internet can be a valuable tool for foreign language and cultural learning. It seems to be a motivating factor and students found the course to be more interesting because of Web use. Therefore, even if empirical research were to show that the actual effects of using the Internet are less than the perceived ones, the Net can be a stimulating factor in making FL learning more enjoyable, which in itself will increase students' performances.

6.4 Internet and The Fundamental Principle of Innovation at UQROO

The University of Quintana Roo Project began in 1989. Its main purpose was to create "The New Mexican University". From the beginning the basic functions of the UQROO were dictated by four fundamental principles. Among them, the fundamental principle of Innovation. It is assumed that the role of the University will all the time be constantly searching for new methods, techniques and processes of development as its fundamental activities.

In this sense, it is impossible to ignore the global trend of incorporating the Internet to the educational context. At the moment it is used by an estimated 50 million people in 152 countries. It is an invaluable source of information, which can be very useful in education. Mexican society is becoming an information society in which Information and Communication Technology (ICT) plays an ever-increasing role. By March 2000, the total of registered domain names in Mexico rounds the 38,000. This means that in only three years the number of people having a presence in the Internet has multiplied five times (Prodigy Web, 2000)[126]. In the information society, there is a need for new skills and a basic understanding of the underlying technology. To achieve this, it is imperative that learning to work with computers and understanding new technologies is assimilated into the curriculum and into teaching methods.

So the UQROO will have to appeal to its fundamental principle of innovation to face the two major challenges in the 21st century :To prepare its students for the information society and To make effective use of ICT to provide better education.

---

125 Ibid.
126 Op. Cit.

CHAPTER 7.   Incorporating the Internet to the EFL Curricula

As soon as the teacher has decided to introduce the Internet in his or her classroom, new problems will be encountered. Although the Internet may have many benefits to offer, actually implementing it is another kettle of fish. It is not uncommon for teachers to simply not know where to start, since they do not know what to expect. This section will deal with a framework proposed by Willis (1997)[127] that teachers can use to make the most out of using the Internet. Furthermore, we will review a number of ways in which to incorporate the Internet into existing EFL curricula, we will give practical suggestion for the use of Internet resources, email and IRC.

7.1 A framework for the educational use of Internet technologies

The Internet should complement existing classroom processes and teachers should be aware that it will never replace them. They have an important role to play in helping students make the most out of using the Internet. Students should be guided strictly through a number of stages in order to make the Internet a true asset to classrooms. Willis (1997)[128] has proposed a model to provide teachers with a simple framework to help them understand how the new technologies can be used to support current learning processes. This framework will be discussed briefly below (see Appendix C for the complete model).
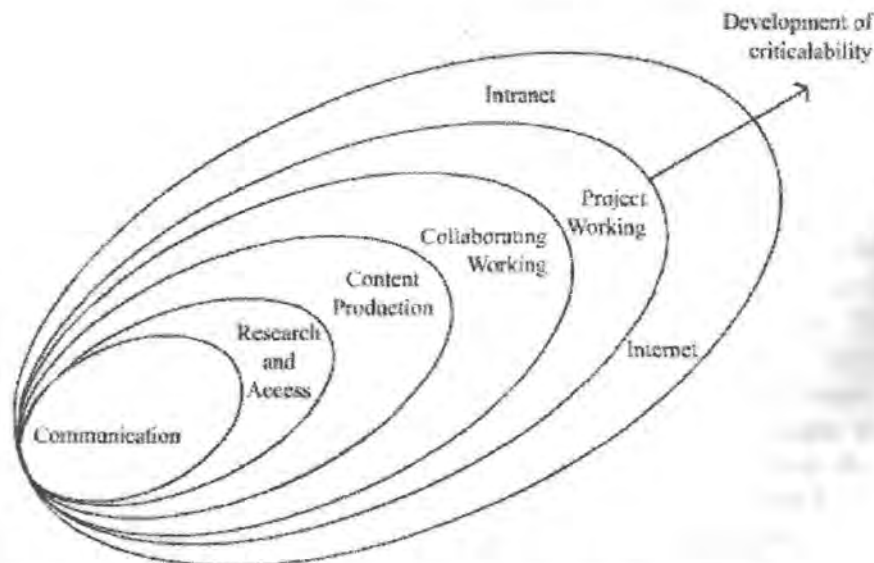

Figure 7.1: A suggested framework for the educational use of Internet technologies

---

127 Willis, D. (n.d./1997). A suggested framework for the educational use of Internet technologies & The development of students' learning abilities to critically evaluate materials [WWW document]. South Bristol Learning Network. URL http://wfs.eun.org/support/edumodel/ppframe.htm
128 Ibid.

The first stage covers basic communication between individuals. Students will participate in on-line discussions, e-mail projects, video conferencing and newsgroups. This way they will be able to use the foreign language they are learning in real situations to communicate with either peers or 'experts' in a certain field. They can, for instance, contribute to group on-line discussions or ask questions themselves. Another possibility is to participate in pen pal arrangements, which are numerous on the Internet.

In the second stage, students will use the Internet to do research and collect information and data. They will have to be taught how to use search engines properly and how to browse the Internet in an efficient way to find the best information in a short period of time (See section 3.2.1.1). Students will be able to access a wealth of authentic foreign language material.

The third stage comprises content production. Students will have to learn how to make and publish their own homepage using HTML and appropriate applications. Since web publishing tools are widely available and increasingly easy to use, this should not be a problem. This stage can be especially motivating and stimulating to students. First of all, they will have to set up a project and do research on a certain aspect of English language, culture or literature. They can use the wide variety of resources available on the Internet to do this. They can consult 'experts' and e-mail questions they might have to people all over the world. During this process, they are continually communicating in English. Finally, they will have to produce a publication themselves. However, it is not only meant for the teacher to see, but for the entire world.

The last two stages are about collaborative working and project working. Students will use the acquired skills to work in collaboration. Eventually, they will use an interdisciplinary approach to project based work. For example, this could lead to literature projects that involve more foreign languages (e.g. exploring and comparing a certain literary theme in several foreign languages). Students will learn how to solve problems, carry out research and collaborate with others.

In each and every one of these stages, communication in English plays a paramount role. Students will come into contact with foreign cultures and a myriad of authentic material. Moreover, they will learn how to use the new information and communication technologies. Lastly, this approach fits into modern pedagogical theories, which emphasize the student-centered classroom, learner autonomy and project based working.

Using this framework will mean that the students will have to accept responsibility. The teachers will have to fulfil a supporting and guiding role. They can certainly not sit back and relax. If not monitored properly, students could go off the rails and lose their way. Therefore, Willis (1997)[129] has developed a model for the critical evaluation of material (see Appendix C) that teachers and students can use going through each of the aforementioned stages. First of all, students will have to develop a research protocol in which they establish the topic, potential sources of information, evaluation criteria and report format. Then the teacher evaluates this protocol and amends it. Both the teacher and the student now know exactly what they are supposed to do and what they can expect. After the student has carried out the research or the planned activity, he or she produces a report according to the protocol. Finally, the teacher considers the outcomes of the student's activities and discusses the report with them. By using this framework students will always know what they have to do and teachers will never lose track of what their students are doing. Following this procedure can take away the fear of some teachers that they will lose control in the student-centered classroom. It is a good way of keeping a check on everything that is going on without having

---

[129] Ibid.

to walk around too much. Additionally, this model supports and expands the development of students' critical abilities.

7.2 The Internet from the teacher's point of view

By using the above framework, teachers can make the Internet a part of their teaching. However, the Internet should not only be used by students themselves. Teachers will also have to invest some time searching the WWW, so that they can come up with authentic material for their lessons or recommend certain sites to their students. LeLoup & Ponterio (1996)[130] observe that the key concept underlying the use of the Internet in the EFL classroom is that the lessons and activities must be curriculum-driven. This is, when teachers start searching the Internet for useful material, they should make sure that the sites they will use support and enhance the curriculum. To this end LeLoup & Ponterio (1996)[131] propose a three-pronged approach to searching the Internet.

First of all, teachers can search for material to support a specific lesson that has been planned. For instance, if an upcoming lesson deals with ordering food in a restaurant, the teacher can look for sites of restaurants, menus, recipes, etcetera. Second, teachers should always be looking for material they might be able to use in class one day. They should continuously expand their own collection by bookmarking sites and resources for future use. To do this efficiently though, teachers should have a good idea of what the curriculum involves. A third and last approach is to investigate the collections of others. Many EFL teachers and educators have spent a good deal of time and effort locating authentic materials, useful sites and publish these on the World Wide Web. So instead of reinventing the wheel and spending vast amounts of time searching the Internet, teachers should have a look at the numerous comprehensive collections of links that are available on the Web (see, for instance, Appendix B).

7.2.1 Selecting material

Teachers who are going to use the Internet will at some point have to start looking for suitable web sites that they can use in their lessons. However, it is more than likely that they will be overwhelmed by the amount of information they will encounter. This section will provide a model for selecting material on the World Wide Web, enabling the user to evaluate web pages critically without getting lost in the information jungle This is the SCAD checklist which was used to select the web documents used in the elaboration of this work. The SCAD checklist can help teachers separate high quality information from poor quality information. In a simplified form it can also be used by students. The model is an adaptation of those proposed by Harris (1997)[132] and Caywood (1995)[133].

---

130 Op. Cit.
131 Ibid.
132 Harris, R. (1997, November 17). Evaluating Internet Research Sources [WWW document]. URL
http://www.sccu.edu/faculty/R_Harris/evalu8it.htm
133 Caywood, C. (n.d./1995). Library Selection Criteria for WWW Resources [WWW document]. URL
http://www6.pilot.infi.net/~carolyn/criteria.html

7.2.2 Evaluating Internet sites

The first thing teachers should do is pre-evaluate their objectives. Before starting to browse the Internet, it is important that teachers set goals as to what it is exactly they want to find. First of all, they should narrow down the subject as much as possible. Then they will have to ask themselves what it is they are looking for: is it an opinion, facts, stories, interpretations, statistics? Lastly, they have to determine why they are looking for this information. In other words, do they want to be informed, persuaded, presented with a viewpoint, etc.?

By answering these questions in advance teachers will create their own private set of criteria by which they can screen their sources quickly before actually evaluating their contents.

The second step is to test the sites that have been selected by a number of criteria. For this purpose, a set of criteria can be used that can be divided into two groups: criteria pertaining to the contents of web pages and those pertaining to design and user-friendliness. The first category is of course the most important one, since only reliable information can be used. Therefore, it is necessary to look at the sources, accuracy and objectivity. However, in limited lesson time slots, it is also imperative that the sites are user-friendly, well designed and easy to access. Furthermore, students should not be distracted from the contents by poorly designed or poorly structured sites.

The SCAD checklist (Source evaluation, Contents, Access, Design) is an easy-to-use set of criteria which incorporates both aforementioned categories. Of course, it hardly needs saying that very few sources will meet every criterion in the list, and if they do, it still is no guarantee of high quality information. The list does facilitate evaluating Internet sites, however, and when used properly it will be a useful aid. See Table 7.1 below.

7.2.2.1 Source evaluation

It can be helpful to look for the author's credentials. Is there any evidence that he or she is knowledgeable and reliable? For instance, is there biographical information (education, training, relevant experience)? Is contact information (e-mail, snail mail) provided? An anonymous publication is never a good sign.

Is the site reviewed or rated by an organization? Or is the article published on the site of a well-known and reputable institution? If this is the case, then one can be sure that the publication has been reviewed thoroughly before it was put on the Web.

What sort of meta-information is provided? Meta-information is information about information. There are two sorts: summaries and evaluations. Search tools sometimes give a short summary of the contents of web pages, which can be very useful, but may sometimes be also deceptive. Therefore, it is always important to check for oneself. Evaluative meta-information is harder to come by. It includes reviews, comments, ratings and recommendations. Collections of hyperlinks often give this sort of information.

Neglect of bad spelling, style or grammar. This means that the author has not bothered to check the work and this is not a good sign. 'Whether the errors come from carelessness or ignorance, neither puts the information or the writer in a favorable light' (Harris, 1997)[134].

---

134 Op. Cit.

7.2.2.2 Contents

It is important to find out if the information is accurate, detailed, factual, exact or comprehensive. The first thing to be done is to look at the date of publication. Some information is timeless, but most becomes outdated fairly quickly. It is best to make sure the information has been updated regularly.

One should also pay attention to the comprehensiveness of the story. It should be a rounded story that makes a complete impression. An information source should not deliberately leave out any important facts and should at least aim at completeness.

The audience a publication is meant for and the purpose it was written for can be important too. If a publication is meant for secondary school students, it is not suitable for scholars. More important is the purpose for which the information was created. Harris (1997)[135] rightly asserts that 'information pretending to objectivity but possessing a hidden agenda or persuasion or a hidden bias is among the most common kind of information in our culture.' This does not necessarily mean that biased information is useless, but one should take the bias into consideration and make its existence clear to the students.

Another criterion is objectivity. A publication should be well balanced, moderate and not emotional. It should not comprise wild and irrational claims or arguments. A good web site offers a balanced, reasoned argument, free of prejudice or bias. Of course, the nature of some writings is biased, but this should not pose a problem as long as one is aware of the purpose of the author.

Lastly, it is important to check if the information presented is consistent with one's common sense. If information contradicts your own experience, it should be handled with distrust.

7.2.2.3 Access

Students easily get bored if they have to wait too long for a page to download to their computer. So it is good to check if a site is not cluttered with unnecessary graphics that help to slow down download time. It is also important to check if a site is so popular that it can become overcrowded and difficult to access. Furthermore, teachers should make sure they have all the plug-ins and software that are required for using the site and they should check if it uses standard multimedia formats. Lastly, they should check if the site is completely free of charge. Most of the material on the Internet is free, but this may change in the future.

7.2.2.4 Design

The last, but certainly not the least category is design. A web page should be well structured and the individual pages should be concise and short enough to avoid having to scroll endlessly. In addition, a web site should be easy to navigate and using it should be intuitive.

Source Evaluation	Trustworthy source, author's credentials, e-mail, organizational support, rated by known authority, meta-information, bad grammar
Contents	Accurate information, up-to-date, comprehensive, rounded story, audience

---

135 Ibid.

	& purpose, objectivity, fairness, reasonableness, moderateness, common sense
Access	Standard multimedia formats, does it require extra software or plug-ins, free, easy to reach or overloaded, download time
Design	well structured, easy to navigate, distracting visual elements, does everything function, functional design, working hyperlinks

Table 7.1: SCAD checklist

7.2.2.5 Evaluation links

There is much material to be found on the Internet with respect to evaluating web sites. Here are some further links that can be helpful to those who want to find out more about this subject. For a more comprehensive list, see Appendix B.

Alexander, Jane and Marsha Tate. *Teaching Critical Evaluation Skills for World Wide Web Resources.*
URL http://www.science.widener.edu/~withers/webeval.htm

Fenton, Serena. *Information Quality: is the truth out there?*
URL http://ils.unc.edu/~fents/310/

Kirk, Elizabeth E. *Evaluating Information Found on the Internet.*
URL http://milton.mse.jhu.edu:8001/research/education/net.html

7.3 Prerequisites

To ensure that the Internet will provide educational enrichment, certain preconditions will have to be set up. For instance, schools will have to consider how they are going to train their staff and what technical prerequisites will have to be met. Another major task is bringing about a change of attitude among teachers who are reluctant to use new media and convincing them that the Internet can be a true asset and not a liability in the modern classroom.

7.3.1 Dispelling myths

It is imperative that teachers start using the Internet with an unbiased, open mind. Some teachers are overly enthusiastic and perhaps expect too much. Others are set in their ways and find it hard to adapt to the new situation. Either way, dispelling myths and fallacies will take away fear and misconceptions. This will both facilitate the change of attitude of reluctant teachers to successfully integrate the Internet into existing curricula and give a realistic picture of what can be expected of the Internet, since it is by no means the be-all and end-all of education.

Frizler (1995)[136] has identified four common myths and misconceptions. The first one is that teaching on-line saves money and time. In the long run this might be true, but initially a substantial amount of time and money will have to be invested into using on-line learning media. Learning how to use the Internet can be time-consuming and costly for many teachers, so they should receive as much support as possible from the University. Teachers should be aware that they will have to spend time in training before the Internet actually begins saving them time. A good idea is to open Internet courses conducted by experienced trainers.

The second myth is that teachers are afraid of computers. There are not many instructors who are completely opposed to the introduction of new media into the classroom. To most of them the pros outweigh the cons. For those who are skeptical, it is usually a matter of 'I don't know what to do'. The complaint heard most often among teachers is that they simply do not have the time or the money to spend on training. In addition, many simply do not know where to start, since the Internet is such a vast realm. Teachers are faced with both a technical and a pedagogical challenge and they should be allotted the appropriate time and resources to make the most out of the Internet as a learning medium (Cameron, 1994)[137].

Another fear that teachers sometimes have is that they will become obsolete themselves. Indeed, some educators make strong claims that the virtual classroom will eventually replace the traditional classroom (Doheny-Farina, 1994)[138]. However, as Berge & Collins (1995)[139] point out, the role of teachers may change, but the need for them will not. Students will always need a leader who assists them in their learning process and who takes into account individual students' characteristics. A computer can never fulfil that role.

The last myth concerns the misconception that getting students on-line is the same thing as teaching. It is actually quite dangerous to turn students loose with no clear language task in mind. Teachers should have a clear goal in mind and these should be made explicit to the students. They have to know what is expected of them and be aware of the connection between using the Internet and learning English. As Frizler (1995)[140] states, 'to be an effective educational tool, technology must have a strong pedagogical foundation.'

7.3.2 Training

Another prerequisite for a successful Internet integration will be staff training. Teachers will have to learn how to use computers and software. Luckily, a number of teachers already have access to the Internet and they have some level of experience using the Internet. These teachers should help the less experienced ones. The UQROO it self should offer more advanced courses for specific staff members, so that the general level of expertise within the English department will be raised. The UQROO has a Departamento de Informatica which very likely has the tools to help EFL teachers to improve their Internet skills. Perhaps, teachers should also consider using student expertise. Many students have home access to the Internet and are often very advanced users of the Internet.

136 Op. Cit.
137 Cameron, S. (1994). Technology in the classroom: Proceed with caution [WWW document] URL
http://www.rpi.edu/~decemj/cmc/mag/archive.html
138 Doheny-Farina, S. (1994, December 1). The virtualization of local life: A tale of two teachers [WWW document].
Computer-Mediated Communication Magazine, 1(8). URL http://www.rpi.edu/~decemj/cmc/mag/archive.html
139 Op. Cit.
140 Op. Cit

This will benefit the whole English Department by raising the team spirit. It is important in a situation where teachers have to adopt new technologies and new ways of working that they can exchange experiences and rely on one another for support.

7.3.3   Equipment

Perhaps the most important condition that has to be fulfilled relates to the availability of proper hardware and software. The average Mexican school is still rather poorly equipped. In the future school procurement schemes will have to include extensive budget lines for new technology every year or two. In the meantime, the UQROO has started to charge students a periodical fee for the use of the Internet.

Regarding to connection, the UQROO has a Local Area Network (LAN) that allows several connections at the same time. This LAN has a router that takes care of the data traffic. Whit this configuration the connection problem is almost solved. Now, the main problem is speed. The Departamento de Cómputo should advice its Administrative counterpart on the hardware needed to ensure a good speed within the LAN.

7.3.4   Equal opportunities

A last consideration is the economic differentiation that is beginning to occur. More and more students have home access to the Internet. This gives them a great advantage over students who can only use computers at the UQROO. To deal with this problem adequately, the UQROO will have to find out which students have home access and how to put right this inequality. In addition, teachers may want to think about how they can build upon this home access in their teaching.

A final issue has to do with the imbalance of computer use between male and female. Traditionally, women tend to participate less than men. This cultural problem will have to be addressed. Teachers will have to make up ways to promote women participation. A good option could be starting girls-only computer clubs.

CHAPTER 8.   Conclusion

This final chapter will first of all assess the main objective of this work based on the preceding chapters. A number of strengths and weaknesses of using the Internet in an educational context will be presented in order to answer not only the question whether or not the Internet is a true asset to the EFL classroom, but also how it can be used in the most effective way. The last section will make recommendations with respect to the actions that can be taken to improve the quality and integration of EFL education and the Internet.

8.1 Thesis objective

The main objective of this work was to present a theoretical discussion of the pedagogical justification of the Incorporation of the Internet to the EFL curricula at UQROO and its possible benefits. The objective has been fully accomplished and the result is presented in Chapter 6. This work has comprised a deep analysis of the theories that have emerged around Internet and EFL. Also, the current situation of EFL instruction at UQROO was determined by discussing a recent study on the subject. This study allowed to recognize the language learning theories that EFL instruction at UQROO is based on. Afterwards, this information was confronted to give a pedagogical justification to the Incorporation of Internet to the EFL curricula at UQROO. Also, the research allowed to argue that this Incorporation contributes to the Objectives of the English Language Major and is coherent with UQROO's Fundamental Principle of Innovation. As to the benefits of Incorporating the Internet to the EFL curricula at UQROO, there is, however, no straightforward answer to this question. The Internet can indeed be a beneficial supplement to the traditional EFL classroom at UQROO, but there are also clear disadvantages to the Internet as a language learning tool. The following subsections will deal with the strengths and weaknesses of the use of the Internet in the EFL UQROO context. In summary, however, it can be concluded that notwithstanding the drawbacks the Internet can be a true asset to the EFL classroom at UQROO. Finally, it should be noted that most of the points made in the following subsections are valid ones with respect to the instruction of any foreign language. The lingua franca of the Internet, however, is English and as such the introduction of the Internet is easiest in the EFL classroom.

8.2 General Conclusions

Even when teachers are convinced of the benefits of using the Internet in an educational context, then there are still many practical matters to be addressed before students can actually start working with the Internet. First of all, teachers will have to learn how to go about using the Internet. Section 7.1 suggests a framework for the educational use of Internet technologies, which makes it easier for teachers to integrate computer-assisted learning into existing curricula.

Third, a number of criteria will have to be drawn up that can help the teacher select appropriate material from the World Wide Web. There is so much information to be found on the information highway, that teachers may easily get overwhelmed. To avoid this and help teachers make carefully thought-out decisions about which material to use and which

not; the so-called SCAD model (Source evaluation, Contents, Access, and Design) will be introduced.

Lastly, a number of conditions will have to be fulfilled before the Internet can truly become a valuable asset to the EFL classroom. For instance, a good training program will have to be set up to teach educators how to make the most out of the new technologies. In addition, the hardware, software and Network has to meet certain minimum conditions, otherwise the introduction of the Internet will have more drawbacks than benefits. These and other prerequisites will be discussed in the following sections.

The strengths

The University of Quintana Roo is facing a major challenge in the 21st century. In addition to its traditional task, it will also have to prepare their students for a life and career in the information age. Students will have to learn to navigate the Internet and cope with large amounts of information with speed and accuracy. By using the Internet in the foreign language classroom, students will be able to develop skills that parallel those that will be commonly used in the world outside the classroom.

The Internet offers vast resources containing a wealth of authentic material. The emphasis in language instruction at the UQROO has a more communicative approach. Through various applications, such as e-mail and Internet Relay Chat (IRC), an exchange of ideas and opinions can take place. The Internet enables students to participate in multilingual communities at home and around the world, so that they will use the language both within and beyond the UQROO setting.

Current pedagogical theories stress the importance of learner autonomy. When the Internet is used in an educational context, this shift is not optional, but a prerequisite. Students work on projects and bear the responsibility for their own work and learning.

In summary, the Internet has many advantages. It is true of course that some of these, such as more learner autonomy, can also be realized without the aid of the Internet. Nevertheless, the nature of the Internet itself makes it an outstanding tool for further emphasis on student-centeredness and communication. The latter in combination with the ample availability of authentic language materials are among the most important features of the Internet that make it an excellent language learning tool. Nonetheless, it should be stressed that the Internet can best be used as a complement rather than a replacement to traditional teaching methods, since there are also drawbacks to using the Net in an educational context, as shown in the next section. Many of these drawbacks, however, are of a practical nature and once removed, the Internet is a powerful tool for communicating, accessing authentic language materials, motivating students, and preparing them for the tasks they will be expected to accomplish not only in the work place, but across all aspects of their lives.

The weaknesses

Most of the positive features of the Internet can easily be counterbalanced by negative ones. Many of the negative features are connected with practical problems that can be solved fairly easily. Nevertheless, these aspects deserve attention, since each and every EFL teacher wanting to integrate the Internet into his curriculum will encounter them and will conceivably be deterred by them.

One of the most intricate problems to solve is the overwhelming amount of information to be found on the Internet. Finding one's way in the chaotic and disorganized world of the World Wide Web in particular is a skill in itself. An additional problem is that it is very easy to publish material on the Net. As a result many people who do not have much to contribute at all do have their own homepage. This produces a clutter of useless material, so that even advanced and experienced Internet users with thorough search skills sometimes have difficulty locating the desired material. In addition, there is much information available that is not desirable, appropriate, or relevant for secondary school students. Pornography on the Internet has received considerable media attention, but there are also other problematic areas, such as texts containing racist propaganda or overt subversion. It is virtually impossible to ban these materials and if students are keen on accessing them it is hard to prevent it. Although these texts can be found in everyday life as well, students would not be able to access these materials in traditional school settings and school computers are not supposed to be used for this kind of activities.

Furthermore, there are also problems of a more practical nature. Introducing the Internet in a school will require substantial investments. The University will have to update its hardware and software, and it will also have to invest in training their staff. A small-scale introduction of the Internet is not recommendable since this would result in a half-hearted and ultimately non-effective use of the Net. Finally, there is the problem of copyright and plagiarism. With modern software and the straightforward possibility to cut and paste, students might be tempted to resort to plagiarism. Teachers should make it clear that it is unacceptable to use work of others without referring to the original, although, once committed, Internet plagiarism is hard to detect. This touches upon another aspect of the educational use of the Internet: supervising students. As we have seen, using the Internet in an educational context stimulates learner autonomy. Although this is in itself a development to be applauded, at the same time it also poses a clear problem for teachers. Not only is it more difficult to assess student performance, but the Internet also offers ample opportunities for improper use. In other words, teachers will have to get accustomed to a new and somewhat paradoxical role in the learning process; whilst being more coaches than teachers, they will also have to monitor closely what their students are doing to avoid misuse.

Lastly, since the use of the Internet in the EFL classroom is still such a young enterprise, the question if it is indeed such an effective language learning device as is often claimed is still largely unanswered. There is a pressing need for extensive research that compares traditional teaching methods to computer-assisted language learning. Studies conducted so far are often small-scale, however they indicate that using the Internet has a positive effect on students' motivation, although they often do not take into account the fact that students' motivation will almost always increase when introduced to something new and unknown.

Regardless of all the drawbacks of the educational use of the Internet, the possibilities of this new medium are enormous. Every change encounters resistance and successful introduction of the Internet in the EFL classroom will require effort and attitudinal change.

While it is impossible to predict exactly which direction the Internet and EFL instruction will go into, it is likely that a further integration of computers into society in general and the language learning process in particular will take place. The result of this will be twofold. On the one hand, teachers will increasingly use the Internet as a language learning tool, and on the other hand, they will have to teach students specific skills to make effective use of this new medium. In other words, although it is impossible to predict exactly how, EFL instruction and the Internet will influence each other and their impact on society will grow noticeably as time goes by.

Recommendations

So far the actual influence of the Internet on EFL education has been marginal. Full integration of the Internet into EFL curricula has not yet been achieved. Where there is access to the Internet, it is often limited to only a few connections, which makes using the Internet on a broad scale virtually impossible. Although some countries, such as the United States and Canada, are already further developed than others in terms of hardware and professional awareness, it seems reasonable to predict that eventually the Internet will find its way into the majority of EFL classrooms. The Internet is growing rapidly; its growth will not be smooth, but it is ineluctable. In addition, it is changing from a network of amateurs into a professionally run and commercially viable medium. The biggest mistake one can make is to see the Internet as 'just another technology'. The Internet is making and will continue to make an impact on society as a whole.

Considering the current rate of development, more and more EFL-related web sites will emerge. Some of them may be dull, having to offer little more than 'old wine in new bottles': gapfilling exercises, multiple choice tests, decontextualized reading passages, and inauthentic language examples, dressed up with sound clips and graphics. However, many sites will offer access to a wide range of authentic language materials in a manipulable form. Moreover, it offers easy and low-cost communication with native speakers and other learners throughout the world and it allows the delivery of materials in a multimedia format.

As we have seen throughout this work, the Internet is certainly not the be-all and end-all of education. Besides offering many advantages to the foreign language classroom, the Internet also has a number of drawbacks that will have to be addressed in order for the Internet to become a true asset to the EFL classroom. First of all, there is a pressing need for more extensive, large-scale, and objective research into the effects of educational Internet use. At this moment it seems that the Internet has a positive impact on the students' learning experience (at least that is the students¡ perception), but it is still largely unclear if and how students' perceptions correlate with an actual increase in language skills. Therefore, further research should be carried out. Programs integrating the Internet in the Curriculum should be designed and tried.

It still remains to be seen how the Internet will influence EFL instruction in the future. Nevertheless, it seems a reasonable claim that the key to success in the new millennium will be information. A further integration of networked computers into society is likely to take place. Global communication will become increasingly important and knowledge of English, being a world language, will be paramount. Therefore, students will have to acquire both thorough computer skills and language skills to be successful in the information age and, as shown in this work, the integration of the Internet in the EFL classroom is a step in the right direction.

REFERENCES

For references to on-line documents the APA standard (Land, 1998)[141] has been used.

Ahmad, K., G. Corbett, M. Rogers & R. Sussex (1985). *Computers, language learning and language teaching*. Cambridge, Great Britain: Cambridge University Press.

Assche, F. van (n.d./1998). *The Web for Schools Project* [WWW document]. URL http://wfs.eun.org./about/context/wfs/projectframe.html

Belisle, R. (n.d./1996). E-mail Activities in the ESL Writing Class [WWW document]. *The Internet TESL Journal*, 2(12). URL http://www.aitech.ac.jp/~iteslj/Articles/Belisle-Email.html

Berge, Z. & M. Collins (1995). *Computer-mediated communication and the online classroom in distance learning*. Cresskill, NJ: Hampton Press.

Berners-Lee, T. (n.d./2000). *Tim Berners-Lee: WWW and UU and I* [WWW document]. http://www.w3.org/People/Berners-Lee/UU.html

Bowers, R. (1995). Web publishing for students of EST. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners*. Honolulu, HI: Second Language Teaching and Curriculum Center

British Council (n.d./1996). *The Internet and English Language Teaching* [WWW document]. URL http://www.britcoun.org/english/internet/engcont.htm

Brown, H.D. (1991). TESOL at twenty-five: What are the issues? *TESOL Quarterly*, 25: 245-260.

Cameron, S. (1994). Technology in the classroom: Proceed with caution [WWW document] URL http://www.rpi.edu/~decemj/cmc/mag/archive.html

Canale, M. & M. Swain (1980). Theoretical basis of communicative approaches to second language teaching and testing. *Applied Linguistics*. [WWW document] URL http://www.linguistic-funland.com/tesl.html

Caywood, C. (n.d./1995). *Library Selection Criteria for WWW Resources* [WWW document]. URL http://www6.pilot.infi.net/~carolyn/criteria.html

Celce-Murcia, M. (1991). *Teaching English as a Second or Foreign Language*. Los Angeles: Heinle & Heinle Publishers.

---

141 Land, T. [a.k.a. Beads] (1998, October 15). Web Extension to American Psychological Association Style (WEAPAS) (Rev. 1.6) [WWW document]. URL http://www.beadsland.com/weapas/

Chun, D. (1994). Using computer networking to facilitate the acquisition of interactive competence. *System*, 22(1): 17-31.

Corbett, A. (n.d./1998). *Internet at Brakenhale School* [WWW document]. URL http://wfs.eun.org/about/context/gp/brakeframe.html

De León, R.M. & R. Vázquez Castro (1999). *Identification of Class Activities in Introductory English Courses in the University Program of Languages at UQROO: Tesis Recepcional Para Obtener El Grado de Licenciado en Lengua Inglesa. Universidad de Quintana Roo*, División de Ciencias Sociales y Humanidades. México.

Doheny-Farina, S. (1994, December 1). The virtualization of local life: A tale of two teachers [WWW document]. *Computer-Mediated Communication Magazine*, 1(8). URL http://www.rpi.edu/~decemj/cmc/mag/archive.html

Dole, J.A., G.G. Duffy, L.R. Roehler & P.D. Pearson (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research*, 61: 239-264.

Frizler, K. [a.k.a. Frizzy] (1995, December 6). *The Internet as an Educational Tool in ESOL Writing Instruction* [WWW document]. Unpublished Master's thesis, San Francisco State University. URL http://thecity.sfsu.edu/~funweb/thesis.htm

González-Bueno, M. (1998). The Effects of Electronic Mail on Spanish L2 Discourse. *Language Learning & Technology*, 1(2): 55-70.

Graphic, Visualization, & Usability Center (n.d./1998). *Tenth WWW User Survey* [WWW document]. URL http://www.cc.gatech.edu/gvu/user_surveys/survey-1998-10/graphs/general/q50.htm

Hagen L. & A. Ring Knudsen (n.d./1998). *Das Bild der Anderen – Use of e-mail for beginners in German* [WWW document]. URL http://wfs.eun.org/about/context/en/dasbildframe.html

Hardisty, D. & S. Windeatt (1990). *CALL*. Oxford University Press.

Harris, R. (n.d./1997). *Evaluating Internet Research Sources* [WWW document]. URL http://www.sccu.edu/faculty/R_Harris/evalu8it.htm

Internet Consortium Software (n.d./2000). *Distribution by Top-Level Domain Name by Host Count January 2000* [WWW document]. http://www.isc.org/ds/WWW-200001/dist-bynum.html

Janis Folkmanis, A. (n.d./1998). *Technology, the World-Wide-Web and the School* [WWW document]. URL http://wfs.eun.org/about/context/wfs/technoframe.html
Jones, C. & S. Fortescue (1987). *Using computers in the language classroom*. London: Longman.

Kenning, M.-M. & M.J. Kenning (1990). *Computers and language learning: Current theory and practice*. New York: Ellis Horwood.

Kilian, C. (n.d./1994). *How an online course works* [e-mail document]. Toronto Globe and Mail, November issue. ckilian@hubcap.mlnet.com

Krashen, S.D. (1995). *Principles and Practice in Second Language Acquisition.* Great Britain: Phoenix, ELT Prentice Hall International. 202 pp.

Kroonenberg, N. (1995). Developing communicative and thinking skills via electronic mail. *TESOL Journal.* [WWW document]. URL http://www.aitech.ac.jp/~iteslj/

Land, T. [a.k.a. Beads] (1998, October 15). *Web Extension to American Psychological Association Style (WEAPAS)* (Rev. 1.6) [WWW document]. URL http://www.beadsland.com/weapas/

Lee, E.-K. (n.d./1998). Using E-mail in EFL Writing Classes [WWW document]. *The Internet TESL Journal,* 4(11).
URL http://www.aitech.ac.jp/~iteslj/Techniques/Lee-EmailWriting.html

LeLoup, J.W. & R. Ponterio (1995). Basic Internet Tools for Foreign Language Educators. In M. Warschauer (Ed.), *Virtual Connections: Online Activities & Projects for Networking Language Learners.* Honolulu, HI: University of Hawaii Press.

LeLoup, J.W. & R. Ponterio, (1996). Choosing and Using Materials for a 'Net' Gain in Foreign Language Learning and Instruction. In V.B. Levine (Ed.), *Reaching Out to the Communities We Serve.* NYSAFLT Annual Meeting Series, 13: 23-32.

LeLoup, J.W. & R. Ponterio, (n.d./1998). *Internet Technologies for Authentic Language Learning Experiences* [WWW-document]. URL http://www.cal.org/ericcll/digest/leloup01.html

Li, R.-C. (1995). English as a second language home page. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners.* Honolulu, HI: Second Language Teaching & Curriculum Center.

Lixl-Purcel, A. (1995). German area studies on the net. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners.* Honolulu, HI: Second Language Teaching & Curriculum Center.
McGuire, T., S. Kiesler & J. Siegel (1987). Group and computer-mediated discussion effects in risk decision making. *Journal of Personality and Social Psychology,* [WWW document].
http://www.psy.gla.ac.uk/~steve/talks/meddiscussion.html

Mörth, T. (n.d./1998). *Eriksdal's School: A Fully IT-Integrated School* [WWW document]. URL http://wfs.eun.org/about/context/gp/erikframe.html

Osuna, M.M. & C. Meskill (1998). Using the World Wide Web to Integrate Spanish Language and Culture: A Pilot Study. *Language Learning & Technology,* 1(2): 71-92.

Panos (n.d./1995). *The Internet and the South: Superhighway or Dirt-track?* [WWW document]. URL http://www.oneworld.org/panos/briefing/internet.htm

Prodigy Web (n.d./2000). *Internet en Mexico* [WWW document]. URL http://prodigyweb.com.mx/

Raimes, A. (1983). *Techniques in Teaching Writing.* Oxford, Great Britain: Oxford University Press.

Roger, C. (n.d./1998). *Comenius likes the Web* [WWW document]. URL http://wfs.eun.org/about/context/wfs/comeniusframe.html

Rosen, L. (1995). City net: Travel the world from your desktop. In M. Warschauer (Ed.), *Virtual connections: Online activities and projects for networking language learners.* Honolulu, HI: Second Language Teaching & Curriculum Center.

Sadow, A.S. (1987). Experiential techniques that promote cross-cultural awareness. *Foreign Language Annals* [WWW document]. URL http://vtc.ngfl.gov.uk/resource/linguanet/cilt/search/233.html

Salmon, A. (n.d./1999). *Internet Statistics* [WWW document]. URL http://www.dns.net/andras/stats.html

Tella, S (1992). *Talking shop via e-mail: A thematic and linguistic analysis of electronic mail communication.* Research report No. 99. Department of Teacher Education, University of Helsinki.

Universidad de Quintana Roo. (n.d./2000). *Licenciatura en Lengua Inglesa* [WWW document]. URL http://www.uqroo.mx/uqroo/carreras/c_lenginglesa.htm

Universidad de Quintana Roo. (n.d./2000). *Universidad de Quintana Roo* [WWW document]. URL http://www.uqroo.mx/uqroo/

Vygotsky, L. (1978). Mind in Society - The Development of higher Psychological Processes. Cambridge: Harvard University Press.
Wang, Y.M. (1993). *E-mail dialogue journaling in an ESL reading and writing classroom.* Unpublished doctoral dissertation, University of Oregon at Eugene.

Warschauer, M. & D. Healey (1998). Computers and language learning: An overview. *Language Teaching,* 31: 57-71.

Web for Schools (n.d./1998). *Internet in Schools: Question and Answers* [WWW document]. URL http://wfs.eun.org/about/context/school/schoolframe.html

Whatis.com (n.d./2000). *Whatis.com* [WWW document]. URL http://whatis.com/

Willis, D. (n.d./1997). *A suggested framework for the educational use of Internet technologies & The development of students' learning abilities to critically evaluate materials* [WWW document]. South Bristol Learning Network.
URL http://wfs.eun.org/support/edumodel/ppframe.htm

APPENDIX A.   Glossary of Internet Terms

Attachment. A file that is sent (attached) with an e-mail message.

Bandwidth. Is a measurement of how many bits that can be sent across a connection at the same time, usually measured in bits per second (BPS). A full page of English text is about 16,000 bits. A fast modem can move about 15,000 bits in one second. Full-motion full-screen video would require roughly 10,000,000 BPS, depending on compression. Normally, the total bandwidth is never utilized fully for more than short bursts.

Browser. A software program that allows you to locate and display documents on the WWW. Microsoft Internet Explorer and Netscape Navigator are two popular browsers.

CGI (Common Gateway Interface). A method that allows a web server to communicate and interact with another program on the web server and vice versa. cgi allows a webmaster to have a web page do more than what HTML can do.

Chat (see also IRC). A live "talk" session with other Internet or network users. There are several forms of chat available on the Internet including IRC, web based chat, AOL Messenger, ICQ and Internet Phone.

Dial-Up. A connection that is made temporarily between two communication devices.

Domain Name. The full address of a particular domain such as revealed.net. It is the combination of all levels of domains, sometimes creating long names such as aea9.k12.ia.us. A domain name will always have at least two parts, divided by the period (the dot). A frequent mistake is to also include the ¡Error!Marcador no definido. name in with the domain name such as www.revealed.net, where www is the server name and not properly part of the domain name.

Download. The process of copying a file from a remote computer, usually a server to your own computer. The opposite is to upload.

Electronic Mail (e-mail). A method of sending messages and attached files to anyone in the world with an email address.

E-mail Address. The address the identifies an electronic post office box where e-mail messages can be sent. All modern e-mail messages have the form user@domainaddress, e.g., pablomontalvo@uqroo.com.mx

E-mail Client. A program that allows you to send and receive e-mail. Popular e-mail clients include Eudora, Microsoft Outlook Express, and Netscape Communicator.

File. Any computer document or program can be called a file although normally used to refer to a document created by a computer program. Sometimes a folder directory) is also called a file.

FTP (File Transport Protocol). The protocol used to copy files from one computer to another. ftp is also used as a verb to indicate the process of uploading or downloading a file using ftp. ftp is based on client/server technology.

Gopher. The predecessor to the World Wide Web, gopher is a system that organizes information in a hierarchical menu, allowing one to find and access information quickly. Created at the University of Minnesota, home of the Golden Gophers.

Host. A computer that has services (applications) that other computers can use on a network. Also called a server.

HTML (Hypertext Markup Language). The programing language used for web pages. It is called a markup language because it is used to describe the formatting to be used to display the document. The html file which contains both the text and code (called tags) is read by the web browser which then interprets the code, displaying the web pages as specified by the html.

HTTP (Hypertext Transport Protocol). The protocol used by web browsers to connect to web servers and display web sites.

Hyperlink. A method of connecting the text being read to other text. Although primarily a computer based concept, some have tried to create printed books based upon hyperlinks/hypertext.

Hypertext. Any text that contains links (hyperlinks) to other text in the same document or other documents. The World Wide Web is based upon hypertext but is not the only example of hypertext. Many help systems on computers are based upon hypertext. One of the first commercial programs using hypertext was Apple's HyperCard.

ICQ. A program that allows you to chat and leave messages for other people which also have ICQ.

Internet. The worldwide network of networks based on the IP/TCP protocol. The Internet is not single service and has no real central "hub." It is not owned by any one group. Rather, it is a collection of tens of thousands of networks, online services, and single-user components all based on the idea of a free exchange of ideas and services. Also, when not capitalized, any interconnected set of networks.

Internet Address. Each computer on the Internet must have a unique Internet address or name. Unique names are formed from smallest to largest, having the form of host.subdomain.domain.topDomain, where host and subdomain are often optional. Each unique name, also called the host address, also is assigned a unique IP Address which is maintained in the DNS.

IP (Internet Protocol). The group of protocols that are used to specify what the data being transmitted around the Internet should look like. IP allows a packet to travel through multiple networks on the way to its ultimate destination. IP is a part of the suite of protocols the Internet is based upon, TCP/IP.

IP Address (Number). Every computer on the Internet is assigned a unique number so it can be identified specifically among all the other computers on the Internet. The normal form we see for an IP address is in the form of 4 numbers divided by 3 dots, for example, 205.243.76.2. This number specifies both the network the computer is connected to and the specific host itself.

Intranet. A private network inside a company or organization that uses the same kinds of software and protocols that you would find on the Internet. Intranets may or may not have a connection also to the Internet. Sometimes an Intranet that is connected to the Internet is called the Extranet.

IRC (Internet Relay Chat). IRC is the granddaddy of all the chat formats and the largest. It is text based communication. There are a number of major IRC servers around the world which are linked to each other. Anyone can create a channel and anything that anyone types in a given channel is seen by all others in the channel. Private channels can (and are) created for multi-person conference calls.

ISP. An organization that provides access to the Internet as well as other Internet services such as e-mail, web hosting, ftp, chat, etc. They normally have a high speed connection with enough bandwidth to handle hundreds and even thousands of simultaneous connections into the Internet.

LAN. A network of computers in a single location.
Mailing List. A group of people with a common interest that interacts through e-mail. Some mailing lists have a high volume of e-mail sent on a daily basis, other are used to send out an occasional announcement. Some mailing lists are strictly one way communication, others are a free for all. Most are moderated to one degree or another to keep the discussion on topic. If you belong to a mailing list, you receive every message sent to that list.

Network. The connection of two or more devices which communicate using a network protocol such as TCP/IP.

Newsgroup. A discussion group that communicates through a server where the messages are stored. The most common source for newsgroups is Usenet although private newsgroup servers are available and are used in an Intranet setting.

Protocol. A set of rules that must be followed for any data communications to be made. This ensures that totally different platforms can still communicate with each other. For one computer to communicate with another, they both must follow the same protocol(s).

Search Engine. A web page that serves as an searchable database to other sites on the Web. On these web pages one can enter a word or words to search. The site will search its index and produce a list of links to web sites that it thinks will match your request.

Server. A computer that contains one or more server programs which are accessed by client software.

Surfing the Internet. Slang for getting on the Internet and more specifically, browsing web pages.

TCP/IP. The set of protocols that is used on the Internet.

Text File. A file that consist only of ASCII characters.

URL (Uniform Resource Locator). A uniform method where a host can be accessed at a specific address using a specific protocol. An example is http://www.yahoo.net/

Web Server. A computer program that "serves" web sites. A web server specifically is designed to work with the protocol http and a commonly used web server is named httpd, developed at NCSA. Apache, Netscape, Microsoft IIS, and WebStar are all web servers.

Web Site. A particular place on the World Wide Web devoted to a particular company or subject that has the same Internet address.

Webmaster. A person that creates, maintains, and/or is responsible for a particular web site.

APPENDIX B.   List of URL'S

Dictionaries

Beard, R. A Web of On-line Dictionaries.
URL http://www.facstaff.bucknell.edu/rbeard/diction.html

Cobuild Home Page.
URL http://titania.cobuild.collins.co.uk

Merriam-Webster Online.
URL http://www.m-w.com

Olsen, M. Roget's Thesaurus.
URL http://humanities.uchicago.edu/forms_unrest/ROGET.html

Onelook Dictionaries.
URL http://www.onelook.com

Smith, J. The American-British / British-American Dictionary.
URL http://www.peak.org/~jeremy/dictionary/dict.html

Evaluation Links

Alexander, J. Teaching Critical Evaluation Skills for World Wide Web Resources.
URL http://www.science.widener.edu/~withers/webeval.htm

Argus Associates, Inc. Clearinghouse: Information: Rating System.
URL http://www.clearinghouse.net/ratings.html

Brandt, D. Evaluating Information on the Internet.
URL http://thorplus.lib.purdue.edu/~techman/evaluate.htm

Ciolek, T. The Six Quests for The Electronic Grail: Current Approaches to Information Quality in WWW Resources.
URL http://www.ciolek.com/PAPERS/QUEST/QuestMain.html

CNET. CNET's Internet Lie Detector Test.
URL http://www.cnet.com/Content/Features/Dlife/Truth/ss01.html

Fenton, S. Information Quality: is the truth out there?
URL http://ils.unc.edu/~fents/310/

Ferrell, K. Truth, Lies, and the Internet.
URL http://www.cnet.com/Content/Features/Dlife/Truth/

Kirk, E. Evaluating Information Found on the Internet.
URL http://milton.mse.jhu.edu:8001/research/education/net.html

Kovacs, D. Evaluating Internet Information.
URL http://www.kovacs.com/ohionet/evaluatingo.html

Norem, M. Evaluating Internet Sites- Quick Guide.
URL http://wwwnhc.nhmccd.edu/public/lrc/research/selectsources.html

Patterson, S., A. Wendt & R. Schroeder. Evaluating Information on the Internet.
URL http://www.udmercy.edu/htmls/Academics/library/evaluati

Richmond, B. Ten C's for Evaluating Internet Resources.
URL http://www.uwec.edu/Admin/Library/10cs.html

Scholz, A. Evaluating World Wide Web Information.
URL http://thorplus.lib.purdue.edu/research/classes/gs175/3gs175/evaluation.html

Smith, A. (maintainer). Evaluation of Information Sources.
URL http://www.vuw.ac.nz/~agsmith/evaln/evaln.htm

Grammars

The English Institute. An Elementary Grammar.
URL http://www.hiway.co.uk/~ei/intro.html

Hughes, A. On-line English Grammar.
URL http://www.edunet.com/english/grammar/index.html

Lynch, J. Guide to Grammar and Style.
URL http://andromeda.rutgers.edu/~jlynch/writing/

Strunk Jr., W. Elements of Style.
URL http://www.cc.columbia.edu/acis/bartleby/strunk

IRC Links

Pioch, N. A short IRC primer.
URL http://cbl.leeds.ac.uk/nikos/tex2html/examples/IRCprimer1.1/IRCprimer1.1.html

mIRC Co. Ltd. mIRC: An Internet Relay Chat program.
URL http://www.mirc.com

NewIRCusers.com. Internet Relay Chat Help.
URL http://www.newircusers.com/index.html

Links for Teachers

BBC Education.
URL http://www.bbc.co.uk/education/

CALL Links.
URL http://tiger.coe.missouri.edu/~cjw/call/links.htm

Center for Internet Technology in Teaching. Using Internet in Education.
URL http://citt.marin.cc.ca.us/using.html

Chambers, T. The Human Languages Page.
URL http://www.june29.com/HLP/

Computer-mediated Communication Magazine.
URL http://www.december.com/cmc/mag/index.html

Eduweb.
URL http://www.eduweb.co.uk

EFL Magazine.
URL http://www.u-net.com/eflweb/home.htm

Frizler, C. Frizzy's University Network.
URL http://thecity.sfsu/edu/~funweb

The Internet TESL Journal.
URL http://www.aitech.ac.jp/~iteslj/

Language Learning & Technology.
URL http://polyglot.cal.msu.edu/llt/

LeLoup, J. & R. Ponterio. Foreign Language Teaching Forum.
URL http://www.cortland.edu/flteach/

Links for teachers.
URL http://digischool.bart.nl/en/teachers.html

Purdue University. Online Writing Lab.
URL http://owl.english.purdue.edu

Ammerlaan, T. Resources.
URL http://www.ammerlaan.demon.nl/ENGLISH.htm

Sarah, T.J. Language Arts Lessons.
URL http://www.lessonstop.org/languagearts.html

Shamash, M. Teacher's Library of Resources.

URL http://193.130.123.186/teachers.nsf

Sperling, D. Dave's ESL Cafe.
URL http://www.eslcafe.com

Teachers Net.
URL http://www.teachers.net

TESL-EJ.
URL http://www-writing.berkeley.edu/TESL-EJ/

Warschauer, M. Links: Language Learning and the Internet.
URL http://www.lll.hawaii.edu/web/faculty/markw/links.html

Yahoo English.
URL
http://dir.yahoo.com/Social_Science/Linguistics_and_Human_Languages/Languages/Specific_Languages/English/

Literature Links

Bibliomania. Classic Fiction.
URL http://www.bibliomania.com/Fiction

Bibliomania. Poetry.
URL http://www.bibliomania.com/Poetry

Hylton, J. The Complete Works of William Shakespeare.
URL http://www-tech.mit.edu/Shakespeare/works.html

Liu, A. English Literature Main Page.
URL http://humanitas.ucsb.edu/shuttle/english.html

Ockerbloom, J.M. The On-line Books Page.
URL http://www.cs.cmu.edu/booksearch.html

Schmidt, B. Mark Twain: Quotations, Newspaper Collections & Related Resources.
URL http://gopher.tarleton.edu/pages/facultypages/schmidt/Mark_Twain.html

Simons, M. Thomas Hardy.
URL http://pages.ripco.com:8080/~mws/hardy.html

Pen Pals

Intercultural E-mail Classroom Connections.
URL http://www.stolaf.edu/network/iecc/intro.html
Key Pals.

URL http://www.ziplink.net/users/tlipcon/keypals

 Pen Pal Connection.
URL http://www.penpals.com

The Pen Pal Depot.
URL http://walker.cioe.com/~shannon/penpal/index.html

Search Tools

Altavista.
URL http://www.altavista.com

Dogpile.
URL http://www.dogpile.com

Excite.
URL http://www.excite.com

Hotbot.
URL http://www.hotbot.com

Inference Find.
URL http://www.inference.com/ifind/

Infoseek.
URL http://www.infoseek.com

Metacrawler.
URL http://www.metacrawler.com

Metafind.
URL http://www.metafind.com

Yahoo.
URL http://www.yahoo.com

APPENDIX C.   Framework of the Educational Use of the Internet

The following is the complete suggested framework for the educational use of Internet technologies & the development of students' abilities to critically evaluate materials, as proposed by Willis (1997)[142].

Stage 1

- Basic communication between individuals. One-to-one or group communication.
- e-mail
- news
- chat
- video conference
- Allows the student to communicate with others, either peers or 'experts' and to contribute to, and learn from, group on-line discussions.

Stage 2

- Research and access: students use the Internet to research and gather information and data.
- use of search engines and directories
- 'expert' sites and others
- download / print for resource use
- cut & paste

Stage 3

- Content production: students are able to produce and publish their own content using HTML and appropriate applications.

Stage 4

- Collaborative working: students use their acquired skills to work in collaboration.
- locally via an intranet
- at a distance via the Internet

Stage 5

- Project based working: students use an interdisciplinary and mixed media approach to project based work.
- involves problem solving
- involves research activities
- involves collaboration
- may be conducted locally on an intranet or at a distance via the Internet or both

---

142 Op. Cit.

Educational use of Internet technologies

- All technical skills can be developed on an Intranet, saving communications costs and risk of exposure to bad content.
- However, access to the Internet is essential to allow students to explore and utilize the full range of resources, participate in distributed activities and publish to the widest audience.
- Development of critical faculties.
- Underlying the use of the Internet is the need for students to develop the ability to critically evaluate the materials with which they are presented.
- This is becoming a crucial issue due to the danger of 'drowning in digital data'.

Critical evaluation of material: A model

1. Development of a research protocol.
   - Students develop, through group activity, a research protocol. This covers:
   - topic
   - potential sources of information
   - criteria for quality evaluation
   - report format
   - The protocol is appropriate to the age and ability of the students.

2. Teacher appraisal.
   - The teacher examines, comments on, amends, approves an individual's protocol.
   - If the research involves the use of the Net, the student is allocated a fixed time on-line (to focus activity and avoid random browsing).

3. Student research.
   - The student carries out the research according to the protocol.
   - The student uses the defined criteria to evaluate the quality of the material.
   - The student produces a report on the material according to the protocol.
   - The student presents and discusses the report with the teacher.

4. Teacher evaluation of results.
   - The teacher considers the outcomes of the student's activities and suggests appropriate follow-up activities.
   - The teacher visits web sites that have been recommended by pupils.
   - If suitable (and subject to copyright) the teacher copies the site onto the school Intranet to create an off-line resource.

5. Outcomes.
   - Students continually develop the ability to critically evaluate content.
   - Institutions develop an off-line resource of (safe) curriculum related material.
   - Off-line resources can be automatically updated.
   - Use of the off-line resources reduces communications costs for the institution.

APPENDIX D. Creating Web Activities for the Classroom

The following is a framework to help teachers create web activities for the foreign language classroom, as proposed by Osuna & Meskill (1998)[143].

1. Select a topic from the textbook.

2. Think about what language functions can be derived from this topic. In other words, what are some of the communicative acts native speakers engage in when dealing with the topic?

3. Think about the cultural component encompassing the communicative process.

4. Choose tasks that integrate language and culture in a natural way.

5. Search the Internet for a web site to match your tasks.
   - Do a search by country *and* keyword(s) associated with the topic selected.
   - Browse around different sites to find a good match for the tasks. If you are not satisfied, keep searching *or* adapt your tasks to the information provided at the site.
   - WARNING: web sites can disappear without notice. Choose a site that is connected to a government agency, a university, a large corporation. This type of sites tends to be more reliable.

6. When you write the activity, give *clear and specific* instructions.

7. Write the activity in the target language.
   - If the activity is for novice learners, use the language in a very controlled fashion. That is, use the language learners know, yet go a bit beyond their proficiency level. If the language employed is too challenging, they will be inclined to give up on the task.

8. When writing the activity, take advantage of the multimedia dimensions of the medium. Use pictures, graphics, movies, music, etc. Think about what can be accomplished by using a computer as opposed to using a textbook. If possible, write the activity to integrate all language skills:
   - Reading. Have students read short selections. Check reading comprehension using true/false statements.
   - Writing. Have students write about what they read, complete open-ended questions, react to visuals, etc.

---

143 Op. Cit.