



Facultad de Ciencias de la Educación

# “State-of-the-art Topic Working with ICT”

Student: Prof. Nadia Comino

Final Work Supervisor: Magter. María Fernanda Rodríguez

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## **Abstract**

The research work "*State-of-the-art Topic Working with ICT*" deals with the use of technology in two secondary schools in Leones, Córdoba, Argentina, where teachers utilize ICT to teach English as a foreign language. The study aims to know how ICT can benefit students as well as the disadvantages to learn English by means of the strategies and activities applied. The results of this research show that the use of ICT in the English classes in these two schools is not considered as a very important tool for the teaching-learning process because only one of the interviewed teachers shows he uses technology in most of his classes.

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## CHAPTER 1

### Introduction

This study focuses on two secondary schools in Leones, Córdoba, Argentina where teachers use ICT to teach English as a foreign language.

The interest in this research topic is based on the tools and strategies that English teachers use in their classes and how they feel about them, for instance if they think that the ICTs are helpful or if they refuse to work with them, if the use of technological devices can be used in any type of classroom, how the students feel, or if teachers are in favor of using any of these technological tools in their classes.

According to Prensky (2001: 1), “our students have changed radically. Today’s students are no longer the people our educational system was designed to teach”.

Today’s students are called digital natives because they are immersed in technology. The constant exposure and interaction with digital technology, through the use of computers, videogames, mobile phones and digital music players, has changed the way our new generation of students’ think and process information in the brain. *Digital natives* are used to receiving information at a fast rate, getting instant gratification, parallel processing and multi-tasking (Prensky, 2001: 1). That’s the reason why nowadays teachers need to update their ways of teaching. The term ICT means Information and Communications Technology and it is often used in different areas for example business, health or education among others. According to Daniels (2002), ICTs have become within a very short time, one of the basic building blocks of modern society. The use of the ICT is an interesting topic to discuss because nowadays a lot of people are talking about it, so it is worth knowing how the ICTs are really used and how useful they are. This research work deals with the use of the ICTs in education, especially, in the English classes.

Many researchers have investigated about this topic before. One of them was Skolverket (2011) who investigated about the use of ICT in schools, the results are not satisfactory and the conclusion is that many schools lacked a strategy for how to work with ICT. Jämterud (2010) said that the most important way to involve the computer more in the teaching is the interest, capability and motivation of the teacher.

There are many tools considered part of the ICTs and they can be used at any time. Some tools are seen as advantages and some of them as disadvantages when using the ICTs in the classroom.

### **Key words**

Information and Communication Technologies, tools, teaching, foreign language, English classroom, strategies, motivation.

### **Research Problem**

How is ICT used in the English Classroom in ESCBA and IPETYM 250, two different secondary schools in Leones, Córdoba?

### **Research questions**

- How can students benefit from the use of ICT when they learn English as a Foreign Language?
- Are there disadvantages in the use of ICT?
- What strategies and activities are used in the English classrooms of the two schools?

### **Objectives.**

- General objective:
  - To know the ways ICT are used in the English classes
- Specific objectives:
  - Recognize and describe what strategies teachers in these two secondary schools use when they work with ICT.
  - Describe how secondary school students can improve their second language acquisition by using ICT.
  - Confirm if ICT is useful for both teachers and students in the teaching-learning process.

### **Hypothesis**

The use of ICT in the English classes in ESCBA and IPETYM 256, two secondary schools in Leones, Córdoba, is considered a very important tool for the teaching-learning process because it helps students to learn in a significant and dynamic way.

## **Rationale**

New technologies have a massive impact on society because they have become a crucial part in everyday life. Nowadays, there are many ways of teaching because in the last years, Information and Communication Technologies have been introduced in the teaching-learning process. Although there can be disadvantages about using ICTs in the secondary school classrooms, many English teachers use these tools in secondary schools because they think they are an effective way for students to learn a second language in a more dynamic way and they are also a good way to motivate them and increase their participation in class. As most of the secondary school students are so familiarized with new technologies, the utilization and integration of ICT tools in the English classes may provide them with exciting new ways to learn a foreign language. Moreover, ICT not only can improve writing and reading skills, but also it can develop listening and speaking skills, and help in communicative and grammar tasks.

This research takes place in two secondary schools in Leones, Córdoba and the main aim is to know if the teachers at these schools use the ICT as a tool to motivate their students in the learning process. It is also worthy knowing how the teachers use the ICT in the English classroom and if they consider that using the new technologies can help students to improve their second language acquisition. It is already known that most of the teenagers can use new technologies very well, but what people do not know is if teachers can work with them.

## **Methodology**

Qualitative research is characterized by its aims, which relate to understanding some aspect of social life, and its methods which in general generate words, rather than numbers, as data for analysis (Quinn Patton, 2002). A qualitative research investigates why and how more than when, where or who and often requires human subjects approvals in the field. According to the research topic, qualitative methods are the most suitable ones.

## **Research tools**

Qualitative research: (non-participant observer). The research work is focused on observing, interpreting, describing and understanding the use of ICT in the English classroom. It takes place in the English classes of both secondary schools, ESCBA and IPETYM 256, in Leones, Córdoba.

## **Procedures**

In order to collect information observation in the classes and interviews to the English teachers working in both secondary schools, in Leones, Córdoba are held.

The advantages of using the observational method are that it is possible to see the real actions of the subjects at the time they are happening and it also permits to see the behaviour of the subjects. Interviews also have many benefits for the research work because the researcher can choose the people to interview and which method of interviewing to use and also change the direction of the discussion when the interview is taking place.

As a complement, the interviews to the teachers are recorded and pictures in the classrooms are taken.

## **Universe**

The observation is held in some English classes of both secondary schools, ESCBA and IPETYM 256, in Leones, Córdoba and the interviews are conducted to English teachers from the same schools. These participants were selected because it is considered that they can provide the best information for the research project due to the fact that they are English teachers and they are observed at the moment they are using ICTs to see how they use them.



## **CHAPTER 2: THEORETICAL FRAMEWORK**

### **Communicative Approach**

This approach to language teaching emphasizes interaction as both the means and ultimate goal of study. According to Tim Bowen (2015:1) on the webpage One Stop English: “The approach to language teaching that can be broadly labelled as communicative language teaching emerged in the 1970s and 1980s as the emphasis switched from the mechanical practice of language patterns associated with the Audiolingual Method to activities that engaged the learner in more meaningful and authentic language use. Twenty years on it is interesting to look at the legacy of the communicative approach and to observe how current practice has been affected by its basic principles. Most present-day practitioners would probably like to think that their classes are communicative in the widest sense of the word. Their lessons probably contain activities where learners communicate and where tasks are completed by means of interaction with other learners. To this end there will probably be considerable if not extensive use of pair, group and mingling activities, with the emphasis on completing the task successfully through communication with others rather than on the accurate use of form. During these activities the teacher’s role will be to facilitate and then to monitor, usually without interruption, and then to provide feedback on the success or otherwise of the communication and, possibly, on the linguistic performance of the learners in the form of post-activity error correction. In terms of the organization of the lesson, the classic present, practice and perform model, where careful input of a particular structure is typically followed by controlled, less controlled and freer practice is likely to have been replaced by a more task-based approach, possibly on the lines of test, teach, test, where the learners are given a communicative task which is monitored by the teacher and then their language use while performing the task is fine-tuned by the teacher in a lesson stage which focuses on error correction or a particular form that is causing difficulties. This is typically followed by a further task-based stage, where the initial task is repeated or a similar task is performed, ideally with a greater degree of linguistic accuracy than during the first attempt.”

Communicative approach is based on the idea that to communicate in an appropriate way, learning needs to have real meaning because when learners are involved in real communicative situations, they will use natural strategies for language acquisition and to learn how to use the language. The use ICT in the English classrooms is a good way

to show learners everyday communicative situations and help them to acquire the language in a meaningful way.

### **Information Communication Technology**

In a two-part series entitled "Digital Immigrants, Digital Natives," Marc Prensky (2001) employs an analogy of native speakers and immigrants to describe the generation gap separating today's students, to whom he calls the "digital natives" from their teachers called the "digital immigrants". The digital natives Prensky (2001) describes are surrounded by digital media to such an extent that their very brain structures may be different from those of previous generations. Digital Natives are used to receiving information really fast. They like to parallel process and multitask. They prefer their graphics before their text rather than the opposite. They prefer random access. They function best when networked. They thrive on instant gratification and frequent rewards. They prefer games to serious work. In contrast, those not born in the digital world reveal their non-native status through a "digital immigrant accent" that manifests itself in a number of ways—printing out a digital document to edit it rather than editing it online, for example (Prensky, 2001).

The native/immigrant analogy, stated by Prensky (2001), can help us to understand the differences between those who are comfortable with technology and those who are not. According to Prensky (2001), digital immigrants are attempting to teach the digital natives with methods that are no longer valid; the only choice may be for educators to change the way they teach. "Unfortunately," he says, "no matter how much the Immigrants may wish it, it is highly unlikely the Digital Natives will go backwards".

According to UNESCO (2002), "Information and Communication Technology permeates the business environment and underpins the success of modern corporations as well as providing government with cost efficient civil service systems. At the same time, the tools and techniques of ICT are of value in the processes of learning, and in the organization and management of learning institutions. The Internet is a driving force, interconnecting both developed and developing countries. Countries must be able to benefit from the technological developments. To be able to do so, a cadre of professionals has to be educated with a sound ICT-background, independent of specific computer platforms or software environments".

According to Wikipedia, "the phrase "*information and communication technology*" has been used by academic researchers since the 1980s, and the

abbreviation ICT became popular after it was used in a report to the UK government by Dennis Stevenson in 1997, and in the revised National Curriculum for England, Wales and Northern Ireland in 2000. But in 2012, the Royal Society recommended that ICT should no longer be used in British schools as it has attracted too many negative connotations, and with this being in effect since 2014 the National Curriculum began to utilize the word computing, which reflects the addition of computer programming into the curriculum. A leading group of universities consider ICT to be a soft subject and thus advise students against studying A-level ICT, preferring A-level Computer Science instead”.

The term ICT is often used as an umbrella term for Information Technology but it stresses the role of unified communications and the integration of telecommunications and computers. This term is often used to refer to computers and other technological tools, such as internet applications, CD-ROMs, video technology, software programs, interactive whiteboards, iPods, mobile phones and laptops among others used at schools and it has caused significant educational changes all over the world because it enables students to develop skills, knowledge and understanding about different topics and subjects.

ICTs are often spoken of a particular context, such as ICTs in education, health care or libraries. This research paper is only focused on the use of ICTs in education. The Ph.D Research Scholar Syed Noor-UI-Amin (2013:1) in his research work “An Effective use of ICT for Education and Learning by Drawing on Worldwide Knowledge, Research, and Experience: ICT as a Change Agent for Education” declares that “Information and Communication Technologies have become commonplace entities in all aspects of life. Across the past twenty years the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavor within business and governance. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student-centred learning settings. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century”.

There are advantages and disadvantages in using the ICTs in the classroom. The main advantages of ICT tools for education are: through ICT, images can easily be used in teaching and improving the retentive memory of students; teachers can easily explain

complex instructions and ensure students' comprehension; teachers are able to create interactive classes and make the lessons more enjoyable, which could improve student attendance and concentration; and students can gain control of their own learning. There are some problems that might occur in language classrooms where ICT is implemented, and Estling Vannestal (2009) deals with some of these. The first disadvantage listed is the lack of computers, or that the computers are old and slow. Secondly there is a lack of technical support in many schools, and then the fact that many teachers do not possess enough knowledge of working with ICT, in general or specifically in the teaching of English. The next problem could be that the pupils lack sufficient knowledge of computers, which might come as a surprise to some. The truth is that the young generation mostly uses the computer to play computer games and to chat with friends, but may not be as confident when it comes to writing e-mails or using a word processing program. Another disadvantage could be that pupils use the computer for other things than school work. Then there might be a problem with pupils who copy material from the Internet and pupils who put more effort on the surface than the content of an assignment (Estling Vannestål, 2009).

The use of ICT in a classroom motivates and engages learners, brings life to concepts and processes, fosters inquiry, provides flexibility, allows application of information, provides access to world of information, brings the world into the classroom, offers collaborative opportunities and communication, offers tutored and individualized learning.

## **Tools**

Communication tools can be synchronous or asynchronous. The synchronous ones are Skype, msn, Yahoo Messenger, video messaging or google talk; and the asynchronous could be email, blogs, YouTube, wikis, newsgroups, etc. Computing tools are considered word processors, presentation software, spreadsheets and database maintenance.

Mind Tools are cognitive tools such as selected computer programs that stimulate learning and thinking in students. This technology is being used in today's schools to teach students in much the same way that educators teach students. Mind Tools in education are a set of five tools that students and teachers can use in combination with traditional teaching and learning methods. The combination of technology and traditional methods of teaching works great together. Thus, both

teachers and students alike will be better served by programs that devote a greater percentage of instructional time to problem solving and active learning.

Database management systems are electronic filing cabinets that are easier to scan through. It is important to remember that the goal of successfully using Mind Tools is to incorporate basic, creative and complex thinking skills, while using the database and its functions in conjunction with the lesson being taught to stimulate learning.

It is known that graphing is one of the great organizational skills in learning. Graphs and charts work well because they communicate information visually. For this reason, graphs are often used in newspapers, magazines and businesses worldwide. The Graph Mind Tool can really help students see their work and what it means. Sometimes, complicated information is difficult to understand and needs an illustration. Other times, a graph or chart helps impress people by getting your point across quickly and visually. A student or teacher uses the semantics Mind Tool area of concept mapping when wanting to organize thoughts, ideas or situations. The Internet has revolutionized the world we live, learn and teach in. Therefore, successful learning while using the search Internet Mind Tool in education is possible.

The final Mind Tool that can be created by a teacher or student is visualization is The Visualization Mind Tool. With this Mind Tool, a complete lesson can be covered through pictures and words by using a multimedia program such as PowerPoint or HyperStudio, or even by utilizing a WebQuest. This tool can be used by the teacher to complete an entire lesson, part of a lesson, or to sum up a lesson. This visualization mindtool can also employ sound and video in the creation of a lesson. While this is a hard tool to master, it is most beneficial in teaching and learning once it is done and it is funny.

ICT includes any communication device or application encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as various services and applications associated with them, such as video conferencing and distance learning.

There are many ICT tools and devices teachers may use in their classes. One example is Microsoft Power Point. According to Wikipedia "PowerPoint presentations consist of a number of individual pages or slides". The slide analogy is a reference to the slide projector. A better analogy would be the "foils" (or transparencies/plastic sheets) that are shown with an overhead projector, although they are in decline now. Slides may

contain text, graphics, sound, movies, and other objects, which may be arranged freely. The presentation can be printed, displayed live on a computer, or navigated through at the command of the presenter. For larger audiences the computer display is often projected using a video projector". This resource may be used to complement a spoken presentation as a visual aid, to summarize information, to identify or highlight key points, to present a non-linear text, to match visual representations, to oral text by the inclusion of images or videos, to build a digital portfolio, etc. Another useful resource for the classroom is the use of CD-ROMs which provide information sources with pictures, animated explanations or spoken commentary. The challenge for the teacher is how to help students to understand how the information is stored and how to gain access to the information they require. Web pages such as search engines, web pages with games related to the subject or with things interesting for reading are other sources that teachers can use in their classes. Schools need to provide laptop and computers and students may find resources for themselves. Students can get involved with the interactive whiteboard and teachers can control the board from their tables. There are some educational games that can be used in the classroom which students can use to have a fresh mind before starting the day or after a long lesson. Schools should create a website and students can get useful online tips and an online forum to discuss some serious issues about the lessons.

A modern tool for the use of ICT in education is a blog which is an asynchronous collaborative tool that allows anybody to express their ideas and thoughts and share them with the rest of the world. Also, another important tool that can be used in the classroom is Moodle, a free platform that can be used to set up a course web. It is easy to use and there are many tutorials. Among the variety of tools available to use in the classroom is podcast, which is a sound file that can be played on the net, downloaded or uploaded so as to be listened to on an mp3 player or a computer. It is very useful for speaking and listening in the English classes. Today, teachers have many advantages because they can use social networks in the classroom, for examples facebook or twitter and many other applications such as Picasa, Google Earth and Google Maps. Each programme or application has its own advantages and all of them can be used in the classroom of any subject.

Multimedia is the combination of various digital media types (e.g. images, sound, video, text) they compile an integrated multi-sensory interactive application to present the information to an audience (Neo and Neo, 2001). According to Agnew, Kellerman and Meyer (1996) multimedia means an individual or a small group using a computer to

interact with information that is represented in several media, by repeatedly selecting what to see and hear next. Using multimedia in education results in the increasing productivity and retention rates, because people remember 20% of what they see, 40% of what they see and hear, but about 75% of what they see and hear and do simultaneously. It means, by using multimedia tools we can create a learning environment, where the communication of the information can be done in a more effective manner and it can be an effective instructional medium for one delivering information. With multimedia technologies students create multimedia applications as part of their required project. This makes them active in developing their own learning process, instead of just being passive learners of the educational content (Neo and Neo, 2001). Multimedia application design offers new insights into the learning process, and gives possibilities to represent information and knowledge in a new and innovative way. But technology alone will not result in higher achievement. The ideal classroom for the 21st Century calls for an amount collaboration, conscious design and technological innovation to make the classroom into a place of positive learning environment.

Apart from working on computers in class there is the possibility to work with interactive whiteboards, sometimes called smart boards (Dudeney 2007). A smart board works as a traditional whiteboard but is also connected to the Internet, which makes it possible to project films or web pages directly on the board. Furthermore, the material on the board can be saved and printed. There is special teaching material created to be used on a smart board. It includes for instance interactive exercises where words or pieces of a sentence can be dragged around the board. Dudeney (2007) identifies the smart board as a successful entry gate to introduce other types of technology in the classroom. Clever boards are a newer version of smart boards, and function in a similar way.

According to the United Nations, "Information and Communication Technologies could enable educational systems to serve children better by addressing key problems at a reasonable cost. ICT-based teacher training could reach remote schools by computer and television; updated teaching material tailored to the needs of pupils could be printed in the quantities requested; and teachers could search online the full range of materials available. Once connected, the schools could double as tele-centres for the whole community."

Kofi Annan (2003) said that ICT was not a magic formula that is going to solve all the problems; it was a powerful tool for economic growth and poverty eradication. Nicholas Burbules (2000) affirmed that as one day calculators and computer labs appeared, nowadays there are netbooks and mobile phones at school. The main point is that today everyone, including children, teenagers and adults, has a technological device such as mobile phone, tablet or netbook. That is why the use of these tools for learning provides more advantages than we can imagine.

A research work carried out in Czech Republic about the Social communication ICT tools used by teachers concluded that “generally, the Czech teachers have very good ICT skills and most of them can use a PC at home. They are motivated to use ICT and Internet very often by their personal needs – to communicate with their family, to do shopping, to process digital photos and to save digital data gained by a digital camera, to dispose administrative agenda, etc. The Czech schools differ very much in ICT tools and experiences in educational applications of ICT. On Secondary schools Moodle is very popular” (Ojala 2009:14-15).

### **Teaching and learning**

"If we teach today as we taught yesterday, we rob our children of tomorrow", (John Dewey, 1915). Nowadays, there are many ways of teaching because in the last years, Information and Communication Technologies have been introduced in the teaching-learning process to change the traditional paradigm of learning. In the past, the traditional process of teaching was planning and leading students through a series of instructional sequences to achieve a desired learning outcome. Contemporary learning theory is based on the notion that learning is an active process of constructing knowledge rather than acquiring knowledge and that instruction is the process by which this knowledge construction is supported rather than a process of knowledge transmission (Duffy and Cunningham, 1996). Learning approaches using contemporary ICTs provide many opportunities for constructivist learning through their provision and support for resource-based, student centred settings and by enabling learning to be related to context and to practice (Berge and Barron, 1998). It is also important to note that despite characteristically greater ICT skills of university personnel and the greater degree of data analysis for administrative purposes, the core of higher education and particularly elite higher education remains solidly rooted in standard work arrangements (Carnoy 2004).



It is important to include the ICTs in education to build an Ideal Classroom for the 21st Century, to integrate multimedia learning environment into teacher-education, to test and research the efficiency of the newest ICT tools in education and to develop curriculum materials for different ages to foster deep understanding and to motivate students through bringing real-life problems and new directions of teaching methods to school. It calls for a place in which it is easy to use technology to locate or deliver content and where one can use technology to collect data about teaching and learning. It calls for a place where technology is not an add-on, but rather an integral part of the curriculum, where teachers can try out newer techniques, find the combination of technology and instruction best suited to the subject and the instructional goals, and work in arrangements that permit fluid transition between approaches to teaching and learning.

The existence of ICTs does not transform teacher practices in and of itself. However, ICTs can enable teachers to transform their teacher practices, given a set of enabling conditions. Teachers' pedagogical practices and reasoning influence their uses of ICT, and the nature of teacher ICT use impacts student achievement. Most analyses of ICT in the educational sector focus on the impact it has had on pupil teaching/learning. Martin Carnoy (2004) analyzed the role of ICT in education in three parts: Changes in the management of the educational sector associated with ICT. Changes in the work process in education associated with ICT. Changes in the training of educational personnel and of students associated with ICT. He said that ICT has contributed greatly to networking among schools and universities and among individuals in schools and universities. This has been especially true in the developed countries, and is now spreading to developing countries. Many school districts and almost all universities now communicate internally and externally largely through e-mail. However, schools and school districts hardly use ICT to manage the quality of output, or to raise teacher productivity, or to reduce costs through analyzing spending.

The main aims in using ICT for education are: improving teaching and learning, supporting learning in and out of school, offering a range of choice and access, opportunities for disadvantaged, flexible working, managing data and improving efficiency. ICT helps students to provide interactive learning experiences, stimulates, engages and motivates them to learn, enhances critical thinking and problem solving skills, helps the learner to share learning resources and spaces, promotes creativity and collaborative learning principles, establishes life-long learning habits and concepts development, and aids to gain valuable computer skills. Teachers should aim, over

time, to implement strategies that will enrich or transform traditional classroom practices. Change may take some time, as teachers understand the potentials of the technology and teaching and learning. ICT opens up opportunities for learning because it enables learners to access, extend, transform and share ideas and information in multi-modal communication styles and format and also links to other learning and to real-world situations and experiences that reflect cultural diversity. Teachers have changed the process of teaching-learning by adding elements of vitality to learning environments in order to prepare the students to adjust themselves in the society. It is essential that they have basic ICT skills and they can determine how ICT may be best used in each context. Learning ICT skills is not sufficed, but using ICT to improve the teaching and learning is the key for pedagogy-technology integration.

ICTs are seen as tools to help teachers create more 'learner-centric' learning environments. In OECD countries, research consensus holds that the most effective uses of ICT are those in which the teacher, aided by ICTs, can challenge pupils' understanding and thinking, either through whole-class discussions and individual/small group work using ICTs. ICTs are seen as important tools to enable and support the move from traditional 'teacher-centric' teaching styles to more 'learner-centric' methods.

Pedagogical practices of teachers using ICT can range from only small enhancements of teaching practices using what are essentially traditional methods, to more fundamental changes in their approach to teaching. ICTs can be used to reinforce existing pedagogical practices as well as to change the way teachers and students interact. Types of usage of ICTs correlate with teacher pedagogical philosophies. Teachers who use ICTs the most, and the most effectively, are less likely to use traditional 'transmission-method' pedagogies. Teachers who use more types of software tend to practice more constructivist pedagogies.

As Martin Carnoy (2004:14) concludes in his research work, "teacher access to lesson plans, networks of teachers, pedagogical techniques, and other forms teaching assistance in specially designed data bases creates many possibilities for teacher self-improvement. Combined with easily estimated student achievement gains available to teachers and school administrators on a regular basis, would allow for constant assessment of student educational progress and teacher and school performance against established norms".

According to a research carried out by Mehrak Rahimi and SamanehYadollahi (2011:1), "ICT use correlated inversely with teachers' age, years of teaching experience, and computer anxiety. ICT use was found to be positively and significantly related to teachers' academic credentials, computer ownership, computer literacy, and use; while ICT use was not related to attitude and gender. Multiple regressions showed that from among the variables that correlated with ICT use, teachers' computer literacy and academic credentials could predict ICT use".

The research work carried out in Czech Republic about the Social communication ICT tools used by teachers established that "there is no research that could describe a situation among Czech teachers if and how they joint to virtual communities on the Internet, if the apply social sites (MySpace, Facebook, etc.) or media sites (You Tube, etc.). Czech teachers do not use these digital sites so much as their students. Some teachers, including the Czech Minister of Education, use Facebook. The Czech Ministry of Education publishes his opinions and ideas also in his blog. Only a few Czech teachers have blogs to publish their experiences. Nevertheless, some Czech teachers were involved into the EU project CALIBRATE aimed to support collaborative use and exchange of learning resources in schools. It brought together eight Ministries of Education including six from new member states and involved seventeen partners in all. Teachers had a chance to use and assess common tools for sharing and creation digital learning objects in LeMill. Czech teachers are also very active in eTwinning projects. More than five years they organize educational projects in collaboration with colleagues from other EU countries. Several years ago, the Czech Informatics teachers decided to establish a union of informatics teachers and ICT coordinators in schools with the aim to discuss together about problems how to integrate ICT in schools, to share ideas, opinions and experiences from teaching with ICT, to help together how to install HW or SW. The union communicates with the Ministry of Education to present ICT teachers' ideas and visions about ICT development of schools. The Ministry of Education invites members of the Union to negotiate proposals related to ICT development of schools, to ICT education, to implementation ICT into school curriculum or to final graduation exams on Secondary schools. From 1996 some Czech teachers are involved into the international teachers' community MIRANDA that discuss a lot questions about ICT in education, research activities in different countries and in international projects about ICT in learning and teacher profession. Czech teachers can share ideas with MIRANDA members from different countries" (Ojala 2009:20-21).

According to a webpage of the Commonwealth of learning the successful integration of ICT into teaching and learning depends on teachers' ability to design and/or adapt engaging learning activities and structure the learning environment in ways that merge the pedagogy with the advantages that ICT offers; and managers at both ministerial and school levels, that create an enabling environment for ICT to be integrated into teaching and learning.

### **Foreign language**

Computers were introduced in schools in the 1970s (Kenning 2007), and there has been a rapid technological development over the past 40 years. Computers are now a part of our everyday lives, but even so, many language teachers do not know how to integrate ICT in their teaching (Granath and Vannestål 2008).

Information, Communication and Technology can be used as a complement to conventional teaching of English as a foreign language. Some people think that in the future teachers will be replaced by ICTs; however, if they are used correctly in the EFL classroom they are going to become a plus and not a replacement for teachers. The use of ICTs can be helpful for learning new vocabulary in a foreign language.

In the "Positive Effects of Integrating ICT in Foreign Language Teaching" Korkut Ulucsisag (2013:1) said that "there has been much debate over the use of computers and the internet in foreign language teaching for more than two decades. Thus, the Information Communications Technology in foreign language teaching has been the researchers' focus of attention. Education, especially foreign language teaching, has to adapt and renew itself to be compatible with the globalized world." His aim was to examine the necessity of ICT and highlight the positive effects of it in order to keep up with the modernized communities in the current digital world. To meet this end, the enormous advantages of integrating ICT in foreign language teaching have been presented. With the enhancement of ICT, teachers and students are able to communicate and collaborate with native and non-native speakers around the globe. He also stated that "the application of ICT is also beneficial in that they provide a wealth of resources for the students to become active learners by creating content for a worldwide audience. When students write or speak for a broader and more international audience, they become more enthusiastic about learning and are active participants in the information age. Furthermore, by using the authentic material

provided by the internet, the students will have a better insight into the culture of the country and people whose language they study.” In the later parts of his study, reasons for using technology in foreign language teaching and some strategies and techniques for integrating ICT in foreign language teaching were presented. Moreover he affirmed that integrating ICT in foreign language teaching has positive effects on both the teachers and students to help them be aware of the modernized world and meet the current demands of the new era. He finally concluded that “ICT presents a powerful learning environment for learners in the classroom. Many countries make investments in ICT integration as ICT is viewed as an effective tool for renewing educational practice in any field. Because teachers are the main characters to employ ICT in educational contexts, they should be trained in how ICT can be integrated into the teaching process. The use of information technology maintaining contact, that bond between us that let our students know that support was only a click away, and at the same time giving them a sense of freedom to work on the areas of their learning that they considered important. These tools also promote authentic communication in an environment where this input is scarce and at the same time helps prepare them for the technological work place of the future. The teacher needs to see the real effect ICT materials have on the learning process. Furthermore, there should be an appropriate balance between hands-on and other work and the motivational aspects of using ICT will be effective only with appropriate planning and guidance from the teacher. In brief, ICT cannot itself resolve educational problems in the developing world. If used prudently, ICTs will enable developing countries to expand access to and raise the quality of education. Today’s technologically competitive world needs integration of ICT in education. If ICT is aptly adapted, then it will be lifelong learning process for the learners. The quality of learning with accountability can be improved to enhance the learners to learn things quickly and successfully. Without a doubt, technology has revolutionized society in many places around the globe, including how language instruction is taught and delivered. In particular, the Internet has become a conduit where people can learn, share, and collaborate in ways not possible years before. However, a great deal of the success comes from preparing students to interact and learn in this online environment. Therefore, if we try to integrate technology in our teaching, our new, refocused approach to teaching will propel us a long way to making technology and the internet a more rewarding partner in the teaching and learning process”.

In the book "The Internet and the Language Classroom" Dudeney (2007) explains the Internet for teachers who have not worked with ICT before. He gives many useful tips on how to integrate ICT in language teaching, such as useful webpages and lesson plans. He says that it is important to plan the lesson well and work with the Internet. When teachers have a homepage, it should be better to be a professional one and not personal. Nevertheless, webpages change from time to time and as a teacher it is important to check all resources before class starts. Moreover, sometimes there are unexpected power cuts or technical problems of some other kind. The best way to prepare for this is to have a back-up plan. Not all material found on the Internet is safe or advisable for children or teenagers to use and it is the teacher's responsibility to check the material and webpages that are to be used, as well as to oversee the pupils during class. This can be done either by using a special kind of software that only accepts certain web pages or that checks if words used on the web page might not be suitable for younger pupils. This could seem a bit drastic and a more profitable way is to make sure that the pupils know how to work with the Internet. Dudeney (2007) encourages teachers to talk with the pupils about working with the Internet so that they are prepared as they use the Internet in their free time with no teacher to supervise them. However, it can be questioned whether the pupils need to be taught how to work with the Internet. He continues to list various ways to use the Internet in language teaching, such as blogs, wikis, chats and pen-pals from other countries. There are several tips for teachers who want to interact with other language teachers who use ICT, for example to subscribe to a listserv for language teachers. The listserv is free for anyone to subscribe to and a way to receive many suggestions on how to work with ICT. It is also a way to take part of interesting discussions with other teachers from all over the world. There are groups and communities of various kinds that teachers can join to share experiences with one another. Another approach to use ICT is to use the Internet as a course book. The teacher then looks to find appropriate material and lesson plans on the Internet (Dudeney 2007).

According to McDougald, students love working with ICT and especially to use ICT as an instrument to aid in the development of their language skills. Using ICT attracts them because it is challenging, yet it is a part of their everyday lives. But the success at the time of using ICT in the classroom depends on the teachers as they have to know how to use them and also how to take advantages of the use of new technologies in a conventional classroom. The role of the teachers is essential in the process of integrating the ICT into classes.

Knobel Michael and Lankshear Colin (2007:99) assume that “in recent years we have been interested to hear educators referring to the English Classroom in contexts where it had previously been more common simply to speak about subject English. While this might be more an idiosyncratic local perception on our part than a wider phenomenon of any significance, it nonetheless reminds us of the extent to which English has become contested and diffuse terrain in curricular and pedagogical terms. Certainly, we think that the question of how, to what extent and why new media technologies, should be integrated into the work of English classrooms, is easier to get to grips with than the question about how, to what extent and why they should be integrated into English”.

When people talk about ICT and language learning, a common term used is CALL, Computer-Aided Language Learning. When CALL started, in the 1960s, most of its exercises were drill-exercises, but over the years CALL has come to include tasks of more communicative nature. ICALL (Intelligent CALL) is an attempt to create programs that adapt to the pupil. The program can be aware of the language components that a specific pupil needs to practice more. CALL-exercises usually mean tasks where the computer is the tutor and the pupils need to provide some kind of response, either by clicking, filling in a word or saying something into a microphone. Svensson (2008) discusses that there are speaking agents that the pupils can interact with on their computer. These agents can help pupils' pronunciation or correct their grammar. There are CALL exercises that let students practice grammar and these can be found on the Internet or on CD/DVD. Most common are webpages with different kinds of 'fill in the gap'-exercises. The user can choose what subject or grammatical feature she or he wants to practice and the correct answer will appear instantly, or as soon as all the exercises on the page are filled in. There are games that let the pupil practice linguistic features. Svensson (2008) also suggests that teachers can create grammar exercises or even let the pupils themselves create their own exercises on the Internet.

Torjusen, Aelita (2008:1) researched on the use of ICT in the EFL teaching in Norway and concluded that “the ICT situation in EFL does not reflect the intentions of the curriculum. The findings induce great concern, especially regarding primary teachers' formal training, both in English and ICT. A discrepancy was found between theory and practice in the implementation of CALL in EFL at the intermediate level. On the one hand, the curriculum explicitly suggested a transformation in the EFL learning environment by introducing computer-mediated language learning as part of the national curriculum in English. On the other hand, neither schools nor teachers appeared to be fully prepared for the transition to a digitalised EFL learning

environment. At the same time, some positive effects of the application of ICT technologies in English lessons were registered, especially pupils' motivation and interest".

The advantages of ICT usage in Foreign Language Teaching can be grouped as:

1. Capacity to control presentation. This capacity marks the difference between computers and books. Books have a fixed presentation, unlike computers, which can combine visual with listening materials, text with graphics and pictures.

2. Novelty and creativity. A teacher can use different materials for each lesson, not like in teaching with textbooks, where all classes presenting a certain topic are the same.

3. Feedback. Computers provide a fast feedback to students' answers through error correction. It not only spots the mistake but also corrects it, sometimes even giving the appropriate advice.

4. Adaptability. Computer programs can be adapted by teachers to suit their students' needs and level of language knowledge. Unlike books, which are produced in a single uniform format and need to be taught irrespectively of students' problems, computer programs are more learner- friendly.

## **Strategies**

Appropriate pedagogical integration of ICT into learning and teaching recognizes that without learning and teaching driving change, ICTs will not be institutionally relevant and effective. It is when we start at the integration of ICT into the pedagogy of learning and teaching that ICT makes institutional sense. Network technologies do enable us to retrieve vast amounts of information at rapid speeds. However, the ability to retrieve information, or the mere exchange of information, does not imply that learning has occurred. Learning assumes a critical engagement with information: the ability to analyze information, the ability to separate out the garbage from the good, the ability to recognise that all information is partial (and in what sense it is), the ability to use information in solving problems, and so on. With the vast amount of information available through network technologies, effective e-learning assumes that lecturers and instructional designers are highly skilled persons – skilled technically/technologically and pedagogically. The epistemological labour required from lecturers in pedagogical contexts where network technologies are used will not be less demanding than what is



required in traditional face-to-face eight pedagogical settings. Lecturers would have to scaffold students in navigating vast amounts of information so as to enable them to develop the requisite knowledge and skills required within disciplines, achieve the outcomes of programmes or the graduate attributes defined by the institution. Yet, at the same time, lecturers need abilities to also encourage play, to stimulate students' curiosity, and to value the unplanned, unintended and serendipitous moments that are so important in learning. The knowledge and repertoire of skills are of course required of competent lecturers in all contexts. However, network technologies open up new ways of mediating learning, new ways of scaffolding students' learning, new ways of playing, and so on. It is important to understand that technologies are not simply tools that we can employ to achieve particular ends as if they are objective/neutral entities. Technologies form part of mechanic assemblages in societies that serve to either control or democratise societies. At the micro-level of institution or classroom, pedagogical assemblages incorporating network technologies can therefore serve to control students (colonise desire) or serve to stimulate creativity and innovation so that the assemblages function to liberate and transform society. All education/pedagogical assemblages are multiplicities that integrate architectures (traditional or network technologies) and body parts (of students and lecturers) with brain chemistry and everything in between.

As regards strategies on the use of ICTs in the English classroom, it can be said that the projector and laptop are good ways to integrate technological tools. The advantages are that they are easy to store starter activities, teachers can use Power Point presentations for essential notes, show video content with English native speakers and students can also make presentations in groups in order to make them speak, participate and discuss in the class. Another important strategy that can be used in the classroom is the use of a blog which is a website that is updated regularly with the most recent entry appearing at the top and can be run by anyone with internet access. Wikis are also a useful way of working with ICTs because multiple users can update the website just by visiting it and they are good for collaborative projects. Cooperation with others (group members) can be assessed by having students share, accept, and support the needs and wants of others.

“Beyond putting computers into classrooms or into computer labs and employing them for training pupils in computer use; some add-on Web-based activities; or having pupils use student-centered, individualized learning games, changing teaching practices around ICT requires a major investment in developing new teacher ICT skills and in

training teachers to teach differently using ICT”, said Carnoy (2004:2) in his research paper. Mobile devices enable students into enquiry based, experimental and knowledge building learning.

In the research paper “Foreign Language Teaching Via ICT” made by Alina Padure and Manuela Margan (2010), they show some strategies that can be used by foreign language teachers in the classroom. They say that the teacher’s tasks are to prepare the class carefully, to know the stages of the lesson and its exact timing, to design activities for each stage, to be able to guide the students while working with the Internet, to have extra activities prepared in case something goes wrong and to ask for students` e-mail addresses in advance. These are only a few suggestions of how to use computers in a foreign language class. Although there is a curriculum that must be followed, using computers and the Internet from time to time makes the class more vivid and pleasant. It is a way of escaping routine and it awakens the interest of the students. Computers can be used with young learners too, because there are a lot of songs and fairy tales on the Internet.

A foreign language classroom can become a place where teaching language and culture may be facilitated and mediated by computer technologies, simultaneously promoting skills and knowledge required by market-driven economy (Castells, 2000; Warschauer, 2002).

In the age of new information and communication technologies, it is imperative to reconsider the role of instructors and the ways knowledge is constructed. Technologies can be integrated in the language classrooms by many ways:

1) Collaborative, student-centered learning within ZPDs. Computer-mediated communication (CMC) via social networks, blogs, public forums, video and photo sharing websites is based on the constructivists’ principles of collaborative learning within Vygotsky’s zones of proximal development (ZPDs) (Basharina, 2009; Nardi, 1996). In CMC the traditional Initiation-Response-Feedback (IRF) model is replaced by the multi-directional exchange of ideas: students themselves assume the role of experts and provide feedback to their fellow-students. Teachers, on the other hand, assume the role of facilitators. This shifts learning processes from teacher-centered to learner-centered and empowers students by making them take control of their own learning; they become lifelong learners. In addition, more opportunities for learning emerge via exchanging ideas with broader audience across geographical, cultural and age boundaries. Availability of ICT helps to solve the problem of the lack of time to

speak in class, as students can engage in interaction outside of the classroom. Last but not least, online interaction promotes face-to-face classroom discussions.

2) Linguistic gains. One of the most important benefits of using technologies in the language learning classrooms is development of students' language proficiency within collaborative online environments (Basharina, 2009). While previously CALL was based on the Structuralist Perspective, which emphasized grammar and vocabulary drills and practice; current CALL reflects the Socio-Cognitive approach that links development of language proficiency with social interaction (Warschauer 2002). Second language acquisition is promoted when learners come to agreement through negotiation of meaning (Pica, 1994), defined as "communication in which participants' attention is focused on resolving a communication problem" (Gass, 1997:107) or when speakers want to reach a clear understanding of each other. Asking for clarification, rephrasing, and confirming what one thinks one has understood are examples of the strategies for the negotiation of meaning. Negotiation of meaning includes forcing learners to focus attention on certain features of their speech (focus on form - Long) and providing feedback and assistance in production of modified output (Smith, 2003). At the same time, we should not undermine the sociocultural context in which the interaction takes place, in that it may afford learners to speak or not to speak. If the relations of power between interlocutors are unequal, and the learner is denied an access to the speech community, the opportunities for interaction will be missed or inhibited. In this respect, the egalitarian online environments are more conducive for risk-taking and participating in interaction.

3) Global awareness and intercultural communicative competence. The use of technology is especially important in language learning classrooms because it provides ample opportunities for interaction with the target language speakers and other learners around the world via international telecollaborative projects. Through such projects the students gain global awareness and intercultural communicative competence, defined as the ability to understand cultures, including one's own, and use this understanding to communicate with people from other cultures successfully (Basharina, 2009; Byram, 1997).

4) Multiliteracies. Pedagogy of multiliteracies promotes the extension of the range of literacy pedagogy from one-dimensional, paper-text representations to multiliteracies or multimodal representations such as written, oral, visual, audio, spatial, tactile. It also

exposes students to various genres, vernaculars, and dialects other than standard. Technology-integrated language classrooms can promote multiliteracies by exposing students to multimedia sources and channels such as: video, images, audio, asynchronous and synchronous communication, online forums and written texts; blending intellectual thought, research, emotion, and public communication; and helping students discover new ways of thinking and organizing material.

5) Digital literacy. Current research recommends using students' everyday experiences to motivate and enhance their learning. Nowadays, ICT is an important part of our everyday lives. We use the Internet for interaction, research, and design purposes regularly. Advanced technology users cannot imagine their lives without their smartphones, iPods, and computers. By integrating technology into the classroom curricula, we bridge the classrooms with the reality of our everyday lives. At the same time, we can help less advanced users develop their digital literacy and/or turn the use of technology from leisure pastime to profoundly educational and empowering experiences, thereby, developing students' real-world skills.

6) Cognitive gains. In addition to linguistic, intercultural, and multiliteracies gains, technology-integrated projects can help students retain knowledge longer and think more deeply, clearly, and complexly about multimedia content. Students, through an inquiry-oriented approach and facilitated by technology, can develop critical thinking. They can find their own unique points of view and relationship to the material they're investigating and express that point of view more fully and clearly. They can learn how to communicate effectively and become better writers in a more natural, new, and collaborative manner. In its turn, meaningful writing will promote student-initiated revision.

### **Advantages and disadvantages of ICT**

ICT is a powerful tool for extending educational opportunities because it has many advantages. ICTs facilitate access to resource persons, mentors, experts, researchers, professionals, business leaders, and peers—all over the world. One of the most commonly cited reasons for using ICTs in the classroom has been to better prepare the current generation of students for a workplace where ICTs, particularly computers, the Internet and related technologies, are becoming more and more ubiquitous. The use of the ICT enables students to learn anywhere and anytime; education enables more effective (e.g. contributing to the growth of academic skills); provides teaching to the

needs of students; provides dedicated teaching through individual communication (student-lecturer); education enables efficient (e.g. request less human resources); provides educational activities in geographic areas larger; encourages individual studying of students.

There are many benefits for the teacher when they use ICT. It facilitates sharing resources and advice; gives literacy skills, confidence and enthusiasm; it is easier to plan, prepare lessons and designing materials; they have access to up-to-date school data; it motivates students to continue learning outside school hours; among others. The students may also benefit by using ICT in education. They have higher quality lessons; gain understanding and analytical skills especially in reading comprehension; they can develop writing skills and fluency better; it gives flexibility of access; students feel motivated to learn and have increased self-confidence and self-esteem; they have opportunities to address their work to an external audience and to elaborate assignments with people outside school. "The majority of students think that ICT plays important role in their education. Undergraduate students in Croatia estimate the importance of usage the information and communication technology as very important factor of the effective university learning environment" (Vidacek et al., 2010:149-156). Parents have the advantages of communicating easily with teachers; having higher quality student reports; increasing knowledge of children's learning and capabilities; they are more likely to be engaged in the school community; among others.

One of the major barriers for the cause of ICT not reaching its full potential in the foundation stage is teacher's attitude. Within the early years education attitudes towards ICT can vary considerably. Some see it as a potential tool to aid learning whereas others seem to disagree with the use of technology in early year settings. The use of ICT in the foundation stage is "unhealthy and hinders learning". Other early years educators who are opposed to offering ICT experiences within the educational settings take a less extreme view than this and suggest that ICT is fine, but there are other more vital experiences that young children will benefit from. In theory some people may have the opinion that the teachers who had not experienced ICT throughout their learning tend to have a negative attitude towards it, as they may lack the training in that area of the curriculum.

Another important drawback to using ICT in schools is the fact that computers are expensive. According to the IT learning exchange (2001), in most schools ICT will be

the single largest curriculum budget cost. This may be seen as a good thing but on the other hand there will be little money left over for other significant costs.

Some disadvantages of using ICT in education are: ICT can create a partition, digital gap within the classroom, where students are more familiar with ICT and will have more benefits, will learn faster than others unfamiliar to technology; can remove the attention from the main goal of the learning process to develop ICT skills, which may be a secondary goal in this process; may affect the connection process between teacher and student, as ICT become a communication tool instead of face to face communication, so the distance of the transaction will increase; also since not all teachers are ICT experts, they may be negligent in updating the content of courses, which can slow down the process of learning to students. Also there is a need for training related to ICT by all stakeholders; cost of hardware's and software can be high; exit from the concrete life and spread of virtual life; feeling of filling that gap and loneliness; informative learning; individual learning; individualism.

## **Motivation**

Research evidence shows that ICT can stimulate, motivate and sparks student's appetites for learning and helps to create a culture of success. This can be demonstrated in their increased commitment to the learning task, their enhanced enjoyment, interest and sense of achievement in learning when using ICT and their enhanced self-esteem.

In the 1980s much of the research on motivation was based upon competency values, i.e. "Motivation was determined by what you expected to get and the likelihood of getting it" (Weiner, 1990:116). Motivating activities were considered to influence emotions such as pride, shame and guilt as well as a general self-concept relating to one's ability to achieve specific goals. The development of motivation theories has also recognized the effects of the locus of control of the learner; the extent to which learners see events as being under their personal control (Blumenfeld, 1992). Furthermore, it has been shown that learners' personal perceptions of how much control they have over events in which they are involved will also affect their attitude towards computers.

Ames (1992) analyzed the work of many researchers into motivation thus developing a framework for motivation relating to students' belief in themselves and their ability to do

better through long term goals. She considered two types of motivation goals, performance goals and mastery goals, which involve different ways of thinking about oneself. Performance goals focus on one's ability and sense of self worth. "Especially important to a performance orientation is public recognition that one has done better than others or performed in a superior manner" in achieving specific goals. (Ames, 1992). These goals are directed towards achieving success in relation to the achievements of one's colleagues. Mastery goals, on the other hand, relate to the belief that effort and outcome are interdependent. With such goals there is a motivation to learn by developing new skills, trying to understand the tasks, improving the level of competence and achieving a sense of mastery based on self-referenced standards. Achievement of mastery goals is likely to lead to a longer term high quality involvement in learning compared with achieving performance goals of particular tasks.

In his theory of planned behaviour, based on his earlier theory of reasoned action, Ajzen (1988) identifies many of the motivating factors which lead to or prevent people carrying out certain actions. According to this theory, "although volitional control is more likely to present a problem for some behaviors than for others, personal deficiencies and external obstacles can interfere with the performance of any behavior." (Ajzen, 1988).

According to a research paper "*The Motivational Effect of ICT on Pupils*" carried out by Don Passey et al. (2004:40-42) "The motivational profiles obtained from the quantitative survey demonstrated the existence of a highly positive set of motivational characteristics in the schools. In summary, pupils were characterized, when focusing on working with ICT, by relatively high levels of learning goals and performance approach goals. The analysis of the quantitative data indicated that the forms of motivation arising from ICT use were concerned with learning, rather than a mere completion of tasks. Perceptions of learning within classrooms were particularly strong and showed that pupils perceived their classrooms, when using ICT, to be focused very much on the process of learning, although many pupils demonstrated anxiety regarding the implications of getting things wrong in front of others, the teacher in particular. The findings suggested that ICT was helping to draw pupils into more positive modes of motivation. ICT appeared to be offering a means for a range of pupils to envisage success. It enabled pupils to see possible end-points for their work, and to recognize that they could work towards these in order to complete work. However, the use of ICT had to be coupled with learning tasks that were appropriate, and where teaching

provided a core of focused pointers (such as where to find appropriate sources, and how to select relevant information). All secondary teachers interviewed indicated that they felt that ICT had a positive impact upon pupils' interest in and attitudes towards school work. They felt that ICT helped pupils to take pride in their work, that it was helpful for coursework, it supported research, that pupils were taking a genuine interest in the quality of their work, and that it was more likely that a task would be completed and on time. Some teachers felt that it did depend upon what was being done, but that interest was stimulated even if sometimes content was not affected. With a range of ICT equipment, motivational effect did not depend upon motivation related to a single form of ICT. Motivation under these circumstances was often determined by factors concerned with the form of software or learning resource, the hardware, and the teaching approach taken. It was reported that, within a positive environment, most pupils enjoyed using ICT. A concern was that motivation would be short term, associated with 'novelty factors' (interest arising from doing something different or new, with reduced impact after a few weeks). Whilst there were indications of novelty factors being involved in some reported instances, pupils also indicated that their interest was maintained over years of use, both in the cases of software such as writing software and in the presentation offered by interactive whiteboards, for example. Teachers widely reported on motivational impacts arising when pupils could make improvements to the quality of their work, in terms of writing, appearance and presentation. The resources that pupils reported helping them the most were internet resources (largely for research purposes), writing and publishing software (for writing purposes mainly), interactive whiteboards (on every occasion where these were present in the school), and presentational software (often linked to use of interactive whiteboards)".

Recent reviews of a range of studies on the effects of ICT on students' motivation, conducted by Cox, have identified a number of specific motivational aspects, including enhanced commitment to the learning task, enhanced enjoyment and interest, increased self esteem and increases in independence and confidence (Cox, 1997).



## **Chapter 3: DATA ANALYSIS**

### **Interviews**

In order to collect information five English teachers who teach in both secondary schools in Leones, Córdoba were interviewed and four classes at these schools were observed and the results were the following. These teachers allowed the researcher to mention their names in the transcription of the interviews.

When the teachers were asked about what ICTs are, all of them answered that they are Information and Communication technologies what shows the researcher that they know the definition. Only one of the interviewed people included some words related with the theory of this paper. That teacher said that ICT is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. Then, the researcher asked if the ICTs can be used in the English Classrooms and, as it was mentioned in the theoretical framework of this research, most of the teachers mentioned words such as motivation and creativity of the teacher. As it was mentioned before, motivation helps to create a culture of success and student's higher self-esteem. The researcher wrote that an important strategy for the use of the ICT is to show video content with English native speakers, and one of the teachers included that using the ICT is the only way students can have access to native speakers, especially in a small town like Leones, so far away from big cities, where there are more chances of coming across English and American people.

When they were asked about training on the use of ICTs, two teachers said that they took courses given by Conectar Igualdad and also private courses in Córdoba and the others told the researcher that they did not do this kind of courses because they do not have enough time. In this paper, it is established that there is a lack of technical support in many schools, and many teachers do not possess enough knowledge of working with ICT.

Then, they were asked if the ICTs are useful for all students and for all ages and most of them agreed. As it is mentioned in the theoretical framework, they said on the internet there are on-line games and activities suited for different academic levels and ages and that by watching a video or playing a game, students of all ages get more engaged in the activities. Two teachers told the researcher that the use of ICTs depends on the group of students and on the teacher's plans. Moreover, one teacher

said that younger students love playing but they need to learn other things and she thinks that teachers should be patient and relax because they can also learn about technology. The methodology in this paper states that the role of the teachers is essential in the process of integrating the ICT into classes.

The next question was about the most useful technological tools for the English Classroom and if the teachers use them. One of the interviewed teachers said that the most useful technological tools are television, cellular phones, and computer and network hardware and software. Another one mentioned videos, PowerPoint presentations, cd rooms and internet websites. The other two teachers told the researcher that there are a lot of technological tools to use in the classroom, for example mobile phones, but they do not use them. All the technological tools mentioned by the teachers are the same stated by the researcher in the theoretical framework.

In the methodology of this paper, the lack of technical support in many schools was stated as a disadvantage in using the ICT and when the teachers were asked about the situation at the schools they are working and if the students have the opportunity to work with ICTs in class, the answer depended on the schools each teacher works in. Two of the same school informed that the internet connection is not very good and not all the students have a netbook to work in class. Another teacher said that her students have netbooks so they can work with ICTs in the classroom. The last teacher assumed that the students have netbooks but he prefers using the smart board. This answers show that the use of ICT also depends on the school's facilities.

The next question was about the strategies used working with ICT and one of the teachers uses the ICTs for production and open activities and told that it is important to mix creativity, use of technology and a foreign language. Another teacher mentioned she applies transfer and motivations strategies when using the new technologies. None of the teachers mention the strategies stated in the theoretical framework of this research paper about how technologies can be integrated in the language classrooms. When they were asked about how they use the ICTs in their classes, most of the teachers agreed that they use ICTs to review a particular topic. The theory in this research highlights the use of the ICTs to work in groups what no one mentioned. Teachers use the ICT making power point presentations for a new topic, for grammar revision, for production and also for listening and reading activities and only one of them applies online games to review particular topics.

Regarding motivation, the theory in this research says that students love working with ICT and specially use ICT as an instrument to aid in the development of their language skills. Using ICT attracts them because it is challenging, yet it is a part of their everyday lives. One of the interviewed teachers stated that technological tools motivate students because they are attractive, for example live images —like the ones broadcasted by television and the internet— and on-line games are obviously more attractive than what books can offer, particularly if you take into account that today's teenagers spend most of their time in contact with these types of technological devices. Another one said that the success in the use of the ICTs depends on the group of students because if they are interested in computers, they love it but if they are not good, it is really difficult for them, they do not feel like working with computers. As any other teaching resource it depends on the group too. The other teacher told the researcher that the use of technological tools in the classroom is sometimes useful because students become too anxious. This research agrees with the last idea stated because anxiety is mentioned in the theoretical framework and disagrees with the statement that the success on the use of ICTs depends on the group of students.

Teachers said that students can improve their language acquisition in all aspects by using ICTs, for example by watching, reading and listening they can improve or rehearse their vocabulary, and one of them stated that teachers should give them the tools and they can continue learning at home. This last remark is shown as an advantage of using the ICTs in education in this research paper.

### **Observation in English classes**

As regards the observation in different English classes, it could be seen that at ESCBA school teachers use the ICT as a part of their classes. They have an English classroom equipped with a projector and an interactive whiteboard, which in this research paper was mentioned as a way to get students involved, and use them as tools to explain theory, or instead of writing on the blackboard with a chalk, they use the projector and the interactive whiteboard so the students copy from there. As it was established above a smart board works as a traditional whiteboard but is also connected to the Internet, which makes it possible to project films or web pages directly on the board. So the use of this interactive board depends on the facilities each school has. Schools which do not have internet connection cannot use it at all.

On the contrary, at IPETYM 256 School, teachers do not use ICT in all the classes. Some of them told the researcher that they do not use the new technologies at all and only two teachers use them but not in all classes.

In a third year class, it could be seen an activity in which the students were working. The teacher asked them to find information about a famous person and then she proposed them to make a power point presentation to be shown in the small cinema that the school has. The students were very interested in the activity and they enjoyed it at the same time they were practicing how to write sentences in the present simple in English. This activity also showed the importance of working in groups because the students were engaged in it and could learn from their peers. One of the most significant point was they spoke or at least read aloud for the whole class what they had done. A weak point shown in this activity was that the students had to have a netbook and those who did not have one could not work on this project. The teacher insisted them on gathering with the ones who have computers, but sometimes they denied. Here, in Argentina, each student was given a netbook from the government, but sometimes the computers do not work or students do not take them to school, so the teacher has to keep that in mind.

Another teacher who uses the new technologies in her classes denied to be observed, but she accepted to send some activities done by the students. In the first one, the students had to create a room using "Paint" and then write sentences with "have got". Some sentences were true and some of them were false. The students had to send the activity to another student and they tried to complete it. In this exercise, group work was also seen. The other activity was called "My Favourite Star" and consisted on speaking. The students had to prepare a power point presentation only with images about a famous person and then, they told the whole class all the information they found as they helped with the pictures. To do this activity, students need the same materials as in the previous ones and the disadvantages in using ICT would be the same.

The other observations were at ESCBA School in a first and second year classes. The first teacher used the projector to explain theory and she also had some activities written on her computer, so instead of copying on the board, she used the projector. This kind of activity shows that teachers can also use ICTs as a time-saving as it was said in this research paper.

In the last one, in second year, the teacher used the new technologies all the time. He created a webpage that contains all the pages that the students have in their

handbooks, British and American maps and also some links with activities and games. He expressed that the webpage is used when a student does not have the handbook printed and when he has extra time in his classes he uses the online activities and games. Another ICT tool he used was the projector and the smart board. He used the projector to show the students photos of the United Kingdom and he explained the history of each photo, and then to show a video related to the topic of the class. The smart board was used to introduce a new topic, in this case was there is and there are in affirmative, negative and interrogative forms. The most important thing to mention is that this teacher can use the ICTs in his classroom because it is well-equipped and also that he has the ability to use technological tools all the time in his classes. Not all the teachers working at the same school use the materials provided by this classroom. The last teacher worked all the time using the ICT and showed he has knowledge about how to use them. In the interview, the same teacher has said that he has received training on the ICTs in the classroom.

### **Suggested strategies and activities**

From the data provided by the teachers, it can be seen that they do not take full advantages of all strategies and activities. They could use the ICTs for example to make the students get in touch with native English speakers, which is considered as a good strategy to learn a foreign language because pupils would learn to pronounce better or they would learn to write better in English by reading emails written by native speakers. In this way, the teaching-learning process would be more real and significant for everyone.

Teachers could also use many programs or applications on their mobile phones related to the English language. For example, if they have to teach geography, they could use Google Earth or Google Maps to show the students where people speak English as a mother tongue, or as a second language.

Other important tools to be used in the English class are social networks, which children and teenagers know very well. Teachers could create Facebook groups or post information on Twitter and they could be in contact with their students, and also with parents all the time.

It was seen that teachers continue teaching in the traditional way by giving written exercises to the students with pen and paper, but this research shows many ways of changing it. For example, it was shown that there are many web pages with online grammar exercises and games to practice different topics. Some teachers have already used this kind of activities but most of them still refuse to do it.

## **Conclusions**

The aims of this research work were fulfilled since it was possible to know the ways ICT are used in the English classes in secondary schools in Leones, Córdoba. Some theoretical concepts related to ICT were defined so as to gain insight about the topic.

The interviews showed that some teachers deny using the ICT for a matter of time. They think they do not have enough time to do courses and training on the use of ICT in the classroom. Some others assure that the use of the ICT in education is not relevant for the teaching-learning process because it is only for the students to have fun. Most of the teachers who use the ICT in the classroom show that they do not know how to use it because they always work with the same kind of activities and using the same computer programs. They work only with computers, projector and smart board and leave aside the mobile phone which is a motivated tool for pupils and most of them today have one. Less than the fifty percent of the teachers try to teach in a significant and dynamic way using ICT. However, most of them do not show enthusiasm in doing so.

The English teachers interviewed mentioned that the use of the ICT in the classroom motivates students and motivation helps to create a culture of success and student's higher self-esteem; however they do not know the variety of programs and applications they may use in their classes and even some of them are not interested in knowing it.

The hypothesis of this research paper was rejected because the use of ICT in the English classes at secondary schools in Leones, Córdoba is not considered as a very important tool for the teaching-learning process. Most teachers still believe that the traditional way of teaching is efficient and that they are not prepared to work differently. Only one of the teachers who were observed in a real class showed that he knows how to work with the ICTs and he even uses them in his classes, for example showing photos to teach culture, showing videos to introduce a topic or playing online games to teach in a significant and dynamic way.

## **Final comment**

To deal with this topic in the research paper was gratifying because the first idea was to investigate about the use of the ICT in the English classroom in order to show that secondary schools teachers in Leones work with them. The surprise was that while the research work was carrying out, many tools that can be used in the classroom and that most of the teachers do not know, started to appear. As the conclusion shows, not only is the computer a good tool to work with ICT but also the mobile phone which has many applications and programs useful to learn a second language and to be in contact with native speakers.

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## APPENDIX 1

### Interview to English Teachers

1. What are ICTs?
2. Do you think that ICTs can be used in the English Classroom? Why?
3. Have you ever received any training on the use of ICTs?
4. Do you think ICTs are useful for all students and for all ages? Justify your answer.
5. Which are the most useful technological tools for the English Classroom? Do you use them?
6. What is the situation in the school you are working? Do the students have the opportunity to work with ICTs in class?
7. What strategies do you use when you work with ICT?
8. How do you use ICTs in your classes?
9. Do the technological tools motivate your students? How?
10. How can students improve their language acquisition by means of ICT?