UNIVERSITAT ROVIRA I VIRGILI

DOCTORAL THESIS

Teacher Training In ICT-Based Learning Settings:
Design And Implementation Of An On-Line Instructional Model
For English Language Teachers

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Tarragona, July 2006

"I'm not a teacher: only a fellow-traveller of whom
you asked the way. I pointed ahead—ahead of myself
as well as you"

George Bernard Shaw (1856-1950)

I would like to dedicate this doctoral thesis to my children, Adrià and Mariona, and my husband Rafel, for their understanding and patience and their inconditional love.

To Dr. Mercè Gisbert, director of this thesis, for her expertise and guidance, for showing me the way in many instances and for awakening in me the passion for Educational Technology.

To my parents and sister, for all their help and support all throughout my life.

To the General Subdirection of Teacher Training and Pedagogical Resources of the Department of Education and Universities of the Generalitat de Catalunya, for their confidence in me and for enabling me to implement ICT training within the Language Teacher Training Programs (2004-2006) of national reach.

To all the teachers that have participated in the research, for their kindness and collaboration, for inspiring me in so many instances and for their readiness towards change and innovation.

To my colleagues, for having shared my concerns, for having understood my needs and for always being there with a helping hand.

To all my students, the first ones with which I used Educational Technology. My gratitude for their energy, enthusiasm and all that I learnt from them.

To the members of the research team at L@te, Laboratori d' Aplicacions Telemàtiques per l' Educació, at Universitat Rovira i Virgili, for their help and support all throughout these years.

GENERAL INDEX

INTRODUCTION

The XXIst century confronts its citizenship with new choices, opportunities and challenges due to the ubiquitous presence of technology into all spheres of life: business and administration, government, education… The profound shifts undergone in the academic field must be viewed by thoughts on the new possibilities that new technologies involve. Traditional teaching and learning paradigms have been shaken by the impact of the integration of Information and Communication Technologies (ICT from now on) into educational practices at the time that teachers and trainers are confronted by challenges which range from the acquisition of skill and literacy in the usage of IT to the delivery of the necessary tools which will lead students to become knowledge creators and users. Thus, deeply immersed in the Society of Knowledge, a society based upon a critical, rational and reflexive use of global and distributed information (Gisbert, 2003:252) in which the most outstanding communication means are telematic networks, one of the greatest challenges to be overcome on our way to the XXIst century is to enable teachers and students to achieve competency and mastery on the use of technology instead of letting them be enslaved by it.

The widespread use of ICT in all areas has a direct effect upon the way in which the world is perceived. The permeating presence of telematic networks in all scopes of life allows unlimited access to information and a flexibilization of time and space barriers. ICT has shaken the traditional teaching and learning approaches and poses new challenges to the educational community, challenges which emerge together with new teaching and learning environments and instructional modalities, mainly set in virtuality. A profound integration of new technologies into education as a central means to teaching and learning processes will inevitably require from teachers changes in attitude and teaching paradigms, such changes will oblige them to adapt to new methodological approaches, educational concepts and management aspects - all of which will have to be set in technology-rich environments. Thus, open and flexible teaching and learning processes, interactive and bi-directional communication systems together with the

emergence of alternative spaces aimed at promoting communication generate new needs and expectative to be achieved by educators. Using ICT in education favors interaction and collaboration among participants and the World Wide Web fosters new means of communicating and interacting both in real and asynchronous time and provides authentic material and resources that can be easily exploited.

All these continuous transformations brought about by the digital era justify the need to include technology in the teaching and learning of a foreign language. Set in the Catalan Primary and Secondary Education context, the presence of ICT into the Curriculum is still far form being satisfactory and demands a double effort from educational authorities: firstly the integration in depth of ICT into the Curriculum not only as a cross-curricular subject, but also as central to teaching and learning processes; secondly an effort to provide teachers with specific training programs to prepare them to face the harnesses of change and to familiarize them with the new teaching and learning scenarios, facilitating, at the same time a life-long and life wide type of learning. Teacher Training is understood as essential and key for the development of the Knowledge Society and -in a more restricted area- to reach success in the acceptance and implementation of ICT in the teaching of foreign languages. Despite the willingness of many teachers to defy difficulties and integrate ICT into their teaching procedures, still the use and deployment of ICT in foreign language teaching is far from being a reality. Only with a correct acquisition -by teachers- of both pedagogical and technological skill and proper competency will we be able to face the challenge that living in the Society of Knowledge supposes.

The aim of this doctoral thesis is to provide an on-line instructional model to train English Language Teachers in the use of ICT by making use of web-based methodology and deepening on those telematic tools and resources which could provide of help to them into their teaching practices. The use of different web-based training platforms with specific training modules, a collaborative environment and the use of different communication tools and resources exclusively dedicated to teachers aims at providing new perspectives to face the

teaching of English as a foreign language from an innovating perspective and constitutes the practical part of this doctoral research. The implementation of this instructional model through a study carried out during the academic years 2003-2004, 2004-2005 and 2005-2006 will give us results to proceed with future research on this field and will also produce guidelines to convert the model into an instructional Action Plan, with the aim of contributing to enhance quality standards in the teaching of English as a foreign language through the use of ICT and to fill the gap of the instructional needs that digital age teachers need.

Chapter I is devoted to provide a detailed overview on the new scope that the irruption of ICT generates into education: the emergence of new teaching and learning spaces which inevitably lead to changes in the pedagogical models. The new role of teacher and student, the competencies and literacies teachers need to meet the challenges of the digital era. We will also provide a general vision on the new instructional modalities brought about by the irruption of ICT in the educational field, from blended learning to distance learning, paying attention to the changes and aspects that each modality embodies within teaching and learning processes. A third section deals with the difficulties of including ICT into educational management, the hurdles with which schools face this advance of technology and their need to catch-up and update their equipment and training programs for their teachers and students.

Chapter II draws an approach towards the different resources for on-line training and thus, the different ways to integrate resources in teaching and learning processes which take place in virtual environments. According to this, virtual resource centers and virtual learning environments are deeply analyzed together with the new teaching and learning strategies which emerge out of the new training challenges and needs brought about by the digital educational scenario: collaborative work in virtual spaces, autonomous work and self-regulated learning to finally conclude by providing an overview on virtual learning communities. The growing importance of virtual learning communities within training processes and their potentialities as training agents constitutes object of study of this research,

as well. Within this chapter there will also be paid attention to the design and development of procedures for the creation of on-line training materials.

Chapter III is mainly concerned with the teaching of English in the digital era. An overview on the current and more widespread research trends which range from CALL to Web-based Training and the impact that ICT have had upon this academic area in the last few years will be offered. Afterwards we will provide the reference context in which the research part of this thesis will be placed: Primary and Secondary Education in Catalan High Schools and the placement of ICT in the English as a foreign language curriculum, with special emphasis on the current situation and perspectives of the future. The need to revise the curriculum and integrate ICT into it so that it can become effective upon teaching and learning practices is also made evident.

Chapter IV exclusively refers to English Language Teacher Training in the usage and implementation of ICT into teaching practices. Thus, the reference context and the collective to which the research part of this thesis will be orchestrated is analyzed and deepened into. In order to do this there will be an extensive study of the instructional mechanisms to which Catalan Primary and Secondary Education English as a Foreign Language teachers may have access (in both telematic and on-site modalities) paying special attention to ICT competencies for teachers of English, to course contents, technological resources used and the detection -if it is the case- of a shortage of instructional initiatives aimed at providing ICT specific training. Thus, there will be an analysis of the proposals by Universities via Schools of Education (ICEs) and the Education Department of the Catalan Government. After this overview, there will be a comment on the perspectives of the future and the most outstanding challenges that XXIst century English teachers have to meet. To conclude this chapter, a final section will be devoted to establish -according to the teacher's training needs and different recommendations by highly praised educational institutions- which have to be the learning objectives and contents related to the use and mastery of ICT of teachers of English as a foreign language.

Chapter V provides an exhaustive compilation of the telematic tools and resources a teacher of English may have access to in order to successfully integrate ICT into his/her teaching practices . The main classification will include the World Wide Web in the first place and its main utilities to teach English as a foreign language: English Search Engines, authentic materials, language translators, with recommendations for their educational use and a selection of links. Secondly, the next section is devoted to the Internet communication tools -synchronous and asynchronous- and the educational possibilities they may offer to a teacher of English as a foreign language. A third part will develop an overview and description of the different on-line educational resources, ranging from educational portals to creative teaching websites. A final section will be devoted to offer a taxonomy of Internet-based activities, with a description and educational tips that can be of use for teachers. To conclude, there is a final section devoted to the evaluation of the different resources provided and indications for a successful selection of material. An appendix on CD format is attached with detailed and more developed information on the use of all the tools, resources and taxonomy of activities mentioned.

Chapter VI addresses the practical part of this research and it will provide the referential and methodological basis upon which the investigation will be implemented. Thus, there will be a detailed part on the objectives of the research, the description of the object of our investigation and the phases of the research. Phase One will constitute the Preparatory phase, which includes a study and revision of related literature, the design of the research: Objectives and methodology; sample selection and courses upon which to implement, instruments for data collection (both quantitative, by means of the questionnaire, and qualitative, throughout the the interventions that teachers have been posting in the forums), the use of different virtual learning environments containing especially content-designed instructional modules and tools for collaborative working (BSCW, Moodle) and the design of instructional material and the creation of training modules and evaluation. Phase Two will account for the implementation process specifically addressed to obtain results from the

investigation, with the distribution of the questionnaire to teachers attending the courses, the distribution of instructional materials and the delivery of different web-based materials and communication tools. Phase Three will be devoted to the analysis of the results obtained, the treatment of data with the help of different instruments: Nudist (Qualitative), SPSS (quantitative)... and finally there will be a section in which these results are going to be thoroughly deepened into.

Last chapter will be aimed at reaching conclusions once the investigation and the results have been concluded. This final chapter will include general conclusions related to the present situation of teachers of English as a foreign language in Catalonia regarding the use and integration of ICT in teaching and learning practices, the training offer which is addressed to them, the barriers that prevent them from satisfactorily implementing technology in their classrooms… The possibility of having made this research extensive to a sample of teachers belonging to both Primary and Secondary education of the whole Catalan territory, and the significance of the results obtained, allows us to propose and recommend an instructional Action plan addressed to train teachers of English as a foreign language in the use of ICT. The creation of a virtual learning community to sustain a collective of English as a foreign language teachers in order to enhance new training models of life-long learning will constitute another of the proposals set up after the research has been fully developed. This training Action plan intends to provide the necessary training and support to teachers but also tries to foster the communication among them. This communication is essential and needed to bring about changes in teacher education. Community building and the exploitation of teachers' networks as training agents, according to our opinion, will become the basis upon which XXIst century quality training is to be built.

Part One

Theoretical Part of the Research

Chapter 1

ICT and the new teaching and learning spaces: from new
pedagogical models to virtual teaching and learning
environments

CHAPTER I: ICT AND THE NEW TEACHING AND LEARNING SPACES: FROM THE NEW PEDAGOGICAL MODELS TO VIRTUAL TEACHING AND LEARNING ENVIRONMENTS

The telematic networks and the Internet – now central to new teaching and learning processes- open up to communication ways which allow unlimited access to information and knowledge, account for a flexibilization of time and space barriers and increase interaction. The Net constitutes an excellent environment which has definitely transformed the different relationships within the educational field and has made possible the emergence of new teaching and learning modalities, which, in turn, require radical pedagogical changes and a redefinition of traditional teaching and learning pedagogical models. According to Cabero (2001), "the flexibilization time-space accounted for by the integration of IT into teaching and learning processes contributes to increase the interaction and reception of information. Such possibilities suggest changes in the communication models and the teaching and learning methods used by teachers, giving way to new scenarios which favor both individual and collaborative learning".

Authors such as Gisbert (2003:256) warn us that although telematic networks constitute powerful containers and transmitters of information and that computers become important tools central to teaching and learning processes, their educational potentiality can be minimum if it is not accompanied by other pedagogical measures. Similarly, Blázquez (2003:14) emphasizes the fact that the participants in these teaching and learning processes set in new virtual environments will have to develop a critical distance in order to benefit from the enormous advantages they account for: "We are aware that the Internet is not and will not be the panacea, it will not even become - to our judgment- a suitable educational means in all situations, furthermore, a proper critical distancing will be required to educate with it".

The profusion of telematic networks and the multiplicity of spaces offer varied

possibilities in which in which innovating teaching and learning processes may be confined and demand from us, educators, to re-think and re-define traditional and unmovable pedagogical models. In this context, in which new educational scenarios and participants are in constant evolution and variation, deep changes in the teacher and student conception as well as in the instructional models are called for.

I.I. New pedagogical models

The new teaching and learning systems orchestrated around telematic networks offer new perspectives to the traditional concepts of time and space and demand a redefinition of traditional pedagogical models, being the roles of teachers and learners – on the one side, and the re-configuration of educational organization and management the most outstanding shifts to be overcome in the XXIst century educational field. Many authors and institutions such as the European Language Network, ICC (2002:8) coincide in emphasizing the enormous communicative and training possibilities that ICT contain. According to them, new organizational and pedagogical models need to be exploited by teachers so that they can offer a co-operative, collaborative and life-long type of learning to the citizenship of the future.

The utilization of ICT learning settings and tools in educational processes, evidently leads to radical changes both in the role of teachers and learners and to the emergence of new teaching and learning environments and methodologies (e-Learning, Web-based Learning, Open and Distance Learning) as well as new training modalities (on-line training, on-site training, Blended-Learning, Instructor-led Learning/Training, Classroom Training -C-training-…) Finally new virtual training settings aimed at facilitating tools and resources to favor communication and interaction and distributing teaching materials through the web will emerge in order to encourage and promote collaboration and co-operation among the participants in teaching and learning processes.

On the other side, many authors such as Salinas (2003:133) agree in the fact that the integration of ICT into education generates a set of transformations which modify all the elements which take part in the educational process: organization, student, curriculum and mainly, they affect the teacher's role, function and attitude.

I.I.i. The Teacher's Role

The impact of the Internet in education in the recent years fosters the vision of a open, global and flexible learning, as authors such as Colás state (2003:33) leading to radical shifts in the teacher's role and competencies. In the framework of this educational landscape the role of the teacher is that of acting as guide and instrument to assure a comprehensive learning process via the Internet, managing the student's learning process by creating - at the same time- new instructional models set in newly-created virtual environments. Colás (2003:33) understands knowledge manager as the person who is able to manage the student´s skills, abilities and knowledge, motivating and taking benefit of the student´s both individual and collective learning possibilities.

The teacher will have to develop skill related to the learning contexts that changes in teaching and learning paradigms require Thus, the teacher's role is multiplied and shifts from being a single transmitter of knowledge to become facilitator and guide of the learning process, integrator of new ICT media, researcher and designer of suitable learning scenarios, collaborator (with other teachers and students), orchestrator, learner and evaluator. The ICC report (2002: 9-16) is especially devoted to the role of teachers of foreign languages determines the skills and competencies a teacher has to master in order to integrate ICT in a successful way. Thus, the report mentions the acquisition of technical, organisational, conceptual skills together with the new literacies: technical, scientific, digital, critical, linguistic, cultural and mediation literacies.

Similarly, referring to the role and function of teachers who develop their activities in ICT-based settings, Lufti, Gisbert and Fandos (2001:70) point out five main functions a teacher should compile: information consultant, group collaborator, facilitator, critical generator of knowledge and finally, academic supervisor. The authors add that the teacher´s profile is shaped in three dimensions: cognitive-reflexive, active-creative and affective-comunicative (2001:71). Cebrián (2003:78-79) develops the new profile of teachers according to the following functions: assessor and guide of the autonomous learning process, resource facilitator, designer of new technology-rich learning environments, adapter of different materials, producer of new didactic materials in ICT-based settings, evaluator of the different processes in which these environments and resources are involved and finally he/she will have to be able to acquire a professional viewpoint on ICT life-long learning.

The necessity of thinking through the challenge that ICT integration supposes to teachers constitutes a basic aspect upon which many authors such as Gisbert, (2001), Colás (2003), Blázquez (2003) and other reports agree and determines-at the same time- the appearance of clearly defined instructional needs. As Gisbert (2001) points out, the teacher's role in ICT-based learning settings is not easy, it is crucial that they acquire instruction regarding the design and implementation on on-line courses, the orchestration of ICT/Web-based instructional processes and the development of management skills. Ongoing teacher training together with the creation of suitable instructional spaces becomes fundamental to enable teachers to implement successfully ICT in their teaching and becomes -at the same time- essential to reach a high degree of quality in the near future teaching processes.

Adell and Sales (1999:363) point out several functions, suitable for on-line training, which teachers should have to assume in technology-rich environments: **Curriculum design**: the teacher has to design and develop a proper curriculum that the use of ICT requires. If we understand ICT as a basic competency that both teachers and students need to acquire it is necessary that it becomes a curricular subject; **Content creation:** the telematic networks offer a great deal of materials

19

and contents which have already been created and the teacher may decide to adapt them or not into the teaching/learning situations; **Tutor and facilitator**: the teacher becomes facilitator of knowledge with the help of multiple telematic tools and resources and guides the process for an efficient and correct selection. **Evaluation:** a non-traditional evaluation is required at the time that new tools and resources open up new perspectives for the teacher. Students interact with multi-faceted materials which sometimes the teacher cannot control. Thus, a deep evaluation of all the elements that intervene in the new teaching and learning processes is needed.

The existing literature on the role and functions of teachers is varied and diverse. Authors such as Cebrián de la Serna (2003), Majó and Marqués (2002:312), Gisbert (2000), Cabero (1999), González Soto (1997) , Alonso and Gallego (1996) have tackled this issue in their works. Santandreu (2004:17-19) makes a compilation of the different contributions to which we agree and reproduce the four main roles teachers working in ICT-based settings would have to play:

- The teacher as planner and facilitator of situations and suitable learning contexts
- Developer, adapter and creator of materials and resources
- Assessor, guide and knowledge facilitator
- Evaluator

As far as these first classification is concerned, Santandreu (2004:20-21) goes on and establishes a deeper distribution of functions to each role, and accounts for distinctive aspects inherent to each function:

ROLE	FUNCTION	ASPECTS
Planners and facilitators of learning situations and contexts	Information Consultant	- Provide basic information about the subject to students. - Search for information materials and resources - Give support to students to access information - Expert use of IT to search and recover information. - Adopt a critical position to analyze and adapt to the learning context of communication media.
	Course planners	- Be aware of individual and group traits of students - Diagnose the training needs of students. - Design the curriculum - Select, evaluate and organize the technological media and resources
	Designers of T/L strategies	- Prepare didactic strategies - Design learning environments which embody IT. - Use resources and their didactic implications - Integrate IT as elements of the curricular design
	Managers	- Manage the class development - Participate in the educational management of the center
	Life-long training	- Participate in courses to update to the subject, resources and didactic strategies - Keep contact to other professionals to share experiences
	Contact with the educational community	- Keep contact with the school environment
Developer, adapter and creator of materials and resources	Resource facilitator	- Search for and prepare resources and didactic materials - Structure materials - Organize contents
	Developer, adapter and creator of materials and resources	- Designing and developing materials in the curricular framework and in technological environments. - Planning activities for training in virtual environments - Designing and developing electronic materials for training
Consultant, guide and knowledge facilitator	Student's motivator	- Awakening the curiosity and interest of students towards the subject. - Motivating the students in the realization of activities encouraging participation and fostering discoveries. - Providing support and motivation during the learning process.

	Facilitator of the contents	- Carrying out well structured expositions according to the characteristics of pupils. - Presenting an interdisciplinary prospect of the contents - Interacting with the class group, setting forth and arguing different points of view. - Considering the three phases of didactic act: global, analytic (research) and synthetic (recapitulation).
	Assessors in the use of resources	- Advising on the use of technological tools in an effective and efficient way for the search and retrieval of information - Advising the process of the information of the matter in the good use of the computer instruments that they facilitate. - Advising on the use of ICT as media. - Helping in the resolution of small technical problems related with ICT
	Guides in the development of activities	- Keep track of student's developments and guide their learning process - Take diversity into account - Enhance co-operative group learning.
	Group collaborator	- Favor problem solving through collaboration - Research on the development new activities using IT
	Tutors and academic supervisors	- Diagnose student's academic needs in training and career development - Help students to select and decide on their future - Supervise students and provide constant feed-back to encourage better practices
Evaluators	Evaluators	- Evaluate student's learning - Use IT possibilities to carry out evaluation activities and self-evaluation - Evaluate the teacher's methodology to introduce changes

Roles and functions of teachers

After the changes and roles in function by teachers, the technification of teaching
and learning processes is a fact and the educational system of the XXIst century
now defined as an information and communication technological model is
confronted by an enormous challenge: the different educational institutions have
to face the fact that teachers accept to radically change their traditional role in

the teaching/learning processes and become instructed to be acquainted with the educational and pedagogical possibilities that ICT-rich learning environments require. Nevertheless, the attitude of teachers towards technology constitutes an object of controversy and provides a variety of confronted opinions.

Camacho (1995:421) states "In this climate, which is not proclive to experiments it is not surprising that many teachers' behavior respond to stereotypes or routines which have been maintained –without being modified- throughout a long professional life". Gisbert (2000) enumerates different factors that condition the teaching task of teachers: firstly the author mentions the existence of a technological infrastructure in which communication is set, secondly, the author accounts for the availability of space to carry out the different tasks, thirdly the teacher's preparation to use technology efficiently and last the teacher's readiness for a life-long learning which will ensure him/her constant updating and renewal of knowledge. On his part Loscertales (2000) accounts for aspects and factors which are directly related to the attitude of the teacher when set in technological environments, such as the age, the kind of social interaction which takes place in educational contexts, the effects on the use of technology in teaching and learning processes, the perception of expectative and finally the personal position of teachers, the most outstanding one, toward the correct use and deployment of ICT into education.

To conclude, Camacho (1995:421) outlines the fact that innovative teachers are not always granted certain recognition towards their work and emphasizes at the same time the reluctance on the teacher's part to abandon the traditional role of main cultural transmitter. Finally, Majó and Marquès (2002) account for the following reasons regarding the attitude of teachers towards the fact of adopting a positive attitude towards the use of technology in teaching and learning processes: first they mention a low competence in the use of technology, influence of social stereotypes, reluctance towards the effectiveness of using ICT and finally the existence of prejudices at work.

It is evident, as many other authors such as Romero (2002) have highlighted that the lack of technical knowledge and a successfully implemented habit and good practice in the use of ICT into teaching and learning processes would one become of the main objectives when trying to elicit from teachers a positive attitude towards the use of technology.

Related to the necessity of receiving specific training, Cabero (1993) and Castaño (1994) coincide in stating that better results are achieved if ICT in teacher training starts soon and point out the necessity of continuous teacher training, at the time that they emphasize to a great extent the attitude of teachers regarding their integration of ICT-based media and resources. Hargreaves (2000: 58-60) considers that "as driving forces of Information Society teachers have to be able to develop a new mastery which not only regards technical and intellectual components, but also social and emotional aspects", in this sense, De Pablos (1996) points to the need of a critical and renewed attitude on the teacher's part in order to favor his/her harmonization with the new educational realities and adds that in many occasions, the teacher may feel impotent to face the new responsibilities. In this sense, Masdeu (1999:17) manifests his conformity with the figure of the teacher who has to offer to students learning strategies with the help of ICT tools, which, evidently, will facilitate his/her task. Related to this, Harris and Wambean (1996: 370) consider the relevance of the new possibilities ICT may offer to teachers and stress the fact that ICT have to be integrated in the sense that they keep and respect the pedagogic objectives and implications conveyed. According to Harris and Wambean (1996: 370) "Instructors need to consider carefully not only how to take advantage of the new possibilities that technology offers but also how to incorporate technology into their courses so that it supports their pedagogical objectives.

A recent 2004 report by the British Educational Communications and Technology Agency, BECTA, based on an analysis of current research about the barriers to an efficient use of information and communication technology draws a distinction

among the different types of barriers under consideration and highlights teacher's attitudinal factors among a typology of barriers:

- resource-related factors
- factors associated with training, skills, knowledge and computer experience,
- attitudinal and personality factors
- institutional and cultural factors

Thus, there have been recent studies associated to the use of ICT in teaching practices which have been developed and can be classified into two major stages: individual (teacher-level barriers) to which we have previously referred and those factors which more straightforwardly have to do with institutions (school-level barriers). As far as teacher level barriers are concerned many authors have investigated in detail their connection with technology, thus, Youen and Ma (2002) concur in agreeing that amongst teachers there exists the awareness that technology does not improve learning whereas other authors such as Pelgrum (2001) stress the lack of confidence on the part of teachers as being the main factor that prevents them from using ICT.

Snoeyink and Ertmer (2001) account for other causes such as the presence of negative experiences in using ICT in the past and provide different examples: the fear and embarrassment in front of students and colleagues... Similarly, authors such as Russell and Bratley (1997) refer to the loss of the traditional status and an successful degradation of professional skills as other important features which prevent teachers from making usage of ICT in their teaching practices.

Taking into account classroom management difficulties, they appear when ratios pupil-to-pupil are scarce (Drenoyanni and Selwood, 1998, Cox et alter, 1999). Finally there are other factors that -according to different researchers who appear mentioned in the BECTA's report- should also be borne in mind:

TEACHER-LEVEL BARRIERS	
Lack of time for both formal and informal training	Fabry and Higgs, 1997
Lack of time for preparing ICT resources for lessons	Preston et alter, 2000
Lack of knowledge necessary to resolve technical problems when they take place	Van Fossen, 1999
Lack of personal management skills to change	Cox et alter, 1999
Teachers have the perception that computer are complicated and difficult to use	Cox et alter, 1999
Lack of motivation to change long-stand pedagogical practices	Snoeyink and Ertmer, 2001

Teacher-level barriers. Source: BECTA 2004

After the different functions and roles attributed to teachers in technology-rich environments and their attitude towards its use have been extensively commented, there is still another issue we would like to place our emphasis upon: the necessity of placing ICT within the teaching and learning processes of curricular areas. Many teaching practices that are presently taking place include ICT and make constant use of the World Wide Web, however, it is a fact that they are still unsuccessful regarding the inclusion of ICT into the teaching and learning processes of curricular areas. According to Escudero, who already in 1995 made this statement, and Blázquez (2003:22) "the computer and in many cases, the data and information provided by the Net are not always incorporated as a material at the service of the activities, contents and objectives of the different areas teaching and learning processes, but as an autonomous, pedagogical space beyond the contents and methodology of these areas". In this sense, there seems that the lack of technological and didactic knowledge of the teacher may be one of the

elements which has contributed to prevent teachers against the use of ICT and a satisfactory implementation of ICT into curricular subjects.

To conclude, one of the many challenges that XXIst century teachers have to overcome is to be encountered in the fact that they have to evolve from an educational system in which the teacher was traditionally characterized by being a static transmitter of knowledge to another educational system which has emerged under the scope of technological advances. At the same time, the teacher has to rethink all his/her tasks and assume the impact that new technologies are going to have upon his/her teaching practices (Santandreu, 2004:17). The necessity that teachers acquire competency in the use of the new tools and telematic resources is once again made evident and in this sense educational administrations and Universities are providing training programs to help teachers meet this need. On the other hand, the student needs to acquire technical instruction as well, and the teachers must be eager and ready to offer it.

I.I.ii. The Student's Role

The effort by educational administrators to offer and provide students, that is, the citizens of the XXIst century, with instruction in ICT is evident and unquestionable. Thus, students have to be offered didactic and technical strategies in order that they can become competent users of new telematic tools and resources. They not only have to acquire skill and ability to cope with technological demands, but also they have to acquire the capacity to use them effectively at technical, rational and critical levels. Gisbert (2000) points out that student instruction would have to be articulated around three main areas: training to consume (ICT materials), training to use (telematic tools and resources) and training to produce (electronic materials).

On his part, Marayo (2000) points out the objectives around which the teaching action regarding ICT would be orchestrated: find information, understand information and transmit information . Thus, the great challenges a teacher would

have to face regarding the student's instruction would be: teach to search, teach to understand, teach to use a critical thinking and teach to communicate. All teaching and learning processes may take as departing point to facilitate and promote learning by putting emphasis upon the different educational needs and qualities of the student. Thus, the acquisition on the student's part of certain ability and skill will be a sine qua non condition and will be useful to them as Cabero (1998:5) exposes "not only to be able to get through technology and the academic institutions, but what can become more meaningful is that they will be able to manage themselves in the society of the future, which -as it seems- will be the society of learning, and it will be a life-long learning."

"Just like the teacher, the learner definitely has to adjust to a new role in the learning process. S/he must take on new responsibilities, often working without any supervision whatsoever" (ICC, 2002:14).

According to Cabero (2000:99) the abilities and skill the student will have to develop in order to succeed in technology-rich environments are the following, thus, the student will have to:

- be able to know when there is a need for information
- identify the necessity of information to solve a problem or investigation
- locate the necessities for information
- organize the information and use it efficiently to solve the problem or investigation
- adaptability to an environment which is in constant change
- work in team in a collaborative form
- use creativity to solve problems
- learn new concepts and assimilate new ideas quickly
- lead new initiatives and be independent
- identify problems and come up with solutions
- gather and organize facts
- carry out systematic comparisons

- identify and develop alternative solutions
- and solve problems in an independent way.

Again, the necessity of a trained teacher, familiar with the new teaching and learning scenarios, and ready to meet the challenges of teaching in the Knowledge Society emerges as one of the most outstanding points to be overcome in the educational field.

In the context of the teaching of English as a foreign language, the advantages of learners are evident and manifold. Classes will become more learner-centered, with learner's time and effort devoted to authentic reading and writing tasks and more related to real communication and for the first time learners of a language can communicate with other partners, speakers of the target language all over the world. The ICC report establishes many of theses advantages: "They (students) have access to unprecedented amount of authentic target-language information, as well as possibilities to publish and distribute their own multimedia information for an international audience" (ICC, 2002:14). The access to different media will favor that students can manipulate different language data and become aware of the different material they can use to work with language. The fact that they can manage this language by themselves and the new active role that learners play in technology-rich environments will also contribute to the fact that they will use their own organizational schemes. At the same times, activities will encourage learners to become language creators and require from them to explore and be inquisitive, rather than becoming solely passive recipients of knowledge, thus furthering the idea of the learner as an active participant in the learning process (ICC, 2002: 14).

Set in new technological environments students are given the possibility to work in an autonomous way, becoming more conscious of their own learning process and of the knowledge they acquire, thus becoming more aware of the contents and objectives to be achieved. The inclusion of ICT into the English classroom favors, above all, communication: "Learning on-line is different from learning off-line in

another important way: there is much more learning and much less teaching (…) at least there is much less teaching as it is typically done in off-line settings" as Peterson and Facemyer (1996:55) state. Warschauer (1996), on his part, adds that students become more participative and produce more oral registers.

I.I.iii. Educational management

The different teaching and learning experiences now taking place due to the advances in telecommunications emerge in distinct space and time co-ordinates differing thus in a great deal from traditional concepts. A third important aspect which is completely modified by the inclusion of ICT and telematic networks in education is the organizational system, that is the framework in which educational communication is circumscribed. The learning context with its space and time co-ordinates determines many variables that take place within teaching and learning processes. The emergence of ICT affects and challenges the traditional educational space unit - the classroom - and the time unit - the time devoted to give an on-site class, which is in most of the cases one hour - at the time that new teaching and learning systems built up around telematic networks need to be set in different teaching and learning environments, which complement and account for a diverse panorama and a pluralisation of the educational offer (Salinas, 1997).

As far as these changes in the educational organization of teaching and learning processes are concerned, Salinas (2003:135) describes the three factors that intervene in the process that are affected: space and time co-ordinates -which in turn- account for the configuration of many variables taking part in the teaching and learning process; organizations and institutions that are asked to provide new means for the delivery of materials, new structures of communication among users and administrations and new formulas of design and production of materials and courses and finally the implementation of new learning systems set in technology-rich environments with the use of all the technological possibilities that they embody.

According to Graus (1999) "the process of introducing a school to the Internet usually starts out with one teacher or a small group of teachers who are enthusiastic about this new medium and who are convinced that it can have many benefits for the learning process in a modern educational context". The next step that has to be taken is to convince the other teachers of these benefits and of the necessity of using new technologies in schools. After that, the school management will have to make the ultimate decision to introduce their school to the information age and start using the Internet. However, there exist a lot of practical considerations that teachers and school management can use to make a final decision.

Web for Schools (1998) recommends considering a number of issues that will disclose the benefits of Internet access, but also the latent troubles it might bring forth. Regarding teachers, these troubles are related to the variety of resources presently available to them, it has to be known if these fulfill the needs or commitments that have to be made. In many instances, especially when teaching foreign languages, teachers look for additional resources and authentic material, which the Internet is a perfect provider of. Teachers have to identify the need for the Internet. Other questions may be related to the fact that teachers already use resources from outside the school; in many instances, they are not happy with what the textbooks have to offer and are constantly on the look-out for extra material.

Another of the questions to be posed is related to the level of ICT literacy among the teaching staff and the way in which it has been acquired. This is one of the key questions which we will try to answer in this thesis. Identifying these reasons may make the decision process with respect to the Internet easier. In many instances, students teach their parents how to use computers and a similar situation can also occur in schools. It is not unthinkable that some students know more about the Internet than their teachers. They are a potential source of information that should be used and taken into account.

Within the context of schools, answering the following questions can shed some more light on the factors that can be considered as influential during the decision process. They are related with the state-of-the-art of the current ICT equipments, the type of Internet access of schools, the conditions and the way in which existing ICT resources are managed and if they are adequately available.

Although it will be later on developed, the issue of equal opportunities for students is also to be highlighted; whereas some students have Internet access at home, others are deprived of any access to it, and this is a fact that worries teachers to a great extent. Although this may lead to an unfairness between the professed information-rich and information-poor. It is the duty of schools to take away this inequality. To conclude, the use of the Internet is increasingly taking basis in all sectors of society and it is a school's job to prepare its students for their role in the knowledge society.

I.II. Instructional modalities in technological environments

The traditional teaching and learning methods together with the most recurrent means of communication have been substituted by other modalities that facilitate interaction and provide at the same time other communication strategies, basically due to two key factors: time and space flexibilization and pluralisation of learning spaces. Cabero (2001) and other authors such as Blázquez (2003:24) support the importance of the apparition of these new learning scenarios for a more participative and extense communication. and make us aware of this emergence of new learning scenarios that allow both individual learning together with collaborative group work. According to most innovating streamlines, some authors coincide in pointing out the effectiveness of using the Net when the teaching/learning processes follow up a clearly stated model based upon research, thus, learners are able to learn by means of a reality discovery process at the time that investigation is enhanced. Aguaded (2002) places within this context other factors: significative learning, content globalisation, resource diversification,

organizational flexibility and curricular adaptation to student´s needs, and Blázquez (2003) coincides in asserting this fact.

The need to include ICT-based learning methodologies is determined by international organizations which claim for their usefulness. In 2001, the European Commission launched the E-Learning Initiative and Action Plan to promote the adaptation of the European Union's education and training systems to the Knowledge Society, through the effective and relevant use of information and communication technologies and the Internet for learning. This action Plan defines E-learning as "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services a s well as remote exchanges and collaboration" (COM: 172 final, 28.3.2001 "The eLearning Action Plan – Designing Tomorrow´s Education"). Two of the main components of the action plan to promote the development of E-learning are teacher training and the establishment of co-operation and interconnection strategies among the members of the educational context. Another of the plan's main points is the aim at engaging all the participants in training processes in acknowledging the importance and potential of e-learning to develop a lifelong and life-wide learning.

The new instructional models to which we have referred suggest new perspectives to teaching and learning processes. They are flexible models with different communication systems and distribution of learning materials in which information can be shared by all participants. Among the different initiatives meant to explore all the educational possibilities in the Net, Web-based Learning emerges as one of the most outstanding and recurrent training and learning methodology. However, within this category different modalities -such as virtual, distance, open, on-site learning- and methodologies overlap and difficult a generalization of the term as Mir, Reparaz and Sobrino (2003:24) agree. According to the American Society for Training and Development –ASTD- we understand Web-Based Learning/Training as " the delivery of educational content via a web browser over the public Internet, a private Internet, or an extranet. Web-based Training often provides links to other teaching resources such as references, email, bulletin boards, and discussion

groups. WBT also may include a facilitator who can provide course guidelines, manage discussion boards, deliver lectures, and so forth. When used with a facilitator, WBT offers some advantages of instructor-led training while also retaining the advantages of computer-based training" .

According to Mir, Reparaz and Sobrino (2003:24), there coexist three types of teaching and learning approaches: a) On-site learning which refers to traditional classroom training in which an instructor teaches a course to a room of learners, b) traditional distance learning based on communication not necessarily computer-mediated and c)on-line or virtual learning which complements both previous systems giving way to mix systems. The authors point out that the gap between on-site and virtual learning settings does not necessarily have to be total but depending on the knowledge, the students and the educational training materials, due to this thesis typology, we will refer to blended learning as a mixture of on-site and virtual methodological approaches. Otherwise, Duart and Sangrá (2000) conclude that learning in virtuality -that is without temporal and spatial constraints- leads to a student-centered methodology set in a virtual learning environments which is described by flexibility and interaction, and a connection to a community and the access to on-line resources and materials, as Mir, Reparaz and Sobrino state (2003: 27).

I.II.i. On-site training

According to the American Society for Training and Development, on-site learning or training usually refers to traditional classroom training, in which an instructor teaches a course to a room of learners. The term is used synonymously with instructor-led training (ILT) and classroom training (c-learning).

I.II.ii. Distance Learning

García Aretio ((2004:254) defines Distance Learning as "that learning which is based upon a mediated didactic dialogue between the teacher and the student,

who, in turn is placed in a different space and who learns in an independent and/or collaborative form". This author accounts for the following traits as distinctive of Distance learning:

- a permanent separation teacher/trainer and student under time and space constraints.
- The student/learner controls time, space, study pace, activities, evaluation timing and educational itineraries…
- Communication may be student/teacher, teacher/student, student/student and teacher/teacher through different use of resources.
- The support of an institution which plans, designs and produces materials and carries out tasks of supervision and motivation of teaching/learning processes by means of peers.

So much literature has been written when trying to account for a successful definition of Distance Learning. García (2001) developed a study in which eighteen specialists in the educational field were asked about the main traits that Distance Education compiled and they converged in stating the following traits as inherent to distance learning processes:

- Separation (physical student/teacher)
- Use of technological methods
- Peer revision by the teacher
- Enhanced autonomous learning

The modality of Distance Learning has viewed different phases and generation of development in the last 150 years and has been object of study by many authors: Garrison:1989, Taylor:1995, Harasim:2000, Novitzki:2000. Due to the development of electronic media, the ways of teaching and learning as they have always been understood have undergone various shifts and transformations. (Garrison, 1985, 1989) describes three basic generations of technological innovation throughout history, basically known as Correspondence, Multimedia and Telematic; however,

other authors such as Taylor (1995:2) and García Aretio (1999) account for a fourth category or generation which is that communication which takes place through the Internet, which is also known as Web-based learning. According to the opinions of these authors the different periods encompassed important changes and are clearly defined by their traits. Learning by Correspondence which was born at the end of the nineteenth century included easy texts which were not very suitable for self-study. Texts reproduced on-site traditional classes and didn't include didactic specifications. As time went on they started to include study guides, complementary exercises and evaluation worksheets.

Distance multimedia teaching emerged during the 60's period with the creation of Open University in 1969 and started to incorporate audio and video media to written texts. The telephone was firstly used to connect students to their teachers although interactivity was not yet enhanced. The telematic period saw the light during the 80's and integrated telecommunications together with other educational media through computers. The use of personal computers became widespread and Computer-assisted Learning favored actions which included flexible programs, radio and television educational resources and audio and video conferencing. Finally, the Web-based learning model, which uses interactive multimedia systems and computer-mediated communication dates back to the 90's and its main trait is that education is conducted by means of networks and multimedia workstations which support systems relaying in the Internet by means of synchronous and asynchronous communications. The greatest achievement of this phase is the quickness and constant feed-back and interaction which take part in the teaching and learning process.

I.II.iii. Blended Learning

Basically described as "the learning which combines face-to-face with virtual teaching" (Coaten:2003, Marsh:2002) Blended Learning emerges as one of the most widespread teaching modality used nowadays in the educational field, mainly by Universities and Higher Education Institutions. According to Valiathan (2002) the term blended learning is used to describe a solution that combines several

different delivery methods, such as collaboration software, Web-based courses, EPSS, and knowledge management practices. Blended learning, in accordance to this author, is also used to describe learning that mixes various event-based activities, including face-to-face classrooms, live e-learning, and self-paced learning.

In the recent years, many authors have accounted for experiences in which Blended learning was central in teaching and learning processes and have tried to define it and to provide some inherent traits to this modality. Adell and Gisbert (1998) in relation to this modality accounted for a new concept which combines synchronous and asynchronous communication as a reaction to traditional concepts of distance education, which are mainly passive and lack interaction among participants in teaching and learning processes. Thus, the "virtual classroom" (GET 1996) provides different elements which enhance communication above all: spaces for classes, libraries, teacher's office to provide peer attention, seminar for group gathering, space for co-operative work and even a coffee place. Thus, the authors account for a new teaching modality which has evolved to blended learning and provide a chart to compare this mix modality to both traditional on-site and distance approaches:

Variables	On-site Modality	Blended Modality	Distance Modality
Time	Shared Determined	Shared Estimated	Not shared Determined
Space	Shared	Not shared	Not shared
New technologies	As material and/or resource	As a context and as material and/or resource	As material and/or resource
Communication	Synchronous Verbal/Non-Verbal	Syn/Asynchronous Verbal/Non-Verbal	Asynchronous Occasionally verbal
Modalities	Formal	Formal Non- Formal Informal	Formal
Students	In Groups	Physically: individual. Virtually: in	Individual

		groups	
Collective Work Space	Classroom: real space	Net: Virtual classroom Space for collaborative work	None
Individual Work Space	Classroom Desk	Personal computer	Office desk
Teacher	Transmitter-Tutor	Facilitator-Tutor	Tutor
Teacher's Work Place	Office	Net Office	Office
Planning	At short term.At midle term	At short term. At medium term. At long term	At long term
Contents	Selection: Administration and teacher	**Formal**. Selection: Administration and teacher **Non- Formal.** Selection: teacher and student	Selection: Administration and teacher
Goals	Defined a priori	Defined a priori	Defined a priori
Methodology	Participative. Non-Participative	Dynamic-Participative	Non- participative
Didactic Material	Printed material linear structure	Electronic material organization divided structure	Printed material linear structure. Audio-visual Material.
Means and Resources	Institutional	Educational resources distributed on the Net	Personal resources. Occasionally institutional
Activities	Cognitive-Manipulative	Cognitive	Cognitive
Assessment	Continuous Final	Self-evaluation, Continuous Final	Self-evaluation Continuous Final

On-site, blended and virtual learning

Brodsky (2003) states that Blended learning is not a new concept and goes on "…
for many years we have been combining magisterial classes with exercises, case
studies, role-playing, video and audio-recordings and assessment" . Salinas (1999)
coined the term "flexible learning" to refer to the type of learning taking place at
the Universitat de les Illes Balears known as Campus Extens in which virtual
systems such as the Web and tools as videoconferencing are being used in
combination with on-site training. Other authors (Bartolomé: 2001, and Leâo and
Bartolomé, 2003) have used the term "semi-presencial"   to account for the same
combination of on-site and on-line learning.

Gisbert (2003:254) stated that Blended learning is understood under technological
environments in which image and sound transmissions play a definite role together
with the definition of common spaces in the net which will account for
effectiveness once group training has been put into practice. In order to succeed in
Blended training contexts the following aspects will have to be borne in mind if
success is going to be expected:

- Communicability
- Easiness in the use of the environment
- Flexibility and adequacy between the objectives of the training activities
  and the needs of teachers and learners.
- Integration. Ability to integrate different tools in the same communicative
  process
- Re-usability of materials and environments in different training instances
- Collaboration: presence of collaborative environments to encourage the
  processes of design, development and evaluation of training actions.
- Management: Usage of tools to manage the training process
- Evaluation processes to contribute to enhance quality standards of training
  processes.

The assertion of the importance of the integration of ICT in the renewal of
traditional teaching and learning systems, the use of WBT as an innovating method

39

of distributing knowledge and instruction via web together with the use of telematic tools and resources based upon collaboration and co-operation for training teachers of English as a foreign language in the Catalan educational system constitute the departing point of this doctoral thesis.

Chapter 2

Resources For On-Line Training

II. RESOURCES FOR ON-LINE TRAINING

II.I Integrating resources:

The profusion and the emergence of new teaching and learning spaces has generated resources for on-line training and learning. With the increasement in the use of information and communication technology in education and learning, there has been a shift away from an 'enhanced' model in which the use of ICT is not simple to an integrated model, which supports and manages learning. The functionality that has been reached by computer-mediated communications together with on-line systems for the delivery of course materials and curriculum content have given way to new learning management methods.

One of the main concerns of contemporary teachers and trainers refers to the design and implementation of new training processes which have to meet the challenges and necessities of the digital age. Due to the complexity and variety of the different proposals that can be taken into consideration, we will refer to certain training proposals which will directly be developed in the practical part of this doctoral dissertation. On the one hand we will refer to different means of integrating resources, the Virtual Resource center and Virtual Learning environments to move on to analyze new teaching and learning strategies and methodologies: collaborative Work in virtual spaces as it is confronted to autonomous work and self-regulated learning, to reach in the end the bridging point between e-learning and knowledge management: Virtual Learning Communities.

To conclude, a general overview on the basis for the design and creation of instructional material will be given, setting up the theoretical basis for the development of instructional contents which will be carried out in the practical part of this thesis.

II.I.i Virtual Resource Centers

Set in the educational framework, there are contexts which manage information and contents together with resources for training. Such information has to be available to teachers and students who are involved in continuous processes of self-training. These new contexts and environments, often set in virtuality, have to manage enormous amounts of information and provide at the same time training to students and teachers involved in teaching and learning processes. Furthermore, this training and information is going to be life-long and account for a continuous type of learning. According to Gisbert (2004:259) in the future there will have to exist – not only in the academic field- centers from which all people will have access to information and training.

Virtual resource centers can have a double utility: as training tool complementary to teaching and learning processes which can be used in courses, seminars taking place under on-site, blended or distance modalities, or as repositories of specific content aimed at providing teachers with as much resources as they can provide. In this sense, Barceló and others (2000) state the need to create centers developed in order to provide support to the new activities that arise as a consequence of the integration of new technologies into educational processes. According to the same authors, these centers would have to integrate four basic functions:

FUNCTIONS OF VIRTUAL RESOURCE CENTERS
Training, assessment and support for the teacher
Support to students
Acquisition of material, maintenance of technological resources to share and for individual use. Virtual resource centers would function at the same time as repositories of already existing material of quality which could be of help to interested teachers
Research and implementation

We consider essential the fact of researching on the design, creation and development of research centers based upon networked technologies. These centers would allow to generate resources to support quality teaching and training and to create at the same time a space of reference to establish co-operation among teachers and students and to share experiences and findings. The creation and development of virtual resource centers aimed at training would enable teachers to generate, facilitate and share information and strategies and to promote –at the same time- an improvement of teaching practices, quality and competitiveness. Information management would also be covered as far as Virtual Resource Centers allow to centralize – in a virtual space- information that has been created by manifold users, and, at the same time, act as distribution canal of the information that –due to its relevance and quality - could become actually valuable.

In the field of English as a foreign language, there exist multilingual, virtual resource centers aimed at supporting and enhancing the teaching of foreign languages through the use of ICT. Virtual resource centres provide information about, and links to quality-assured on-line resources relating to the teaching and learning of English as a foreign language to which teachers can easily resort to. The aim of a virtual centre is to decide on, organize and catalogue resources which could be of significance and save time to teachers. An example of virtual resource centre is Lingu@net Europe, which offers access to a collection of over 1500 resources, from authentic teaching materials to planning documents and research bibliographies and gives teachers multilingual access to on-line resources. Virtual resource centres can be directed to teachers, trainers, policy makers, researchers and other members of the educational community involved in teaching or in whatever sector of education or training.

In Catalonia teachers may refer to the CRLE (Centre de Recursos de Llengües Estrangeres) which is a service of the General Subdirection of Permanent Training and Pedagogic Resources. Its functions are the following:

- Experimentation and diffusion of every type of didactic and technological innovations.
- Creation of a documental, accessible background on- line, to facilitate the educational task, the research and pedagogic research.
- Elaboration of didactic material for the different educational no university levels.
- Advice and information to carry out any pedagogic activity related with the students of foreign language.
- Diffusion of any general type of information of interest for centres and teachers, as courses, scholarships …
- Collaboration with other programs of the Department of Education and with institutions of other countries.
- Participation in projects funded by the EU.
- Participation and presentation of reports, communications or lectures in congresses, courses, seminars and pedagogic conferences.
- Endowment of diverse didactic material to the centers of pedagogic resources (CRPs).

Source: CRLE

II.I.ii Virtual Learning Environments

According to BECTA (2004) a virtual learning environment can be defined as a "standardized, computer-based environment that supports the delivery of web-based on-line learning. It might support learners both within an institution and also distance learners, who remotely access course and assessment materials". A Virtual Learning Environment can sustain a variety of learning contexts, from traditional classroom delivery to distance learning and on-line learning. Virtual Learning Environments cover the on-line communications that take place among learners and teachers.

Virtual Learning Environments are gradually becoming an essential part of the approach for delivering on-line and flexible learning, the main functions of them take into consideration the following aspects:

- Access to curriculum that has been classified into different sections which can be assessed and recorded separately.
- Track student activity and achievement using simple processes that teachers can define.
- Sustain on-line learning, access to learning resources, evaluation and management.
- Communication to provide direct support and feedback for learners and peer-group interactions that may report a sense of group identity and common interest .

There exists much confusion in literature on what a virtual learning environment should be. According to the report by BECTA (2004), a system which is "purely a conferencing and communications system with no place to put courseware could not qualify as a virtual learning environment; nor would a system which had content, but no way of tracking student activity and achievement against that content". In order to be a virtual learning environment, a system must contain all the principal functions as defined before.

Even though the employment of virtual learning environments in Secondary Education is not in reality as important as it is in Higher Education, the European Schoolnet study (EUROPEAN SCHOOLNET, 2003) provides relevant evidence of the way in which virtual learning environments are used in European schools. Results put forward that secondary teachers use virtual learning environments as part of a combination of diverse teaching styles, combining computer-based instruction with face-to-face teaching to form a 'blended learning' approach. According to this study, teachers use virtual learning environments more than students, making use of their organizational and communicative potentialities: they communicate with staff in their schools and with teachers from other schools through virtual learning

environments, commonly as part of international collaboration programmes. In teaching, virtual learning environments are used most often to teach ICT and other cross-curricular subjects and teachers use them to receive training and share experiences.

Continuing with the report by BECTA (2004) the specific components of a virtual learning environment are likely to include the following:

- Bulletin board
- Course outline (containing a course structure, assignments, assessment dates)
- E-mail
- Conferencing tools (asynchronous conferencing or discussion groups)
- Student home pages
- Meta data (to index keywording resources)
- Assignments
- Assessments
- Synchronous collaboration tools (whiteboards, chat, video conferencing...)
- Multimedia resources
- A file upload area (so students can upload their resources to a shared area)
- Calendar.

Among the common profits of using virtual learning environments, it can be concluded that both teachers and students can find it better to use ICT within an integrated environment which ensures them that communication canals can be improved by means of different communication tools, email, chats, forums…. Students may encounter flexibility (Jacobsen and Kremer, 2000), attain learning achievements regarding ICT, such as writing, understanding and presentation skills (Watts and Lloyd, 2000). stimulus and commitment are also reached (Watts and

Lloyd, 2000; at the same time there is a progress of higher level learning styles (Gibbs, 1999).

Literature also gives evidence that teachers commit themselves to the technology by sharing personal opinions and knowledge (Russell, 2000), while inactive teachers are asked to contribute more efficiently (Tanner and Jones, 2000). According to Pilkinton et al. (2000) the use of virtual learning environments among student teachers enhanced self-confidence and encouraged practice and collaboration after carrying out some research on this field.

To conclude, it should be borne in mind, after these considerations, that in order to obtain an effective use from using virtual learning environments, teachers need to see them from an educational perspective to determine whether technology can be embedded into their teaching and learning practice (Britain and Liber, 2000). Similarly, teachers need to become skilled at the use of new skills to participate in online discussions, create online materials and widen online tutoring techniques (Monteith and Smith, 2001). In order to succeed in this, it is obvious that they have to acquire specific training. Again, training and reliable technical support are crucial. It can be added that virtual learning environments are still somewhat new to schools, but they are likely to have a noteworthy impact on future teaching and learning processes, as it will happen with teacher training processes.

II.II. New Teaching and learning strategies

II.II.i. Collaborative Work in virtual spaces

This definition accounts for that type of work which is done by a group of individuals in order to achieve a common objective (Fandos 2003). Salinas (2000) states that collaborative work is the "individual acquisition of knowledge, skill and attitudes which take place as a result of group interaction", definition to which we completely agree. Within collaborative work, each of the group members provide and exchange information while they actively participate in decision-making and

problem resolution. Puente (2002) states that collaborative work has to be based upon four basic streamlines:

- Communication
- Organization (in terms of timing and role-distribution)
- Exposition and exchange of information
- Collection of ideas after a process of creation, discussion and concretion process.

In the collaborative model the group assumes responsibility and decides if they require more information on the tasks that have to be taken out. The tasks are also distributed among the members of the group and the teacher or trainer facilitates suggestions on the way in which the process have to be tackled. The main aim is that learners adopt an active, motivated and profound role in the learning process (Barajas, Scheuermann and Kikis, 2003)

As far as the use of different technological devices in collaborative environments is concerned the inclusion of ICT into teaching and learning practices, which will help the group in the use of different resources in order to accomplish different functions, appears of great relevance:

- to communicate: via e-mail, forum, chat… so as to share ideas, video-conferencing…
- to organize the group by means of different tools such as a schedule, bulletin boards, invitations and reminders to the different events of the group
- to expose ideas by means of images, simulations… Tools such as the blackboard or similar applications can be useful to accomplish group tasks
- to organize, classify and share information on the possibilities that collaborative work tools include, which may allow users to organize documents according to their learning needs.

49

Collaborative environments such as BSCW offer the possibility to promote collaborative work through the web. The use of this tool, however, requires certain training both regarding the attitude and the abilities to manage group work.

II.II.ii Autonomous Work and self-regulated learning

Under this approach, it is the subject who assumes the responsibility and control of his/her own learning. Torres (2003) revises the definition by Brockett and Hiemstra (1993:38) in which self-directed learning "describes a process in which the individual assumes the initiative in the diagnose of his/her learning needs, the formulation of learning goals, the identification of human and material resources needed to learn, the election and application of adequate learning strategies and the evaluation of the learning results".

The learner is in charge of constructing his/her knowledge and will have to adapt to the new requirements that the emergence of new technologies into education have brought with, that is, find useful information, possess a critical attitude towards it, select and contrast it … Within this pedagogical model, the learner becomes the center of the teaching and learning process and regulates it according to his/her own learning needs, the teacher will guide and accompany the learner providing and facilitating help, but not directing the process. Otherwise, and acccording to the same authors, teachers will have to develop several functions when referring to autonomous work:

- Provide information on certain topics through conference and audio-visual means
- Serve and act as resource in relation to certain parts of the contents to be learnt
- Help learners to value their needs and competences so as they can keep track of their individual learning itinerary
- Provide feed-back

- Locate resources

- Establish contact with specialists

- Collaborate with students and stimulate them

- Help learners to develop an independent attitude

- Encourage discussion and group activities

In the end, and when it is possible, the teacher will end up transferring the whole control and management of the learning process to the learner. It is for this reason that the learner will have to be more trained to self-regulate his/her own learning pace and will have to develop skill by means of decision-taking and diagnosis of learning needs. Within this process, s/he will have to choose the suitable means to achieve an appropriate instructional itinerary which will allow him/her to reach a significative construction of knowledge.

II.II.iii. Virtual learning Communities

Although Collaborative learning rather obviously implies learning with others it seems that it becomes more powerful and exciting when it occurs in the context of a **community of practice**. A community of practice could be formed by a well-defined small group (e.g. a research group at a university) or a large collective (people involved in a certain discipline). Such communities have developed a level of trust and evolved sets of assumptions, practices, hierarchies, and projects which enable their members to work together. In the real world we learn most in the process of becoming part of such a community and of contributing to what it is doing.

In *A Guide to managing knowledge: Cultivating communities of Practice*, Wenger, McDermont and Synder (2002) define communities of practice as having the following characteristics: "They are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interaction on an ongoing basis". Typically they "share information, insight and advise; help each other solve problems; discuss situations;

51

their aspirations and their needs; ponder common issues; explore ideas; and act as sounding boards; may create documents...." Their sense of identity is created through interactions and exchanges over time, which continually combine the personal/social and instrumental/business concerns of members. Thus, according to these authors, communities of practice:

- are important sites of knowledge development and accumulation
- provide a different approach to providing knowledge
- have a value derived from learning both formally and informally
- have both tangible and intangible outcomes
- over time, can develop a sense of identity

Although it has already been established, there are certain differences between communities of practice and virtual learning communities. Virtual learning communities embody the generation of collective spaces for the exchange and communication among its members, they are basically constituted from scientific, educational and social circles, which encourage change and innovation. They constitute non-hierarchical organizations and continuously engender networks of participants out of which other networks can be born.

When considering the basis for the creation of virtual communities of practice several aspects have to be taken into account:

- The inclusion of determined training objectives
- The recreation of social learning processes
- Virtual learning communities have to be designed attending to the professional development of teachers, in this case, of English as a foreign language teachers.
- The training objectives are usually mid or long-term designed the same as the planification of the training process.

Regarding the use of virtual environments which provide support to the existence of virtual learning communities, there are aspects related both to usability and to sociability (Gisbert, 2006) which will have to be accomplished:

Usability	Sociability
Interaction	Policy regarding members
Navigation	Code of conduct
Registration	Security
Representation of users	Privacy
Format of Messages	Author rights
Tools of support	Interventions

In accordance to Gisbert, the studies by Dias (2001) regarding virtual learning communities reinforce the ideas previously stated and go further: "Learning in the Web learning communities is based on the networked interaction and communication and on the collaborative processes in the experience and knowledge building. The author claims for the importance of the organisational linkage existing between the "knowledge through the collective and strongly interactive communication, among the individuals and between these and the distributed representation systems". Again, collaboration is remarked as a very important aspect to involve the community in both knowledge sharing and the participation in the construction of learning.

Several European initiatives have tried to link continuing professional development with the creation of virtual learning communities. Thus, the National College for school leadership launched in 2003 an online community environment addressed to school teachers which "sought to leveragethe idea of communitites in support of learning goals". In this sense,and considering the functions of virtual learning communitites, Goodfellow (2003) states: "the underlying question is whether a virtual learning community is simply a context in which distributed individuals learn together, or whether it can play a role of helping a wider community to

improve its practices". According to this author it can be stated that the emergence of a virtual community may itself become a learning outcome for the participants in a virtual learning environment.

Other examples of practices with educational learning communities are NCSL, Learning Schools Programme, the Inquiry Learning Forum and the Tapped-In Project.

II.III. Creation of on-line instructional materials

II.III.i Basis for the design and creation of instructional material

According to Cabero (2004: 6) and referring to the principles for the production of materials in the Net, there are some basic elements that guarantee the success of a formative action based on the Net: the virtual tutorship, the activities that are suggested, and the design, the structure and organization of the material. Thus, a website dedicated to training must have different types of elements, the emphasis of which can be placed both in the contents and in the telematic environment, which will be especially devoted to the management of the training material: texts, diagrams and animation, audio and video clips, connections to databases, tools of both synchronous and asynchronous communication, an area for collaborative work… Besides, it is convenient that these environments offer different possibilities so that the teacher can go on and evaluate the teaching-learning process, carrying out and establishing some strategies suitable for the training. De Benito (2000), and De Benito and Salinas (2002) have developed an extensive work related to the possibilities of the different web tools and their educational use, giving strategies for an effective use of them.

Ellis and others (1999) recall our attention with regards to some of the key decisions a teacher should adopt in order to select the most significant characteristics that a instructional web-based environment should contain.

Specifically focussing upon websites devoted to training, the author mentions the following items:

1.- Course contents (with modification and personalization possibilities)

2.- Working skills and competencies (including those contents and resources needed to meet the requirements of the different activities)

3.- Templates and authoring tools

4.- Registration of use

5.- Places of access and security

6.- Course catalogue

7.- Use of statistics and other reports which can be used to evaluate the success of the programs

8.- Use of profiles and information which could provide to the individual users of the material some feed-back on his/her progress

9.- Guidelines for successful navigation in order to guide the students on the use of resources that can be appropriate for them

10.- Inclusion of instruments which can test the value of the platform and the use that students make of the different resources for training purposes

11.- Inclusion of tools for evaluation

12.- Existence of both synchronous and asynchronous tools of communication

13.- Elements for practice and revision so that the different users can have access to the practices and revise the materials with additional resources

14.- Access to other on-line resources

In this sense (Cabero and Gisbert, 2002) face the the issue of the pedagogic, technical and esthetic elements to be borne in mind when accounting for the design of instructional spaces. Specifically, the authors set off of the idea that the design of materials in the Net must break up traditional paradigms included in printed material. According to these authors, the design of these materials must include different elements that range from the specification of the goals the user has to achieve to the scheme of the contents that will be developed in different

units, the existence of an introduction and presentation of recommendations for the study, the proposal of activities that learners must carry out, summaries containing the most outstanding ideas.

Cabero (2000:92-93) indicates some general principles that should be contemplated when conceiving the elaboration and presentation of contents:

a.- Offer materials that develop different points of view on an issue

b.- Present uncompleted materials to the user which will ask from him/her to proceed in the search of information or resources

c.- Use a progressive difficulty in the presentation of the materials

The author goes on and provides different proposals which are directly linked to different learning approaches:

- Lack of great differences between the transmitted knowledge and the problems to be solved
- The presentation of real and significant problems for learners
- Similarity with the context where the contents and activities are presented and the contexts where they will be implemented later on
- Offer different perspectives from which a problem can be analyzed and understood
- The use of practical cases that provide different experiences of learning which can easily be put into context
- Favor an active and constructive participation of the learner in the construction of the knowledge

Chapter 3

English language teaching in the digital era:

from CALL to Web-based learning

III.- ENGLISH LANGUAGE TEACHING IN THE DIGITAL ERA: FROM CALL TO WEB-BASED LEARNING.

III.I.   ICT in the English as a foreign language Curriculum

In the current educational system in Catalonia the study of at least a foreign language is compulsory from the age of 6 years, however, the introduction of a foreign language may be allowed and carried out at previous ages. In Catalonia English as a foreign language constitutes a core curricular area both in Compulsory Secondary Education (ESO) and in Post-Compulsory Secondary Education (Batxillerat). Regarding vocational Training the study of a foreign language is compulsory in certain areas. The acquisition of the ability to communicate in a language xc which is different from the native language is the main reason which justifies its inclusion in the Curriculum in almost all educational levels of the Catalan System. Despite this basic instrumental function, in the Common European Framework of Reference for Languages the Council of Europe highlights and stresses those aspects related to the learner's upbringing: "Learning a language is a privileged process to appreciate and value cultural diversity and one's own identity and to develop a critical and open attitude towards cultural matters".

As it is established in the Curriculum "the student is the center of the learning process, assisted by the teacher who acts as a referent. The function of the teacher is defined as of pedagogical intervention which will guide and facilitate the process of creative construction of learning. Thus, it will be necessary to favor proposals and diverse learning strategies respecting always the principles which promote a significative type of learning. The Common European Framework of Reference for Languages elaborated by the Council of Europe has been promoted by the Departaments of Culture and Education of the Generalitat de Catalunya as one of the objectives of 2001.

Traditionally, the concept of curriculum has been centered upon teaching rather than learning, the role of teachers has been that of transmitting information

instead of awakening the students' interest towards learning and their ability to interpret and make sense of information in order to solve educational requirements.   Schools do not have autonomy to decide upon educational resources and media, and what is more, they cannot decide what to teach, since that is regulated by the Ministry of Education. It is for this reason that the decisions on how to teach are extremely interrelated with the selections and contents of the curriculum.

Thus, teachers who may endeavor to try an instructive use of ICT in order to improve teaching and learning processes will have to pay attention to aspects which will range from the kind of curriculum that is used, the type of learning it favours, the available media at to schools in order to support this type of learning, the type of usage that teachers can make of the media they have at reach and fundamentally, in what sense the conception and practice of the curriculum should vary in order that the use of ICT would give way to a significant improvement of teaching and learning processes.

In order to answer to some of these questions we would like to make a detailed distinction between the "disciplinary curriculum" as opposed to the integrated one. The disciplinary curriculum, based upon academic disciplines, is mainly centered around abstract knowledge. Its main traits are the following:

- It facilitates the control of teaching and learning processes to a center of power: administration, managers of educational centers, educational authorities…, leaving diversity and distinctive realities aside.
- It is mainly centered on the teachers and their actions.
- It is addressed to well-adapted students
- It adopts an excessive instructional pedagogical approach, mainly based upon textbooks.

This notion of curriculum avoids the emergence of new pedagogical paradigms and at the same time difficults the usage of ICT in both the planification and

development of teaching and learning processes.

Opposed to this, the integrated curriculum is based upon constructivist basis by which what is taught has to be tailored to the level of development of students, and essentially inquires and reviews the knowledge of the subject and its association with other elements taking part within the educational process. Authors such as Hernández (2001), Hargreaves et al. (1998), Yus (2001) and Guarro (2001) claim for an integrated curriculum as a means to confront the new challenges of education in a constantly changing world.

Therefore, schools which wish an integrated curriculum will have to try to build alternative curricular projects which will support students and will not be foccused upon contents, but on their connection. Students will have to cope with investigation and research methods in order to solve problems which are going to be thoroughly linked to real-life situations. The **integrated curriculum**:

- Allows students to become skilled at the actions of what to do and think in order to have contact to a life-long type of learning, thus, students can understand the "formative and educational component of ICT as a really basic tool to treat information and access to knowledge".
- Will call for from schools a regular updating in practices and an essential scaffolding to students in order to facilitate the exploration of reality and their experiences.
- Encounters in project-based work a proper milieu from which the need to comprehend the different disciplines and their associations is answered, and what is more, allow students to develop at their own tempo.

Alonso (2001) agrees with this idea of the integrated curriculum and accounts for the curricular integration of the media understood as a "know-how" which is intimately closed with the knowledges of the curriculum, of didactics itself and to other relevant fields of study.

All these factors guide us to detail different necessities: on the one hand, teachers have to work collaboratively and share their work and experiences. The teacher will have to be impartial and act as a partner and finally, time and space barriers recover a unique dimension, especially with the development of different and new teaching and learning scenarios.

Despite all the advantages of the integrated curriculum, educators and teachers regard change with reluctance, as it has been exposed in previous chapters. A change in mentality is crucial, teaching and learning methods in the era of Knowledge have to be revisited, the same as the role of the media that will be used in the processes, the revision of evaluation and above all, a reconsideration of initial training and life-long teacher training plans. Sancho (2005) enumerates different factors to be overcome to succeed in the change from a disciplinary curriculum to the integrated one:

- An effort by educational administrators to deposit more confidence, autonomy and resources at schools.
- Organizational changes which would have to diversify teaching and learning spaces taking into account an overall inclusion of ICT.
- Teachers would have to acquire abilities and pedagogical knowledge to get on well with the new role of facilitators of knowledge.
- Learners would have to be given collaborative learning spaces in which they would be conscious of their own responsibility in the learning process and aware of the need to find reasons and different ways of learning.
- Centers should promote Learning Communities in which families would find guidance and thus they would be able to play an active part in the teaching and learning processes of students.

Significant learning requires that information is contextualised and that students make progress and establish relationships with other areas of the curriculum. Digital spheres such as the WWW, CD-Roms and multimedia applications endow with that link and justify the need to re-organize the curriculum. According to Lixl-

Purcell (2003) the field of foreign language instruction is situated in the foreground of this curricular shift.

Within the field of English Language Teaching (ELT), the growing importance of ICT has led -at the same time- to an enormous effort on the autonomous Catalan government's part to implement and encourage its use and good practice and to favor -at the same time- its integration within English Language teaching. Effort carried out by the Centre de Recursos de Llengües Estrangeres (CRLE) of the Departament d´Educació and the Àrea de les Tecnologies de la Informació i la Comunicació, depending on the Catalan Government Departament of Education. Field of research of this project, the English language becomes an exceptional area of knowledge due to its intrinsic communicative trait as an ubiquitous language in the World Wide Web that allows access to knowledge and information and -above all- because it contributes to favor communication and exchange in our XXIst century contemporary digital society.

As far as the curriculum 's requirements are concerned, the Education Law (1992 and its amendments 2000) and the recently approved LOE (Ley Orgánica de Educación, 2006) clearly state that ICT should be integrated across the curriculum. Many of the general requirements and those specific for the language area apply consequently to the foreign language curriculum; the following are references to the use of ICT in the secondary foreign language curriculum:

- Pupils will learn to use printed material (dictionaries, indexes, encyclopaedias, reference books, and newspapers) and other ICT-based sources (oral, audio-visual, electronic).
- Pupils will work with diverse types of texts and documents, their presentation including electronic formats (CD-ROM, web pages).
- Pupils will use traditional oral and written environments as well as audio-visual resources and electronic communication environments.
- Pupils will make use of the Internet to participate in a chat or a discussion forum, with a specific well-structured task (compulsory

education).

- Pupils will take active part in Internet discussion forums (post-compulsory education).

- Pupils will use e-mail to ask for information, apologise, complain... (post-compulsory education).

- Pupils will become aware of the important role of foreign languages in using ICT.

Regarding teacher training and the integration of ICT, among other factors, The Catalan Department of Education established in 1986 these two units:

Subdirecció general de Tecnologies de l' Informació (ICT in Education Area – formerly PIE) PIE to set up and coordinate action plans related to ICT in education, and **CRLE** (Resource Centre for Foreign Languages) those concerning foreign language teaching and learning. The growing significance of ICT potentiality in the field of foreign language education has led in the last decade to a close partnership between these two units in the realization of action plans to make ICT integration in the language curriculum feasible. This has implied provision of tools and supplies (CD-ROMs, e-learning...) to all schools, teacher training and ready-to-use classroom material devise, as well as diffusion of good practice.

Regarding teacher training, present Catalan Education policy is characterized by the encouragement of the use of technologies in schools by means of infrastructure and investment, hardware, in-service training… Alltogether tied with in-service training and initial teacher education. From the year 1999 all student teachers are obliged to have achieved a number of ICT-related standards as an integral and compulsory part of their training. As far as the equipment is concerned, the government has carried out enormous attempt to supply Internet connection and equipment (hardware and software) to all schools, considering to suit the needs of foreign language teaching and learning and to promote and hold students' progress regarding information management and communication strategies.

School ICT policy concerning computer and information literacy skills must demonstrate confidence on the educational impact and benefit of using ICT in any subject area. As representatives of the CRLE state: "whenever ICT has not been considered as related to language learning, English as a foreign language teachers have tackled great limitations in accessing hardware and software, even when there have been instructions from the part of the Ministry of Education that the equipment was specifically addressed to FL teaching and learning". At the beginning, when technologies reached schools they were often supposed as being optional, rather than tools for achieving better learning results. At the moment, teacher training institutions have accounted for the need to include technology training elements in their curricula and advice that Teacher Training in technology as it has been previously stated in this thesis should go beyond ICT skills training to include instructional design and classroom strategies.

There is enough evidence that the integration of ICT into the Curriculum in various ways can enhance pupil's learning (Leask and Pachler, 2001), however, teachers will need to work and learn together to establish new and high quality professional practice. Teaching needs to find solution to issues related to a wider use of ICT such as resourcing, training and the development of new pedagogical skills: "the learning curve for many teachers is very steep, but the challenge of changing practice must be saved if children are to be properly prepared to face life in the XXIst century and not ghettoised from an early age into the "information rich" and the "information poor" sections of society." The authors go on ..."networks of colleagues provide us with opportunities to extent our skills and knowledge in the area of ICT. Teachers need to be committed to the notion of life-long learning and continuing professional development." (Leask and Pachler, 2001:18)

As a conclusion to all that has been previously stated all throughout this chapter we would like to point out the following points. It is necessary to adapt the curriculum in order that best practices are achievable and determine how ICTs will be used to support best practices and curriculum, that is, how learning objectives and outcomes are served by the most effective tools for the job. In order to carry

out such an overwhelming enterprise, teachers will need to work and learn together to establish new and high quality professional practice and continuing professional development seems to be one of the keys to reach success.

III.II. ICT and the teaching of English as a foreign language (EFL)

Technology has backed up in many different ways the teaching and learning of foreign languages, in the case of this research we will specifically deal with English. The technological and pedagogical advances that have been taking place in the Society of Information first, and the Society of Knowledge later, have reshaped in a progressive and constant way the current panorama in which research in English Language Teaching is confined. Marsh and others (2002:35) underline important changes in the methodological approaches of teaching foreign languages in Europe during the last twenty years. The authors highlight the positive impact of implementing ICT both on the teacher's and the learner's attitudes basically as a consequence of the changes and advances in teaching and learning theories. Computer-Assisted Language Learning (CALL) - primarily- and the use of the Web to teach and learn (WBT) in a second place shape the two most recurrent and central research streamlines of present times.

A recent report by BECTA (2004) is deeply concerned with the use of ICT in modern foreign languages. This report is based on an analysis of available research about how primary and secondary teachers are using ICT in the teaching of Modern Foreign Languages. The main key findings are thoroughly exposed whereas available resources for introducing ICT into FL teaching are also mentioned. Thus, ICT can contribute to the key Modern Foreign Languages (MFL) skills of listening, speaking, reading and writing through a variety of ways:

● Digital resources such as those on the internet, CD-Roms, vocabulary databases and video clips give access to a vast range of information and learning opportunities

● Pupils can work at their own pace as digital resources can be slowed and replayed repeatedly according to individual need

● Access to authentic materials, and communication with schools abroad via video conferencing, email and discussion forums in the target language facilitate cultural awareness

● Multimedia presentation software enables a range of MFL skills to be practised and supports a range of learning styles

● Word-processing applications allow pupils to plan, draft and edit their work and develop skimming and scanning techniques

● Digital video can offer feedback on pupils' language performance for self-critique, teacher or peer evaluation

● Personal interest in MFL can be encouraged by watching films in DVD format with subtitles and multiple audio tracks in different languages.

This report considers not just the technologies themselves but also the pedagogical implications and the support necessary to enhance learning and teaching of Modern foreign languages.

The fact of analysing the great importance that new technologies place upon teaching and learning processes has to be viewed under the perspective of English language learning. The mentioned report refers to the literature and research carried out in this field. In this sense the report establishes a number of key benefits which have been identified from the research evidence:

- Increase in pupils' motivation, enthusiasm and confidence
- Positive association with attainment
- Learning possibilities expanded via collaboration, interaction and communication in the target language
- Potential for differentiation according to individual pupil need

Teachers can maximise the impact of ICT in MFL teaching by:

66

1. maximising access to ICT resources
2. using the advantages of multimedia to engage the learners' interest and develop their key skills
3. using ICT to interact with native speakers and authentic materials

On the basis of Becta's analysis, ICT can have positive effects in the teaching and learning of MFL. The study signals benefits for both students and teachers. As far as the benefits for pupils are concerned, it seems that digital resources facilitate pupils to put into practice individually what they have previously learnt (Passey et al., 2004), at the time that they can be slowed down for better understanding. According to Teachernet (undated), a real successful way of communication wide-reaching can be completed by means of videoconferencing with native speakers, which can convey a rich and real experience to students. Otherwise, pupils can be helped by word processors and their applications to review, edit and summarise texts. E-mail correspondence with 'e-pals' – constitutes another important communication tool which can have a positive impact on grammar, vocabulary and tenses (Blyth, 2001).

As far as the benefits for teachers are concerned, it seems that there is an affirmative relationship of the use of ICT in Modern Foreign languages with achievement (Harrison et al., 2002). Thee are tools such as interactive whiteboards which seem to make possible enhanced delivery and pace, communication and debate, and transmit enthusiasm for both teachers and pupils (Passey et al., 2004). To these authors, individual learners' needs can be better supported. Teachers may also resort to a selection of resources which can be used to cater for specific training needs. With the help of ICT there is the possibility to easily access native speakers and their culture (Harris and Kington, 2002). Finally, multimedia resources consent teachers to utilize visual, audio and text practice in the target language.

Despite these statements, the level of research related to the role of ICT in modern foreign language teaching and learning is still constrained and limited.

Much of the existing studies provide case studies and models of teachers using ICT in their practice, and underline many hopeful results, however, long-term academic studies are also requested if we want to obtain a clearer picture of the uses and benefits of ICT in the teaching and learning of English as a foreign language. The report on ICT in Foreign Language Technologies (ICC, 2003), which looked at current developments across Europe, notes that MFL is different from many other subjects. ICT can be used to support and develop all the key curriculum MFL skills of listening, speaking, reading and writing; often with overlapping benefits across them (TOP,2001). Resources such as digital video can provide a predominantly successful way to sustain language acquisition in the classroom (Tschirner, 2001). Video conferencing has shown benefits in listening and speaking skills (Harris and Kington, 2002). The key skills required for MFL can all be provided by multimedia applications such as interactive software, videos, CD-Rom dictionaries, digital voice recordings.. and others, as it can be derived from the BECTA study (2004).

Other investigations (Blow, 2001;TOP, 2001) also report for a positive outcome of ICT upon pupils'achievement. ICT can assist pupils become more self-confident and proficient in their learning (Passey et al., 2004; TOP, 2001). ICT can bring in contact with native speakers and their culture, either through digital means or by means of direct communication. E-mail, which is regularly utilized to keep up collaborative projects with schools, can support language learning (Usher, 2001), and convince students to aspire at superior accuracy and attainment. In addition, the use of ICT eases pupils' understanding of other cultural demonstrations, enabling them to value difference.

It is needless to say that both communication with native speakers, and information extracted from realia or authentic fonts (Internet, radio and satellite TV broadcasts…) contribute to language learning.

The integration of ICT into classroom activities allow attention to diversity and students can evolve at their own tempo, attain personalised answers and reach

autonomy of learning. Teachers can take charge of individual progress and present formative and summative evaluation. Passey et al. (2004) state that " ICT also enables a multi-sensory approach to be exploited, potentially engaging pupils who would otherwise not explore their full potential".

Considering diverse reccommendations for an effective use of ICT into the English as a foreign language it is clear that teachers need frequent access to ICT resources in order to be able to use them into their daily teaching. It is actually significant that students and teachers grow to be acquainted with the equipment they are going to employ in order to take advantage from technology.

Continuing professional development for teachers (ICC, 2003) and the achievement of competencies on the use of ICT becomes essential and key to reach a successful implementation and quality standards in teaching and learning processes. As it has been previously stated, up to date lines of investigation show that ICT facilitate a range of helpful benefits. The achievement of success will depend on the teachers capacity to use ICT as an valuable pedagogical tool in the quest of determined learning objectives.

III.III. Current research trends: From CALL to Web-based Learning/Training and the new emerging technologies

Warschauer (1996) describes three phases in the implementation of CALL in the teaching and learning of foreign language processes. First, a behaviorist phase which used repetition (drilling) as learning methodology and was approximately used until the 70´s. Secondly, the communicative phase, which was used throughout the 70´s and 80´s; in which communicative approaches emphasize learning as a discovery process of expression and development and finally a third phase: integrative or constructivist which encompasses the periods from the late 90´s to the present times. Socio-cognitive approaches enhanced the use of language in authentic social contexts, thus, methodologies based upon tasks (task-based), projects (project-based) or contents (content-based) aim at the learner's

integration within real learning environments together with the inclusion of the four language learning skills and use in the process.

According to Warschauer (1996), with the irruption of new technologies in the educational scenario, a new perspective related to technology and language learning known as Integrative CALL allows technology to be fully incorporated in the process and gives the student the possibility of using a great variety of technological tools and resources.

As Internet has transformed communication around the world, its irruption in the context of teaching and learning a foreign language supposed a revolution as well. '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). As LeLoup and Ponterio (1996) point out "there is a great number of aspects inherent to the Internet which make it particularly suitable for language teaching and describe the World Wide Web as a real treasure of authentic materials for foreign language teachers. Both authors enhance -at the same time- the positive impact of ICT upon teacher and student's attitudes.

The World Wide Web appears to be the most powerful computer-assisted means of communication introduced in the teaching and learning of a foreign language and teachers have the possibility of using it in a wide range of applications that help them in multiple forms to enrich the foreign language classroom; to deliver linguistic exercises, to access authentic materials, to stimulate communication, to carry out projects, to share opinions and ideas, to work in collaborative and co-operative ways. We understand Computer-Mediated Communication as that communication which is made possible through computer technology in both synchronous and asynchronous settings (Permanyer, 2002); definitively the types of pedagogical practices based upon electronic communication such as exchanges,

project work, communicative tasks, simulations, chats… and the teaching of English as a foreign language through the Internet (WBT) has clearly supposed a new departing point form which ELT has to be understood. The use of the Net, furthermore, encourages an interactive learning process which takes place in favorable communicative situations and favors at the same time collaboration and co-operation.

Computer-based reference resources help out in the change from the teacher being a sole transmitter of knowledge to provide learners by rapid access to information. Technology can grant the basis for a more oriented pedagogy which highlights learning over the linear transfer of knowledge (Lixl-Purcell, 2003) and Pachler (2001:68). As far as the creation of materials is concerned: "Web-based training needs to be carefully planned, clearly planned, carefully structured and well-sequenced". Regarding the creation of Internet-based activities the usual stages of preliminary activities are similarly valid to the teaching that doesn't make use of Internet-based material.

According to Kern, Ware and Warschauer (2004) research on networked language learning is now entering a second decade. Whereas earlier research had been mainly centered on the linguistic and affective characteristics of computer-assisted discussion in single classrooms, recent research focuses on long-distance collaboration, which basically involves diverse learners who operate with different cultural backgrounds, communicative expectations and rhetorical frameworks. It is within this context that communicative tasks take place both inside and outside the class, and they are based upon student's own schedules, posing namely important research challenges. This shift covers mainly three aspects:

- it expands the focus beyond language learning to place the emphasis on culture (intercultural competence, cultural learning, cultural literacy…)
- it expands the notion of context beyond the local setting to include social discourses
- it brings about notions such as communication and intercultural

competence.

Several authors incorporate the notion of "electronic literacies" as an alternative to CALL when it is applied to on-line instruction (Warchauer 2000, 2001) and after conducting some research in a case study of four college technology-enhanced language and writing classes, research showed that learners took the objective of learning new semiotic skills in on-line media rather than carrying CALL. Following this line of work, Shetzer and Warchauer (2001) develop this concept of electronic literacies and how best to develop them in terms of communication, construction of knowledge, research and autonomous learning. This same author (2004) shows the Internet as an authentic communication medium in its own right. Language educators should use the Internet not so much to teach the same thing in a different way, but to help students "enter a new realm of collaborative enquiry and construction of knowledge, viewing their expanding repertoire of identities and communication strategies as resources in the process". It is obvious that teachers have to be ready to be able to cope with such a challenge.

A specific section on the new emerging technologies and their usage in English as a foreign language is available in the next chapter devoted to tools, resources and electronic activities for teachers.

Chapter 4

Teacher training in ICT: state of the art and future perspectives: the Catalan model. ICT competencies for English language teachers

IV.- TEACHER TRAINING IN ICT: STATE OF THE ART AND FUTURE PERSPECTIVES: THE CATALAN MODEL. ICT COMPETENCIES FOR ENGLISH LANGUAGE TEACHERS.

Nowadays the new technological means offer to teachers a great scope of varied educational contents which favor autonomous and diversified learning. Teachers are required to abandon traditional roles and to act as guides and facilitators of knowledge, encouraging, at the same time, co-operative and collaborative procedures. Furthermore, they are expected to be acquainted with the new technological media, that is to become media-literate teachers and to be able to manage different learning scenarios in which skills, experience and knowledge have to be complemented. In a more specific area, the teacher has to be familiar with the software with which s/he will work and be able to choose and evaluate learning materials, finally s/he will be required to solve theoretical and practical problems as they may arise, as it is stated by the ICC (2002:9-16) when considering the new teacher's role.

IV.I. Teacher Training in ICT. Basic Competencies.

One of the greatest concerns of teachers towards ICT has been that of acquiring the necessary knowledge and competence to cope with change. Despite this fact, many teachers consider they lack training in the usage of new media and the means of processing information, while aspects such as attitudinal and ideological contents have been left aside, difficulting to a great extent the development of critical and responsible attitudes towards ICT (Santandreu, 2004:11). Educational institutions have carried out an enormous effort in order to successfully integrate ICT into teaching and learning processes, although we could suggest that this has been done in a non-systematic way. Despite this fact, in the recent years the number of equipment in our schools, the participation of teachers in training courses as well as the number of educational experiences concerning ICT have increased significantly.

74

As authors such as Cabero, Duarte and Barroso (1997) suggest, the fact of having more equipment in the educational centres and the training that teachers receive is not enough to appreciate important changes in teaching and learning processes: "Nowadays, there is a paradox in the fact that there exists a great variety of technologies, sometimes even in the centres, as it had never occurred before. On the other hand we find that educational practices still rely on two basic means: the textbook and the teacher as sole transmitter and information provider. The necessity of specific training related to the curricular and didactic usage of technological tools and to the design and creation of messages more adapted to our educational needs may be one of the problems. Cabero (1998) states that most training has been developed according to technical and instrumental criteria, whereas other aspects such as references to their utilisation , organisation and didactic design have not been included. Cebrian de la Serna (1995) stated: "Today, the quality of the educational product is to be found in the initial and life-long training and not in the unique acquisition and utilisation of the infrastructure".

According to Majó and Marquès (2002) the preparation and the competencies of teacher as a result of their training have to change due to the following facts:

- The teacher has to cope with more complex situations in which students are more heterogeneous but more familiar with the different communication means.
- The changes in the contents to be taught and the instruments to be used, bearing in mind ICT, the increasement in the functions to be developed by the teacher and the evolvement of didactic methodologies.
- The need of a permanent lifelong learning and a constant updating of knowledge.

The existing literature related to teacher training in ICT is widespread: Bautista (1994), Cabero et al. (1994, 1996), Cabero (1998), Martínez (1995), Romero (2000), coincide in the necessity of developing training actions as a basic condition for a successful implementation of ICT in schools, but also bearing in mind a basic

factor, in our opinion, key to reach success: the combination of technological knowledge together with the didactic use of them , which would include aspects such as the creation of activities, the integration of IT in the teaching and learning process, the evaluation of the student's progress… In this sense, Correa (1999) states: "without training in the field of ICT, the school won't be able to meet the challenge that Information Society is calling for. The objectives of this training have primarily to respond to the needs that recent telematic tools are asking for, and develop a movement of pedagogical renewal which will enable a curricular integration of the new multimedia materials"

Cabero (1998) states that "the training plans that have been developed with a deep technical and esthetical background have not been useful to help teachers to integrate in the curriculum the didactic instruments and media and reveals them as serious problems which prevent a successful integration of ICT into TEACHING AND LEARNING processes. The lack of specific training on ICT addressed to teachers has obviously been object of many comments by many authors. Thus, authors such as Fernández Morante and Cebreiro (2002) , Blázquez et al. (2002) and Cabero et al. (2003) agree with this statement and go on by stating that the lack of didactic training poses a serious problem in the integration of media in educational centers, at the time that limit the possibilities of participation and intervention of teachers and manifest that usually training is essentially devoted to the acquisition of technical and instrumental skill and knowledge while important aspects such as the didactic usage and the design and production of materials are not even mentioned.

In this sense, Cabero (1998) draws a distinction of what teacher training in media should be and in order to clarify concepts, he establishes two differentiated approaches to training which have to be borne in mind, in our opinion, if we wish to account for a successful implementation of technological resources in teaching and learning practices. Consequently, the author makes a first reference to **"training for the media"**, set in order to acquire knowledge in the use of the means, that is to acquire skill to interpret and decode systems of the different

means. The teachers thus, can be able to better capture information and better interpret the messages received form the different media (Cabero:2003). On the other hand, this same author, makes reference to the concepts of **"training with the media"** which introduces the vision of a training much more devoted to the use of the means as didactic instruments which favor the development of cognitive abilities, stimulate the understanding of information and the creation of differentiated environments for learning.

The scarce importance that has traditionally been put into the teacher as creator of instructional material becomes one of the reasons by which teacher training in means is carried out under the first categorization, that is training for the media. Romero (2002) states –in accordance to this- that the media have an intrinsec educational value and that it is enough to integrate them into teaching and learning processes, provides another of the reasons by which training with the media is not as widespread as it should be.

Cabero (2003:87) states that "One of the problems we encounter when trying to implement in the curriculum the different media (ICT, audio-visual…) is closely related with the training the teacher has towards them. In order for students to achieve success, the capacitating of teachers is considered to be –after familiar environments- the most determining aspect. In order to be able and enable teachers to reach this capacitation, it is crucial to analyze which competencies will allow them to develop and carry out their functions properly. In order to do this, we will draw our attention to the basic competencies in ICT that English Language Teachers should possess.

Majó and Marqués (2002) point out that the teacher's readiness and capacity is – after familiar factors- the most relevant clue to achieve success with students. It is from this viewpoint that we would like to review the basic competencies a teacher should have and constantly revisit and update related to ICT and their inclusion in teaching and learning processes: **ICT basic competencies**. According to the same

authors, the necessary competencies a teacher should compile should be classified in accordance to four basic dimensions and competencies.

Once these basic dimensions have been set up, and due to the lack of specific training for teachers regarding all the pedagogic changes that have been brought about by the irruption of new technologies, the same authors state that administrations should agree in stating certain basic competencies that all teachers should possess and constantly update and revise.

1. Knowledge of the field area s/he is going to teach (Cultural competency)
2. Pedagogic Competencies: didactic abilities, tutories, research-action techniques, social and psychologic knowledge (conflict-solving, treatment of diversity, group dynamics…
3. Instrumental abilities and awareness of new languages: ICT, audio-visual / hipertextual languages….
4. Personal traits such as self-esteem, maturity, empathy, self-confidence…

ICT basic competencies for teachers

The same authors account for nine different blocs regarding competencies:

1.- ICT

2.- Audio-visual language

3.- Good didactic practices

4.- Acquisition of pedagogical skill in the area

5.- Multi-culturality

6.- Treatment of diversity

7.- Group dynamics

8.- Conflict solving

78

9.- Emotional Intelligence Components

Focussing our attention in the ICT competency, category, authors such as Salinas (2000), Majó and Marqués (2002), Bernard (1999), Cabero et al. (1999), Santandreu (2004) coincide in the most relevant aspects and elements which refer to the knowledge, abilities and basic skills upon which study plans should be built around and which teachers would have to acquire in order to efficiently work with ICT.

| NOWLEDGE, COMPETENCIES AND SKILLS IN THE USE OF ICT BY TEACHERS | a. To use ICT in classrooms of conventional educational centers | a.1.About the knowledge and technical domain in the use of the different technological means (hardware and software) | -Basic knowledge about the hardware and the different types of these technological systems.

-Knowledge about the components of basic computer systems. --The knowledge of these components will allow teachers and pupils to carry out learning experiences from the interactiveness and of the utilization of the different devices that facilitate the combination of images, text and sound. The technique facilitates the use of these elements without the need to have too much technical knowledge, since the technological environments every time are more amicable.

- Knowledge of the necessary skills in the personal as well as professional use of the tools of productivity, the processors of text, data bases, spreadsheets, printing utilities, graphs ., and the tools of communication that ICT offer.

-Knowledge to elaborate web pages of interest related with the subject matter.

- To know the use of ICT in the usual activities where they are necessary: use of programs of general utility (Windows, word processors, Internet browser, electronic mail...)

- Knowledge of the functioning and the services that the Intranet or virtual campus of the teaching institution in which people work.

- Enough technical knowledge that allows the teacher to redo and to re-structure material existing in the market to adapt it to his/her class needs.

- Mastery of the procedures of electronic communication to develop formative actions (continuous training) and to encourage communication between the centers and other professionals. |

a.2. About the knowledge educational didactic mastery of ICT for its incorporation in the curriculum	-Know the different ICT applications in the educational field.
	-Knowledge about the different ways of working with ICT in the different disciplines and areas.
	-Organizational and didactic knowledge about the use of ICT in the classroom and educational center planning.
	-Theoretical and practical knowledge to analyze, to understand and to take decisions in the teaching and learning processes with ICT.
	-Know the use of ICT in the specific field of knowledge: data-bases and specific programs on ICT, professional instruments...
	-Know good didactic and educational materials of interest and ready-to-use related with the subjects that are being taught and have valid criteria for their selection.
	-Know how to plan the integral curriculum integrating ICT as an instrumental means within the framework of the activities typical of each area of knowledge, as a didactic means and as mediators of cognitive development.
	- Know how to use ICT to manage the different activities related to teaching and learning processes, from classroom activity programming, implementation and exposures, up to the processes of evaluation of the pupils learning; knowing how to design and to develop activities that integrate these means into the curriculum of the area.
	- Knowledge to develop guidance to students in the use of the possibilities offered by the Internet in the school activities.
	-Using ICT in teaching as a means of didactic innovation: creation of the web page of the subject, organization of the virtual assessment of students, exploitation of the resources of the Internet for the classes.
	-Be updated in the different computer tools, ICT and materials that keep on appearing to the market, so that its use is adequate in every moment and does not become phased out with respect to that the students use at home.

		a.3.Understand the global variables that have repercussion in the world of ICT	-The teacher has to have a good communicative competence on the new technological means: Internet, satellites, cable television...etc -S/He has to have an understanding about the technological messages in depth, we need to know who is the emissor, his/her intentions and under which forms the messages are structured. - Has to know how to carry out an understanding reading of the messages that surround us and have the criteria of a good consumer, s/he has to know how to access and extract relevant information. -Knowledge of the related human and ethical questions in order to prepare pupils on how to develop socially with a high capacity of work, success, equity, respect and justice.
	a) Ability to understand the new training modalities offered by the technological		-Fluid utilization of the instruments of communication the Net offers. -Exploitation of these instruments of communication for collaborative work. -Training for the development of skills related with flexible, virtual and on-line education. -mastery of the formulae of electronic communication.
	b) Requirements to understand the new and exploit training modalities of that they proptiate .		-To know the instruments of electronic communication to be able to intervene in the attitudes of the pupils towards this type of communication. -Make use of such technologies to communicate with different educational communities that will allow them to construct their knowledge from an informal type of learning in which there is an exchange of information. -Participate in the new communication trends that are being developed in society, and use the resources that are in the Internet which enhance processes of autonomous learning.

Competencies, knowledge, abilities and skills for teachers in ICT

Once the basic competencies have been stated it seems evident to mention that there are some factors on the teacher's part which intervene in the reachment of that competencies a positive attitude towards ICT and a constant and progressive

81

training with the adequate contents. The barriers and duties which prevent teachers from a successful integration of ICT in teaching and learning processes has been exposed previously in Chapter One. It is our duty, then, to examine which are the formative contents a teacher trainer should take into consideration when training teachers in the use of ICT. Majó and Marqués synthesize several proposals accounted for by different authors and present a detailed list of contents:

TYPE OF CONTENT	CONTENT
ON ICT (for professional, didactic, personal use)	- Society of Knowledge and ICT: open but critical attitude about their use and consequences. - Notions of hardware and basic maintenance of the equipment - Basic functionality of the operating system: exploring the disks, recording, copy... - Audiovisual language, hypertextual structuring of the information. - Texts: word processor, dictionaries, OCR, creation of simple web pages... - Image and sound: graphic editor, scanner, sound editor, video, photography... -Presentations: presentations program, transparencies... The services of the Internet: navigation, electronic mail, FTP,chats,lists... Techniques to search, evaluation, process and transmission of information with ICT. Spreadsheet and graphs (basic level) Management of data bases (basic level) Local nets (basic level)
THEMATIC (related directly with the subject matter of the teaching)	-Sources of information and ICT resources: location, access.. -Use of programs specific to the fields of knowledge of the subject.

PSYCOPEDAGOGIC (including deep actitudinal components)	- Integration of ICT into the curricular design. - Objective evaluation of ICT resources. - New teaching and learning strategies using ICT, co-operative work, self-instruction... - Selection of ICT and design of formative interventions set in a context. - Using ICT to evaluate students and in the educational action. - Using ICT to guide and identify the main characteristics of the pupils, reports, follow-up... - Using ICT for the management of the educational centers. - Management of the ICT resources in the classroom, centers of resources, coordination. - Elaboration of simple didactic materials: open programs, authoring tools...

Basic contents for ICT Instruction

The need on the teacher's part to receive ICT training becomes evident. It is clear that ICT training can help teachers to overcome barriers (lack of equipment, unreliability, lack of technical support, beliefs about teaching and technology, openness to change... (Snoeyink and Ertmer: 2001)) but there seems that even all efforts, it stills fails to do so. Being lack of time and training the two major obstacles that prevent teachers form a successful integration of ICT (Guha, 2000, Cox et al. 2001), research shows that weaknesses in the design and delivery of many courses constitutes a serious disadvantage. Van Fossen (1999), Wild (1996) state that by focussing on basic ICT skills training fails to prepare teachers to integrate ICT into their pedagogy, teachers, furthermore often accustom to have little experience of using technology to deliver courses and Initial teacher training becomes once again extremely important when trying to provide access to ICT training to new teachers. According to BECTA "pre-service teachers lack practical

models of integration, leading to a disparity between their expectations of ICT use and their actual use (Whetstone, and Carr-Chellman, 2001) This lack of encouragement to use ICT during teaching practice and other factors which have more to do with schools prevent new teachers integration in class and they lack motivation to do so.

IV.II. The Catalan Model

Teacher training has always been an important subject, among other reasons, due to the existing relationship that there is between the quality of teachers and the transferred education. In this sense, it is the teacher "who starts off, stimulates and sustains the process of teaching and learning (Romero, 2002)". This statement is corroborated and broadened by other authors such as Escudero (1998:11) who manifests: "teacher training, either initial or in-service, is considered unanimously as one of the most decisive and most unavoidable resources to promote the reforms and improvements that the society claims today of the school systems and the education".

Traditionally there have existed two main streamlines in teacher training: initial training and in-service training, which depend on the professional moment in which the teacher is in. Notwithstanding this, it has to be said that the majority of up-to-date studies aim towards the consideration of the training process as something in change, continuous and in constant evolution. Continuous teacher training, thus, is to be present all along the professional trajectory of the teacher, and there appears the need of coordination between both types of formation. All throughout the history of Education every type of training has acquired more or less relevance depending on the different educational reforms or the circumstances of the moment.

At the same, despite the proliferation of organizations, training management centers, programs and diverse educational institutions which are in charge of planning and programming the numerous training courses at different levels:

provincial, local autonomic… the deployment of efforts and regulations, in the practice, has given few results and the present situation still reveals itself as far from being satisfactory. With respect to continuous training, it seems that there exists a determinate political model of teacher training (Santandreu: 2005), given the advances of the last years in this field. But at the same time, the current panorama is very heterogeneous, unequal and sometimes contradictory, and the training offer is far from suiting the real needs and necessities of the professionals of education. Otherwise, it should be taken into account that teachers have different visions with respect to their training which in many cases differ enormously from those of educational institutions which are responsible for providing the different instructional programs. Sometimes these reasons may appear as motivated by very varied causes that range from individual reasons such as personal and professional development, to historical and contextual factors that can seem foreign to the school work (Fernández Sierra and Barquín, 1998). Authors such as Yanes (1998) suggest the lack of a training culture as one of the causes of the present situation, especially regarding Secondary school teachers, who, in turn develop determined attitudes of apathy and demonstrate different ways of approaching and facing their training process.

In this sense, authors such as Santandreu (2005) and Alonso and Gallego (1996) state that it is the teachers, both belonging to Primary and Secondary Education who manifest and recognize possessing insufficient academic, pedagogic and didactic formation so as to face the educational task with the optimum conditions that the society of Information and Knowledge requires, especially considering the fast and continuous changes that are taking place. This fact reflects the deficiencies that our system has regarding teacher training.

Two of the educational institutions which play an outstanding role in the conception and delivery of training contents are the ICEs (Institutes of Sciences of Education) and the CRPs (Centers of Pedagogic Resources). ICEs were created in the different Spanish universities in accordance with the Decree 1678/1969, with the following attributions; on the one hand the pedagogic training of university

students, both in the initial stage prior to their incorporation to the educational world (CAP Course, which is a sort of training that future-to-be-teachers have to undergo compulsorily), and in the actualization and updating of the teachers who already work. The active research in the domain of the Sciences of the Education constitutes another important key point of this institutions and finally the delivery of technical advice regarding educational problems.

With the decentralization of competences from the Spanish government to the Catalan one, the training of Primary and Secondary school teachers was passed in a great deal to the CRPs. In those moments, ICEs were obliged to change their functions, assuming other competences such as institutional evaluation, educational innovation... etc, apart from their functions of training agent which caters for the university staff. In the end ICEs became part of the Generalitat de Catalunya (Law 26/1984 of the 19 of December, of University Coordination), and from that regulation the ICEs participate actively in the Plan of Continuous Training of the Catalan government Department of Education.

Lifelong training is acquiring more significance and relevance within the educational context, continuously subdued to multiple and never-ending changes. It is for this reason that continuous training of the teaching staff in all areas is one of the most important challenges to be overcome by the present educational system. Regarding ICT, the acquisition and the existence of proper teacher training programs is made evident and necessary, given changing nature of the technological means, which require constant updating and revision, and especially because the training that many teachers have received during their professional life did not include any specific ICT type of content.

The LOE (Ley orgánica de Educación) establishes that the continuous training is a right and a duty to all the teaching staff and articulates updating activities belonging to the scientific, didactic and professional fields. Each autonomous Community, in the exercise of its competences is responsible for the programming and planning of the plans of continuous training of teachers. Indeed, the

continuous training of the teaching staff is a decentralized competence, therefore the institutions of the teaching staff that are in charge of this task differ according to each administrations.

In general terms, the training of the non-university teaching staff has officially been in charge of the ICEs, the Educational Administration and the CRPs, or combination of several institutions, depending on the autonomous community. However there are other institutions that have been offering this type of training, as well: teacher unions, the schools of Graduates and Doctors, movements of pedagogic renewal, professional teachers associations, private associations ..., that in the present offer great amount of formation, sometimes related as well to the integration of ICT. In the last thirty years there has been a shift from a very limited model of continuous training to the present extense formative offer, which sometimes overwhelms teachers but sometimes it is not specific to suit their determined training needs.

Recent policies are very concerned with the improvement and qualification of the teaching staff in the exercise of the profession (Yanes, 1998). At the same time this training has been subdued, in the last years, to a continuous debate and extensive academic, political and social analysis, which has not succeeded in providing adequacy to the preparation and commitment of teachers respecting the new socio-educational need (Barquín and Fernández, Sierra, 2002). In accordance to Santandreu (2004) reality offers us a very heterogeneous panorama and sometimes contradictory with respect to the continuous training of the teaching staff; "a problematic terrain, generator of new conflicts, fractures and uncertainties" (Escudero, Bolívar, Dark González, 1997).

The necessity of including the needs of the different educational centers with their particularities and the necessities of teachers working there constitutes another consideration hat we would like to suggest. In this sense, several authors have tried to the training of the teaching staff as ICT users: Cabero and others (1994, 1996); Villar (1997); Camacho (1995); Gallego and Alonso (1995; 1997); Romero

87

(2000) among others. All of them coincide in the urgent need to develop formative actions regarding the teaching staff as a necessary condition to facilitate the generalization of the use of ICT in schools. They also suggest that the training plans have to combine the technological knowledge of the means with a didactic knowledge for their use, such as the creation and organization of activities, interaction of the means in the teaching and learning process, the evaluation of students and their learning process…

It is also indispensable and almost urgent that the educational administrations propitiate the means and necessary resources to start off solid training actions to both train, but also update teachers in the didactic use of ICT. In accordance to Cabero and others (2003) we would like to state that the integration of ICT can not be analyzed as if they were a resource more; contrarily to this, the integration of these new means makes necessary that from the area of teacher training the conception of the teacher and his or her new social profile is faced. At the same time there emerges the need to deeply think on the acquisition on the teacher's part of a literacy on the use of the media so as to achieve a good integration of these tools into the educational context.

The task of providing the teaching staff with this training requires clear strategies and at the same time flexiblility which will allow to develop on the one hand the contents related to technology and to the handling of these means, and on the other the methodological aspects and concrete proposals for an integrated didactic utilization in the different stages and areas of the knowledge. Finally, the process would end up with the introduction of these tools and resources within the programs, understanding them as didactic means for the achievement of established educational goals. For this reason the teaching staff needs to be also prepared to evaluate the different materials and select them in order to adapt them into their context and to the determined goals to achieve; and if it is the case, teachers can also learn how to create new material.

The formative lagoon that teachers evidence regarding didactic and pedagogical training related to the subject area they teach is something that worries competent educational authorities. On the other hand, it has to be considered that the teaching staff has a long professional life, in the course of which many changes can take place, especially when talking about changes related to technology. The Society of Knowledge is evolving constantly and this fact evidences the need to create and maintain life-long training processes which are absolutely necessary to keep teachers prepared and eager to face the harnesses of change. This type of life-long learning will ensure the teacher the possibility to incorporate to his/her teaching process that professional knowledge which is continuously being generated.

In these moments in Catalonia this training is carried out in a basic way from the Educational Administration, which is using, as it has been stated previously, several modalities: short courses, conference, in-center training, workshops... however still the deployment of teachers to use and attend training courses which do not suit their needs is made recurrent. The training addressed to English as a foreign language teachers provides no specific training for this collective, instead, it is part of a generic plan of the in-service training programs of the teaching staff.

At present time, the Catalan Department of Education counts with 3.907 schools which belong to Primary and Secondary Education, 1,036.082 students and 87.828 teachers. From the Subdirection of Teacher Training and Pedagogical Resources, three main axes constitute the basis upon which teacher training is constructed:

1. To design and plan the In-Service training (Framework In-Service Plan 2005-2010)
2. To manage the development of training programmes
3. To follow up and evaluate the training activities
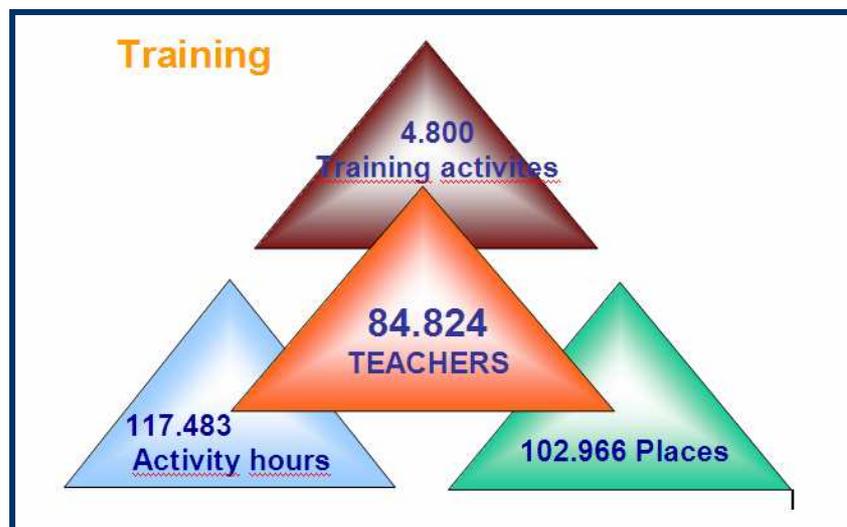
2006 Figures
Source: Department of Education

The In-service Training Action Program 2005-2010 contains the following priority stream lines:

- To improve the training and the trainers' conditions
- To assess the impact of the training in the different job positions
- To promote the co-ordination and the exchange of knowledge between the training, the innovation and the research
- To contribute to the optimisation of the resources addressed to the training from the educational services
- To facilitate the teachers access to the educational resources and exchange and dissemination of innovative practises
- To provide a diversified training offer that covers the needs of the educational system taking into account the schools and the teachers
- To change the management model of the teacher training to bring it nearer to the teachers and schools
- To redefine the role of the University Institutions with regard to training, research and innovation
- To facilitate the participation of different groups and entities in the teacher training

90

- To promote a change in the model of the teacher training activities as a means of increasing the quality of the training

As far as in-service teacher training is concerned, the Subdirection aims at providing a diversified offer to attain the schools and teachers' specific training needs. Thus, the different training areas and the 2005-2006 academic year percentages attributed to them remain as it is shown in the following graphic:

School Management and Educational Services 10%

ICT 15%

Personal improvement and professional development 15%

Comprehensive School 30%

Curriculum and Innovation 30%
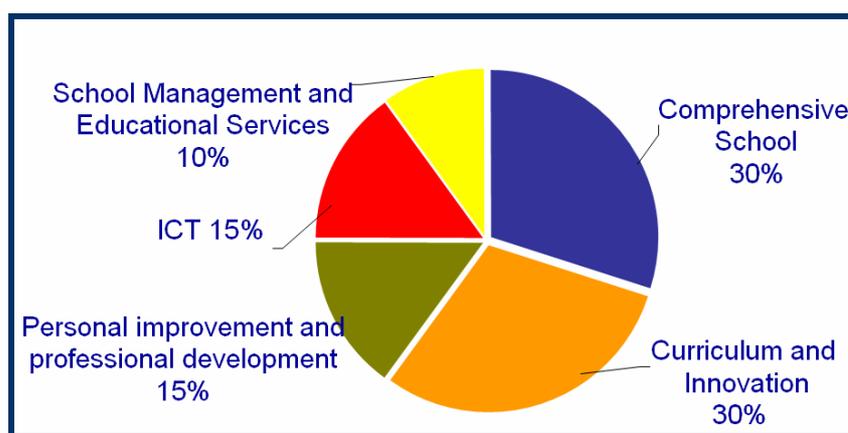
In-Service Teacher Training – Training Areas 2005-2006

Source: Department of Education 2006

The In-service Training Action Program for the years 2005-2010 establishes the following specific Training Initiatives and gives special priorities to them:

- Comprehensive school:

    Reception of new pupils into the school

    Special needs

    School mediation

- Curriculum and innovation:
    - Foreign Language Programmes
    - Science and Technology Programmes
- Information and Communication Technologies:
    - Educational ICT Programmes
- Personal improvement and professional development
    - Paid Study Leaves
- School management and Educational Services
    - Management Staff Training

As far as Foreign language programs are concerned, the In-service Training Action Plan states the following priorities related to foreign languages and teacher training : organization of activities for all the foreign languages taught in our educational system (English, French, German, Italian), decentralization of the activities, organizing them throughout the territory. In this sense the Administration has carried out a big effort in order to be able to send as many teachers as possible to courses abroad. As far as the contents of the in-service activities are concerned, it has to be said that they are not only methodological but also linguistic and cultural. Furthermore, activities are not only addressed to foreign language teachers but also for teachers of other subjects (CLIL, European programmes). The integration of new technologies (classroom and training activities) is established as an important priority the same as the promotion of the collaboration between teachers of different languages and different educational levels. Finally, In-service activities based on a reflective approach of the teaching practice are also encouraged by the In-service Training Action Plan.

As far as the management of the Training Activities is concerned, the Subdirection of Teacher Training and pedagogic resources is in charge of the following duties:

- In-service Programmes directly designed, planned, developed and followed up by the Department of Education

- Area-based in-service: decentralized training to attain the teachers and schools' needs
- Funds addressed to teachers, institutions and non-profit organisations to organize training activities (Summer School)
- Validation of the training organized by different institutions
- Collaboration with the university within the framework of the continuous teachers' training

The **Area-based training Plans** constitute a key component of the training services of the Department of Education; they provide the training activities and the resources to attain the teachers' needs to improve the educational practise of an specific area.
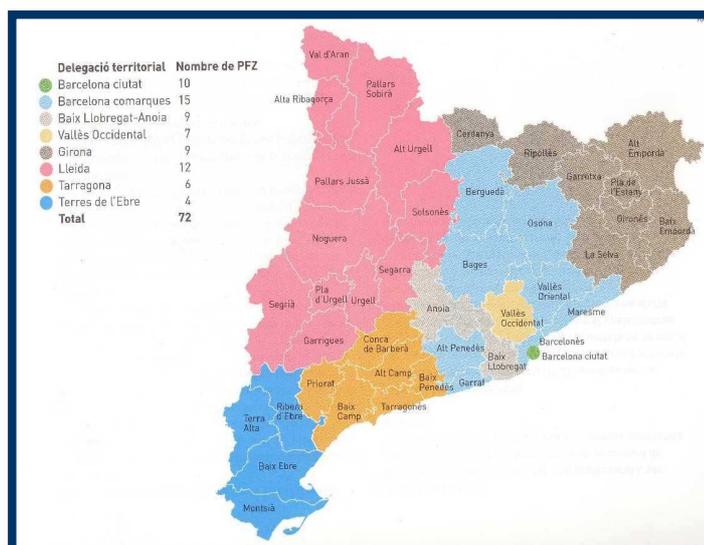
Distribution of the Area-based In-service Training
Source: Department of Education 2006

The Area-based In-service Training is the concretion in each of the territories of the offer of the in-service training activities, basically they are mainly addressed to the teachers who work in that territory and they are meant to

93

improve their teaching practice and to facilitate the acquisition of new knowledge.
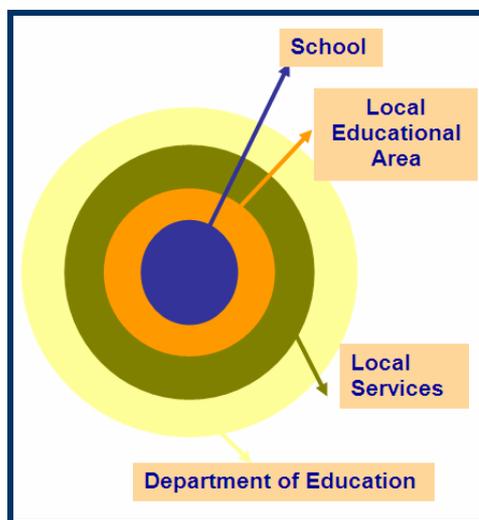
Source: Department of Education 2006

These training activities respond to the needs and priorities listed by the teachers and schools of that territory, the aim is to offer the teachers a wide, coherent and institutional training programme which is also in accordance with the teacher's school needs. The functioning of the area-based training is easy: in every Pedagogical Resources Centre there is a commission with representatives of the different institutions in charge of the training in the area. The commission establishes the general criteria, defines the specific objectives and takes part in the assessment and following up of the whole training.

The phases in the process of management are represented in the following chart:
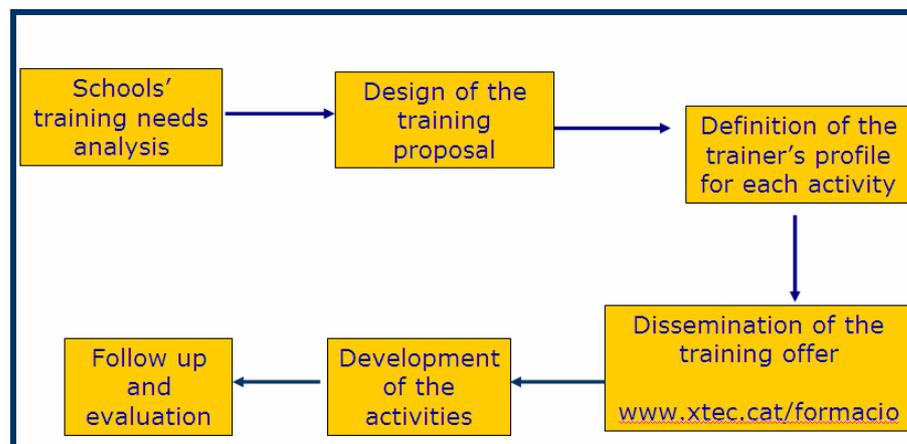
Source: Department of Education 2006

Teacher training for teachers of English as a foreign language.

As far as teacher training is concerned, the CRLE developed already in 1995 several in-service teaching materials in order to accomplish the objective of catering for the integration of ICT as an additional significance to the teaching and learning of a foreign language. These materials were piloted by this institution with future-to-be trainers, they consisted of a series of tasks whose achievement required the use of ICT tools and resources and the main aim of the activities was that teachers became aware of the potential of the tool so as to favour teaching-learning.

From 1995-2000, much more emphasis was put upon methodology rather than on the use of the different tools and resources. The implementation of telematic distance training addressed to all Catalan teachers favoured that many teachers had access to these courses and new instructional modules were designed to be offered to teachers. However, these courses contemplated the use of word processors, or html editors, rather than phocussing on the pedagogic potential of the tools.

EDU365, the Catalan educational portal offers a multiplicity of resources for students and teachers of all subject areas, it contains reference materials and manifold activitities which can be directly carried out on-line. As it was stated

before, The Catalan Education Network (XTEC) gives service to all schools equipped by AREA TIC (previously known as SGTI), and regarding English and other foreign languages, CRLE, is responsible for all resources and information .

Regarding ICT support, the CRLE offers maintenance of a web page (http://www.xtec.es/crle), an updated blog with many references which are extremely interesting for language teachers, access to guidelines and support ,a catalogue of the resources available, innovative school projects regarding the integration of ICT tools in the FL curricula, provision of teacher training to the teachers involved….

IV.III. ICT Competencies for English Language Teachers

Aware of the growing relevance of the potential of ICT within the framework of foreign language teaching, organizations such as the Centre de Recursos de Llengües Estrangeres (CRLE) and the Subdirecció General de Tecnologies de la Informació i la Comunicació and the Subdirecció general de Formació del Professorat dependent of the Catalan Education Department (Departament d´Ensenyament de la Generalitat de Catalunya), several University Education Programs and other academic institutions work in collaboration in order to offer teachers of this particular field training and instruction in ICT integration by means of their training programs which can be followed either via the Internet or through on-site training. As it has been stated previously, Teacher Training is the key to reach a successful introduction and later implementation of ICT in Teacher and Learning processes.

According to the report "The Impact of Information and Communications Technologies on the Teaching of Foreign Languages and on the Role of Teachers of Foreign Languages" commissioned by the Directorate General of Education and Culture of the European Union the ICT competencies required from teachers of foreign languages working in media-rich environments will be:

- Recognize the individual learning problems of students.
- Make a careful and considered choice concerning the use of the media.
- Check the truth of information content offered.
- Develop efficient search techniques and be capable of conducting effective research with the help of the computer.
- Be able to use standard software confidently and competently .
- Make wise and critical choices of information found.

This report highlights the competencies and literacies required from teachers and students in order to participate in all spheres of life, which evidently have changed a lot. Teachers in particular should be given the opportunity to update, extend and acquire new skills so that they are better equipped to meet changes in the workplace and in society at large as well as putting them in the situation where they can pass on such skills to their learners. Thus, teachers need to understand and master the new literacies (scientific, digital, linguistic, cultural) which are appearing and the demands they place on both language learners and teachers:

1.- Scientific literacy relates to the ability to think scientifically in a world which is increasingly shaped by science and technology. PISA defines scientific literacy as the capacity to use scientific knowledge, to identify questions, and to draw evidence-based conclusions in order to understand and help make decisions about the natural world and the changes made to it through human activity.

2.- Digital literacy relates to the ability to use ICT adequately and apply them in a principled way to the subject matter at hand. For the language teacher, it refers in particular to Web literacy, i.e. the ability to make use of the World Wide Web for language research, to the use of linguistic tools and standard programs for exercises and testing.

3.- Critical literacy implies the ability to evaluate the credibility, usefulness and reliability of any given sources of information.

4.- Linguistic literacy in this context refers to the ability to recognise different genres as they develop, to track developments in use and usage and to adapt teaching materials and approach to the changing situations.

5.- Cultural literacy relates to observing and recording changes in the society or societies of the target language together with implications for language teaching.

IV.IV. Future Perspectives

Recent research in the field in foreign languages indicates that within the European scope, and after technology teachers, teachers of foreign languages are the most receptive towards the inclusion of ICT into their teaching practices. After having explored the challenges that the Elearning Action Plan of the European Commission highlights, the European eLearning Summit manifests and develops proposals and recommendations to accelerate the program of innovation and implementation of the use of ICT in education. Among other proposals, the Summit's fifth recommendation stresses the necessity to "Increase investment to continuous professional development of educators. Enhance their status. Help them develop an understanding of a pedagogy for e-Learning", ICC (2002:53).

Finally, after having drawn an exhaustive analysis of the current research methodology, on the changes of roles in teacher and learners attitudes and after including examples of good practice and case studies for a good implementation of ICT in foreign language teaching, the detailed and complete report elaborated by ICC suggests different proposals in order to maximize the benefits and minimize the disadvantage of integrating ICT. Among these proposals, we would like to put the emphasis on those which have certain relevance and are directly linked to the practical development of our project:

- Creation of workshops to promote exchange of experiences among colleagues.
- Teacher Training initiatives in order to "provide a principled, meaningful approach to the development and harnessing of new literacies (mainly digital, critical and cultural) such as the creation of dedicated websites. As an

example, they mention initiatives such as EUROCALL, ICT4LT, TALLENT and Lingu@net Europa.

- Creation of platforms which offer links to providers and users of online language classes and learning materials.
- Development of new training modules whose contents should be updated and revisited periodically.

The need to integrate technological advances taking place in society into education is made more than evident. The necessity of a trained teacher ready to confront this challenge and who is accompanied by the necessary tools and means to do that, becomes a reality. Thus, the basic streamlines upon which a successful integration of ICT into teaching and learning processes could be articulated are, according to our opinion:

- Need to change the teacher's role
- Need of a long-life training in ICT in order to optimize its usage, to deepen upon its implications and potentialities as educational agents, as they are
- Need to acquire a digital culture, by achieving a satisfactory use of the competencies stated before.

Chapter 5

Internet and the teaching of English
as a foreign language: tools, resources and taxonomy of
activities for teachers

V.- INTERNET AND THE TEACHING OF ENGLISH AS A FOREIGN LANGUAGE: TOOLS, RESOURCES AND TAXONOMY OF ACTIVITIES FOR TEACHERS

In order to present a structure for the educational use of ICT, it is obvious that the Internet should balance existing classroom practices and that teachers should be aware that they will never substitute them. They have an significant function to play in helping students achieve their goals when using the Internet. Students should be directed rigorously through a number of phases so as to make of technological tools true assets to classrooms. Willis (1997) proposes 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. According to this author, there are several stages:

> 1.- Cover **basic communication** between individuals: this can be achieve by students taking part in on-line discussions, e-mail projects, video conferencing and newsgroups. This way they learn in real situations to communicate with either peers or 'experts' in a certain field. Willis states that they can, for instance, contribute to group on-line discussions or ask questions themselves. Another possibility which is mentioned is that they can participate in pen pal exchanges.
>
> 2.- To do **research and collect information** and data. Therefore, they will have to be taught to use search engines and to browse the Net. Thus, students will be able to access a wealth of authentic foreign language material.
>
> 3.- **Content production**. Students can be taught to make and publish their productions. Willis states that they can be asked to set up a project and do research on aspects related to the foreign language, culture or literature. They can use the resources available on the Internet and can consult 'experts' and e-mail doubts. During the procedure, they are constantly communicating in the foreign language. Finally, they will have to create a publication.

4.- **Collaborative working** and Project working. Students will be required to use the acquired skills to work in collaboration. They will be asked to learn how to solve problems, carry out research and collaborate with others.

The following selection of Internet-based tools, resources and taxonomy of activities pretends to give an approximate idea of the numberless resources a teacher of English as a foreign language can resort to when trying to introduce ICT into his/her teaching procedures. A general classification was developed according to the nature of the different tools, resources and activities provided. Deep analysis and further research on the use and exploitation of the different tools, resources and activities for English as a foreign language is provided in the annex of this thesis. We have considered only to include and in a very concise way the general classification, one example of the didactic exploitation of each tool and a representative link. See appendix for further information.
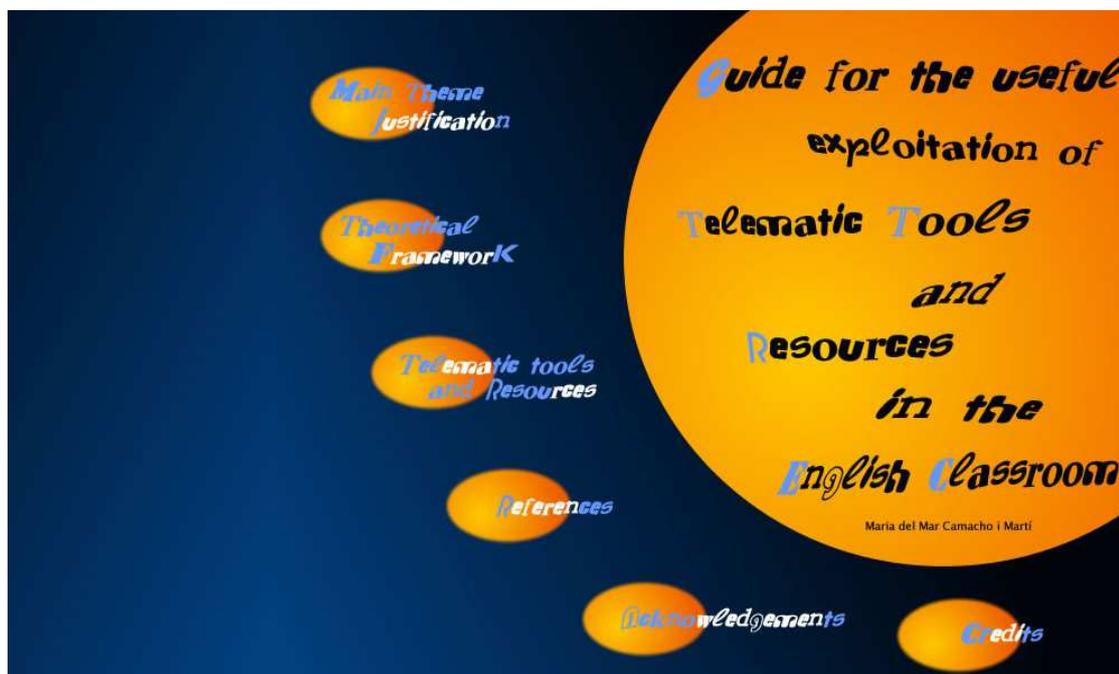
This information was initially gathered in 2005 in a CD which was created in order to facilitate English as foreign language teachers strategies and tools to be used in class. The CD included several theoretical considerations in order to help teachers understand the factors which surround the incorporation of technology into teaching and learning practices. Furthermore, I developed an original classification of the tools, resources and e-activities which could be of help to them. All these materials were searched for and compiled during a long period of time which encompassed one year and a half, all of them were tested in the classroom with students always bearing in mind their didactic potentiality. Each of the tools, resources or activities described, include a description, several reference URLs and a teaching tip to help teachers introduce the tool.

A. INTERNET TOOLS
1.- WWW
Assynchronous Communication
2.- E-mail /Webmail
3.- Mailing Lists /Discussion Lists
4.- Bulletin Board
Synchronous Communication
5.- Chat/ Audio-chat
6.-Audio/video- Conferencing
Synchronous and Assynchronous communication
7.- Collaborative Environments
8.- Virtual Reality
9.- Authoring tools

1.- THE WWW:

a.- Using the WWW as a **source for reference materials**:

- *Dictionaries*

http://europa.eu.int/eurodicautom/Controller   Eurodicatom: The European Union
Dictionary.

Didactic usage

Teachers can have an online contest with your students: Write down a list of unknown words from any reading. The students who first guess the meaning of the words in the list will be the winners. The meanings have to match the meanings in the readings.

- *Encyclopaedias*

http://britannica.com Encyclopaedia Britannica

Didactic usage

The quizz archive section included in the Encarta encyclopaedia provides loads of quizzes a teacher can resort to after having introduced a topic.

- *Language Translators*

http://babelfish.altavista.com Babelfish

Didactic usage

To make students aware of the complexities of using translators, the teacher can ask them to test different on-line translation services by giving them a paragraph in the native tongue. A class contest can be organised to see which students reach the best translation.

- *E-zines and newspapers*

http://www.thepaperboy.com.au/welcome.html The paperBoy.Com

Didactic usage

Make students compare the different perspectives under which the same news is tackled by the press. Analise and discuss objectivity in the media.

- *TV and radios*

http://www.bbc.co.uk BBC

Didactic usage

Students can try to produce their own newscasts. First, they have to find out about interesting news or articles in newspapers or magazines, then , they can edit them and

make them shorter. Once the newscast is finished they can read it to the rest of the class.

b.- Searching the Net: the WWW and the **Information Search Engines**

http://ajkids.com ASK JEEVES for Kids

Didactic usage

Planning a trip to a favourite place, exploring a city and creating a mini-brochure, finding information on famous singers or actors/ actresses…

2.- E-mail/Webmail

http://www.epals.com Epals.Com

Didactic usage

Start a project with another class, or just create a new friendship with someone on the other side of the globe

3.- Mailing lists / Electronic discussion lists

http://www.jiscmail.ac.uk/lists/eurocall-members.html EUROCALL

Didactic usage

A useful didactic usage for students is to make them subscribe to different mailing lists. After two/three weeks time, they have to share with the class their findings and evaluation of the list.

4.- Bulletin Boards/ Discussion Boards

http://www.blurty.com Blurty Journal

Didactic usage

Create a class bulletin board and make students participate in it by describing problems or doubts they have, let the other companions help them and try to create a cooperative tool out of it. Participation is easily achieved and the teacher keeps track on the student´s progresses.

5.- Chat

http://www.habbohotel.com/habbo/en/ Habbo Hotel

Didactic usage

Instant messengers are extremely popular among students and surely most of them may have heard of it. Make sure all your students have a suitable e-mail account and try to connect all your class with the help of this tool. It is interesting that all students change

their names and personalities. The object of the activity is to discover who-is-who.

6.- Audio and Videoconferencing - Teleconferencing

http://www.cuseeme.com Cuseeme.Com

Didactic usage

Instant messenger services such as MSN messenger provide a teleconferencing service in which participants communicate and see each other in real-time with the help of Webcams.

7.- Collaborative Environments

http://community.eun.org/enter.cfm Virtual community of european SchoolNet.

Didactic usage

Try to join a community or to create your own. European schoolNet communities have a name and are administered by a group leader. They also provide information about the members and an instant messaging facility.

8.- Virtual reality

The educational use of virtual realities is basically observed in those activities which reproduce real situations in virtual contexts such as MUDS and MOOs, action Mazes and adventure games…

9.- Authoring Tools:

Create your own activities: crosswords, puzzles, rubrics, fill-in-the-gap exercises, comprehension testers, randomizers…

http://www.teachers-pet.org

B. Internet resources
10.- Educational Portals
11.- Virtual Resource Centers
12.- On-line Writing Labs
13.- CyberListening Labs
14.- Web-based English Courses
15.- Virtual Libraries
16.- Creative Teaching Websites
17.- Teacher´s Websites
18.- Student Websites
19.- On-line English Grammars
20.- Help Centers on English-related questions

10.- Educational Portals

Educational portals related to ELT include a wealth of resources for students and teachers of English ranging from communication tools such as message boards, forums, e-mail, chats... to activities, projects, lesson plans, interactive exercices, reference materials, directories, topic-related links...

http://www.edu365.com/ Edu365.Com

Didactic usage

Using an educational portal such as edu365.com in class can really help both teachers and students to integrate ICT into their teaching/learning processes. Students can get an e-mail account and register and teachers may access to the portal by using their XTEC e-mail account

11.- Virtual Resource Centers

Basically the main function of resource centers is that of providing information about, and links to quality-assured on-line resources related to the teaching and learning of english as a foreign language.

http://www.linguanet-europa.org Lingu@net Europe

Didactic usage

Lingu@net Europa is a multilingual, virtual resource centre to support the teaching of foreign languages. Lingu@net Europa offers access to a collection of over 1000 resources, from authentic teaching materials and details of organisations and service providers to policy and planning documents and research bibliographies.

12.- On-line Writing Labs

OWLs include handouts, web-worksheets, lesson plans for teachers and multi-faceted guided writing exercices related to aspects such as punctuation, sentence structure, text coherence, use of connectors, errors, writing tips...

http://www.readingmatrix.com/directory/pages ReadingMatrix.com

Didactic usage

Convince your upper-level students to participate in an on-line writing lab and perhaps take a lab demo tour.

13.- CyberListening Labs

Resource that includes a long list of interesting listening activities. As well as in the on-line writing labs, the main aim of cyberlistening platforms is that students acquire a

satisfactory understanding level and improve -at the same time- their listening skills.

http://www.esl-lab.com ESL Lab Randall´s Cyberlistening Lab

Didactic usage

The teacher can ask them to e-mail a question to Randall's Voice Mail Box. If the question is chosen, the answer to it can be listened to over the Internet at http://www.esl-lab.com/voice/voice.htm.

14.- Web-based English Courses

New learning scenarios in which students become part of and need to find solutions to proposed activies always set in web-based instructional settings.

http://www.english-to-go.com/ English To Go.Com

15.- Virtual Libraries

http://www.stardots.com/index2.shtml Stardots.Com

Didactic usage

Blue Web'n is an educational online library of more than 1800 outstanding Internet sites categorized by subject, grade level, and format which include lessons, activities, projects, resources, references and tools).

16.- Creative Teaching Websites

Creative teaching websites offer technical support, samples to build sites, to create content-based lessons and to participate in collaborative Internet projects. Thus, they provide instruction to create rubrics, class calendars, project checklists…

http://www.4teachers.org/tools/index.shtml Kansas University Teaching Tools for Teachers.

Didactic usage

Try to create your own website by following the instructions given at Filamentality at http://www.kn.pacbell.com/wired/fil/ a fill-in-the-blank interactive website that guides teachers through different categories: web search, topic election, internet sites gathering, transformation of web resources into interesting learning acitivities…

17.- Teacher´s Websites

Websites addressed to teachers of English as foreign language. They offer teachers a great variety of tools and resources and ready-to-go activities which can be easily done in class.

http://www.timeforenglish.net   Time for English

Didactic usage

110

Have a look at the numberless possibilities these selected websites offer and try to introduce any of their proposals into your classroom.

18.- Student Websites

http://www.learningplanet.com   LearningPlanet.Com

Didactic usage

Students can be asked to log on to a website specifically addressed to ESL students. Make them participate in forums and observe which are their similarities and differences with other students worldwide.

19.- On-line English Grammars

Searchable on-line resources with written language exercises which usually include on-line grammar lessons, selections of topics and levels to choose, examples of grammar points, quizzes to check the student´s understanding of the topic

http://www.edunet.com/english/grammar the Education Resources Website

Didactic usage

Make students check their understanding of a particular grammar topic and follow their progress: http://www.churchillhouse.com/tests/index.html
They will be asked to enter their e-mail account and the scores will be sent to them. Ask them to send these scores to you, a weeks after, maybe before an exam ask them to repeat the test and see their advances. This is a really encouraging and motivating activity for them.

20.- Help Centers on English-related questions

Many Internet sites devoted to ELT and the use of ICT , provide many other useful resources. The Online Help for Common Writing Assignments and Problems , for example, offers a varied range of selection of on-line in order to provide instruction as well as some exercises to test students.

http://www.rpi.edu/dept/llc/writecenter/web/handouts.html THE WRITING CENTER

Didactic usage

In order to let students know about the existence of help centers and their specific usage divide your class into different groups. Refer each of the groups to different help centers and make them ask the same question. Try to analyse the answers each group retrieves and agree which is the best.

C. TYPOLOGY OF INTERNET ACTIVITIES
-Information Search
21.Treasure Hunts
22.Webquests
23.Scrapbook
24.Hotlists
25.Subject Sampler
-Grammar
26.Webworksheets/E-lessons
27. Self-study Quizzes & Assessment Tests
-Reading
28. Web-based Reading / Proofreading exercises
29. Newspapers and Magazines Reading Materials
30. Fairy Tales and Short stories
-Listening
31.Songs and Poems
32.Audio Tests
-Writing:
33. Creative writing and Storytelling
34. E-Postcards / Smileys and Emoticons
35. Weblogs / Open Diaries
36. Chain Stories
-Speaking
37. Vocal Tests and Activities
38. Pronunciation and Speech activities
39.Groaners, Tongue Twisters and Action Rhymes
-Vocabulary
40. Puzzles, Wordsearch Games and Hangman

41. Vocabulary Sheets
42. Spelling Activities
- Culture & Literature
43. Cultural Sheets
- Literature
44. Literature Activities
45. Virtual role Playing - Action Mazes
46.Brainbuilders, Crosswords, Puzzles
47. Tales and Literaure
48. Flashcards and Vocabulary Builders
49. Writing & Story Box
50. Chants and Songs
51. Tongue Twisters, Fingerplays & Action Rhymes
52. Educational Cartoons
53. Educational websites

21. Treasure Hunt

Treasure Hunts become fun games for students to play and to test their ability to find information on the Internet. To achieve success, students are asked to find answers to different questions previously posed by the teacher or the Treasure Hunt developer by searching for them in the web.

http://www.museummania.com/treasure.htm

Didactic usage

After solving an on-line treasure Hunt, try to develop your own. The first step is thinking of 10-15 trivia questions with answers that can easily be accessed in the Internet, provide the students with the exact pages you want the students to go to look for information). After you've gathered these links, you have to pose one key question for each web resource you've linked to. Many webs addressed to teachers include useful intruction and "how to´s" to help teachers develop their web-based activities.

22.- WebQuests

A WebQuest presents student groups with a challenging task or problem to be solved. It's best to choose aspects of a topic that provide different perspectives.

http://www.ozline.com/learning/index.htm

Didactic usage

All students begin by learning some common background knowledge, but later on they can be divided into different groups. In the groups each student or pair of students have a particular role, task, or perspective to become expert on. When the class comes together, students must synthesize their findings and expose them to the rest of the classmates.

23. Scrapbooks

http://www.kn.pacbell.com/wired/fil/pages/scrapdinosaurio.html

Didactic usage

Try to start a class multimedia scrapbook with your students. Ask students to gather interesting Internet sites which contain details related to events that have taken place recently , or to school facts, photographs taken in the class outings, videos of festivals…

24. Hotlists

http://www.kn.pacbell.com/wired/China/hotlist.html

Didactic usage

Select 10-15 interesting websites related to a determined topic, thus, students immediately reach the required information and can develop the activity. Hotlists become extremely useful in the sense that they spare loads of time to students and they can phocuss on the activity itself.

25. Subject Sampler.

The purpose of this Web page is to give students a sampling of some of the aspects related to a topic. Each of the activities asks from students to make a personal commitment to what they like, believe, or feel about a topic.

http://www.kn.pacbell.com/wired/China/sampler.html#activities

26.Webworksheets / E-lessons

Online and worksheet activities for English language learners. EFL/ESL Lessons Using Web Sites

http://www.insideout.net/e-lessons.htm.

Didactic usage

E-lessons are great for self-study although many activities can become part of a class, then, students can send their answers to the teacher. Many of these websites usually include a help section which provides fast answers

27. Self-study Quizzes & Assessment Tests

http://www.funbrain.com/grammar/index.html

Didactic usage

To practice grammar students can try to visit Daily Grammar at http://www.dailygrammar.com/archive.html, a site which offers short online grammar lessons. Students can sign up to receive via e-mail a grammar lesson and a quiz every six days.

28. Web-based Reading / Proofreading exercises

http://www.readinga-z.com/

Didactic usage

They help them to learn how to create web-based and technology-rich learning materials with activities, projects, and assessments based on reading benchmarks. They integrate a variety of web-based reading resources for students and teachers in which web-based, thematic units developed by classroom teachers can be examined.

29.- Newspapers and Magazines Reading Materials

Students really show their interest upon what they are reading when the subjects really are of their interest. At FindArticles.com teachers may find magazine articles

on any subject, this database contains more than 300 magazines. Searches can be done by attending to different categories: Keyword search, magazine´s name or search by subject.

http://www.nytimes.com/learning/students/explorer

Didactic usage

Teachers can use the lessons for group activities and students can work at their own pace for individualized learning. There is the possibility to listen to the story they have previously read. Furthermore, once students finish reading and listening, they can check their progress and understanding by taking different quizzes.

30. Tales and Short Stories

http://www.bedtime-story.com/bedtime-story   Online stories for young students

Didactic usage

The teacher can ask students to find a story that they really like, after providing them with suitable and level-adjusted Urls. After they finish reading the story, they can choose a partner and tell him/her the story. They don´t have to use the exact words, but use the main ideas to tell the story in their own words.

31.Songs and Poems

Students can listen to songs and take different fill-in quizzes online, there are programs which check the answers. There are even music discussion centers online to which students can log on and post their comments on music-related topics.

http://vidnet.usa.com

Didactic usage

Karaoke is familiar to many of our students and it is an original activity which will help students to improve their pronunciation, stress, intonation and phrasing while they have a good time with their classmates.

32. Audio tests

http://literacynet.org/cnnsf/

Didactic usage

A great variety of really creative listening activities which tackle several subjects (Business English, ESL Exercises, History, Literature, Movies, Music, News, Politics, Pop Culture, Radio…) which are addressed to different level students. From here, students can

have access to listening activities, lessons, topic-related exercises and other activities.

33. Creative Writing and Storytelling

http://darkwing.uoregon.edu/~leslieob/pizzaz.html

Didactic usage

In many of these magazines teachers and students are welcome to post their opinions. An interesting activity is first visiting the site with your students, analise different pieces of writing and finally ask them to participate by creating their own. As a class activity visit the web and make comments on the student´s contributions.

34. E-Postcards / Smileys and Emoticons

http://www.towerofenglish.com/mertonasciismileys.html The Unofficial Smiley Dictionary.

Didactic usage

Apart from engaging in different class exchanges, students may be asked to send an e-card to their teachers, friends, classmates… or to their parents at Christmas, Easter.At http://www.e-cards.com/site/ students can find holiday cards which can be of great use and help

35. Weblogs / Open Diaries

Among the many advantadges of using weblogs in the class, weblogs provide daily reading practice to the learners, promote exploration of English websites,   provide class or syllabus information and may even serve as a resource of links for self-study.

http://beeonline.blogspot.com/ Bee Online

Didactic usage

Class Blogs can be used like a free-form bulletin board for learners to post messages, images, and links related to classroom discussion topics and they can be also useful for encouraging project-based language learning, where learners can be given the opportunity to develop research and writing skills and asked to create an online resource for others. Class blogs can also be used as a virtual space for international classroom language exchanges.

36. Chainstories

Students are allowed to post their paragraphs or sentences to already existing stories and - if they have already created their own- they can be published, continued and finished by others. These websites include different story levels and a seccion for collective creation.

http://darkwing.uoregon.edu/~leslieob/pizzaz.html

Didactic usage

First, they have to choose a story title, secondly, they are asked to choose a list of words to use in the story. They have to enter different types of words such as nouns, verbs, colors, names, etc.) Then , the computer creates a story made with those words.

37. Vocal Tests and Activities

http://eleaston.com/speaking.html

Didactic usage

They include ready-to-do activities addressed to students with different levels in order to enhance otudent´s oral practice.

38. Pronunciation and Speech activities

http://www.quia.com

Didactic usage

In order to make students aware of the variety of English pronunciation, students can be addressed to Phonetiks.org (http://www. phonetiks.org) and there they are given the possibility to listen to different pronunciations of the same English words
As they are pronounced in seven English-speaking countries.

39.Groaners, Tongue Twisters and Action Rhymes

http://www.eslflow.com/ICEBREAKERSreal.html

Didactic usage

A good way of encouraging speaking among your students is to organize a class contest, which undoubtedly will provide lots of fun and diversion. Another fun game are Magic Card Tricks in which students have to learn different cards with their corresponding patter and then be able to remember them and tell them to their mates in class.

40. Puzzles, Wordsearch Games and Hangman

http://www.bbc.co.uk/worldservice/learningenglish/quizzes/index.shtml

Didactic usage

To play Boggler, students have 3 minutes to find as many words as possible in a square. All the letters have to be connected. They can go up, down, left, right, or diagonally. Just type your words in the box. A class contest can be organised so as to see who is the best Boggler player in the classroom.

41. Vocabulary Sheets
http://www.pdictionary.com/ The Internet Picture Dictionary

Didactic usage

You can ask the learner to choose the correct name for the picture from a list of words. Useful categories such as furniture, clothes, school and office, home appliances. Also, try the Mystery Puzzle--another creative way to learn new vocabulary

42. Spelling Activities

http://www.spellaroo.com

Didactic usage

Students can be addressed to take different spelling tests some of which are easy to take whereas others incorporate difficut words which will challenge

43. Cultural Sheets

http://www.onestopenglish.com/Culture/lessons-English-teaching/elt_esl_lessons.htm Try Brainpop. Com at http://www.brainpop.com/English/seeall.weml . This website includes cultural-related topics and offers short animation videos on English-related aspects.

44. Literature Activities

http://www.eduplace.com/rdg The Wacky Web Tales.

Didactic usage

The educational website from Eduscapes exclusively dedicated to Literature offers many resources and tools with which teachers can use literature in their classes. http://www.eduscapes.com/ladders/index.html

45. Virtual role Playing - Action Mazes

http://www.bogglesworld.com includes a role-play.

Didactic usage

The Enchanted Forest http://www.rinkworks.com/forest is a fun adventure and fantasy game that students can play easily. First, they have to read the instructions. Then, choose a nickname and password. The game starts in the middle of the Enchanted Forest. They have to choose a direction to move in, then read what happen to them. If they meet a monster, they can choose to fight, run away or give him a bribe (if they still have enough gold). The object of this game is to score as many points as possible. Students can be addressed to check the High Scores list to see how they can compare to other players. If they succeed in finding the magic Blackstone, they get a lot of bonus points. If they run out of points, they die.

Emerging Technologies

As far as the new emerging technologies are concerned, Godwin-Jones (2005) enumerates a series of new fundamentals that have to do with the teaching of languages and makes a distinction among the "digital natives" for whom the Internet and the new forms of digital communication are second nature and the "Digital immigrants", who are those who have adapted to new technologies but without the same commitment. Regarding the emerging technologies, researchers –as Godwin-Jones states- see the benefits of Instant messaging (IM), P2P file swapping, mobile communication or Videogames and point out as having very positive effects upon the development of computer literacy, the student's communicative skills and community building. The author also points out the possibilities that these new tools offer to identity creation (by means of the usage of avatars in games and chats), the enhancement of collaborative learning (networking to develop game playing strategies, as an example) or in helping others in game strategies or fiction writing.

Although these technologies were not created to support language learning, they are being used in both formal and informal language learning. The emerging technologies refer to the use of the following tools:

- IM (AIM; MSN; ICQ;GAIM)
- SMS (short message service)
- Moblogging
- Peer-to-Peer Networking & the ipod phenomenon

V.IV. Criteria for the evaluation of the different resources. Proposals for an accurate selection.

Teachers who are going to use the Internet will have to start looking for appropriate web sites or resources that they can use in their teaching. However, there are many instances in which teachers become really overwhelmed by the

amount of information they find. Graus (2001) provides 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, and as such it aims to give teachers practical advice, the model is an adaptation of those proposed by Harris (1997) and Caywood (1995).

According to these authors, "there is a lack of a presiding or reviewing authority which causes the Internet to be like a labyrinth for those who are looking for good and reliable information. Since the nature of the information on the Internet is so versatile, it is useful to set criteria to facilitate the evaluation of sites one encounters during a search of the Net".

1.- Pre-evaluate the learning objectives. Set goals as to what to find. Narrow down the subject as much as possible. Are we looking for opinion, facts, stories, interpretations, statistics? 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.

2.- 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:

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 organisation? 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?. Evaluative meta-information is harder to come by. It includes reviews, comments, ratings and recommendations. Collections of hyperlinks often give this sort of information.

2.-Contents

It is important to find out if the information is accurate, detailed, factual, exact or comprehensive. The audience a publication is meant for and the purpose it was written for can be important too. More important is the purpose for which the information was created. Harris (1997) 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. A publication should be well balanced, moderate and not emotional. It should not comprise wild and irrational claims or arguments.

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.

4.- Design

A web page should be well structured and the individual pages should be concise and short enough to avoid having to scroll. In addition, a web site should be easy to navigate and using it should be intuitive. Teachers should also ask themselves if the design is functional or just fancy. Does it support the contents or does it constitute a distracting element? Do all parts of a page work and are the hyperlinks up-to-date? A last consideration is the degree of interaction. One of the benefits of using the Internet is that students can interact and not merely passively sit back and consume information:

Source Evaluation	Trustworthy source, author's credentials, e-mail, organisational support, rated by known authority, metainformation, bad grammar
Contents	accurate information, up-to-date, comprehensive, rounded story, audience & purpose, objectivity, fairness, reasonableness, moderateness, external consistency
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, interaction, distracting visual elements, does everything function, functional design, working hyperlinks

SCAD Checklist

Part Two

Practical Part: Design of the Research

Chapter 6

Design of the Research

VI. DESIGN OF THE RESEARCH

The incorporation of technology into teaching and learning processes has accounted for radical changes into all spheres of education. As it has been analyzed previously, technology generates new training modalities, new teaching and learning environments in which collaboration is essential. Nevertheless, technology has inevitably changed the traditional role of both teachers and students. The need of training teachers in the acquisition of ICT skills becomes fundamental and one of the major priorities for educational institutions at the time that they constitute a primordial objective to be achieved.

While recent data put forward that computers and the Internet have attained certain incursion in schools today it is true that many teachers persist to come to grips with methodological troubles, which are posed by the acceptance and implementation of technology (Dexter, Anderson and Becker, 1999). As it has been seen, many authors coincide in stating that part of the problem takes root in the lack of attention to technology integration in teacher preparation, and a number of reports have raised concerns about the lack of homogeneity on technology integration in teacher preparation programs, but also in continuous training programs. The limited use of technology in teacher training courses generally puts emphasis on teaching about technology rather than teaching with technology, which constitutes, according to our opinion, one of the major factors which needs to be revised and approached.

The analysis and description of a whole teacher training process under ICT-based settings from the viewpoint of the professional development of teachers becomes a great challenge in the research on pedagogical practices related to the integration of technology and constitutes the empirical part of this thesis. The first questions that arose when trying to shape and configure this doctoral thesis were all directly linked to the capacitation, mainly in technological and pedagogical terms, of teachers and their disposition to integrate technology into their teaching practices. From personal experiences which had taken place during my

professional career as teacher trainer there did not seem to exist much guidance and documentation to help teachers who still felt insecure to use computers in their classes. Otherwise, educational institutions didn't offer much specific training to the Catalan collective of English as foreign language teachers and basically, most of the technology-related courses offered ranged from the use of word processors to the creation of web pages, always emphasizing the technological aspect of the course, never the didactic. These courses seemed to lack the approach of how to address change and how to include didactic strategies in the process of introducing technological tools and resources in English Language Teaching.

After carrying research in depth on the effective use of technological tools and resources and the whole of their potentialities for English language teachers, I developed a guide addressed to this collective of teachers on how to exploit these telematic tools and resources in the English class, devoting special attention to provide didactic strategies to ensure a successful and easy implementation in classroom practices. Simultaneously, I encompassed this task with several teacher training courses which phocussed on the teacher's acquisition of both technical and pedagogical skills and aimed at the implementation of ICT in English as a foreign language classes. After having given several courses and detecting from those teachers their eagerness to include ICT into their teaching practice, together with their training needs I decided to develop a basic introductory course, consisting of ten modules, which according to our opinion would encompass the basic technological, but also pedagogical functions a teacher should master appropriately for a good implementation of Information and Communication Technology into class practices. This basic course, known as the N-@ble project, incorporated the blended modality and was conceived differently to the already exisiting training offer addressed to English as a foreign language teachers. The course served to test the blended approach, the consistency and adequacy of the training materials, the participation of teachers and ultimately the inclusion by these teachers of the tools they had received specific instruction about.

Soon, educational institutions such as the Institute of Sciences of Education, from the Universitat Rovira I Virgili and the Catalan Department of Education of the Generalitat de Catalunya showed their interest towards this proposal and the N-@ble project served us to design, develop and implement a blended course addressed to both Primary and Secondary School teachers, which was given several times in the following years. The process of rewriting and redoing this modular course, its foregrounds, the possibilities that new training modalities (blended learning, on-line learning…) offered together with the continuously changing possibilities emerging from technological advances conform a substantial part of this thesis. At the same time, it has to be said that as new tools and resources appeared they were included within the training modules as they provided new solutions and horizons to the training process.

Once the pilot contents were tested and the first data showed the achievement of certain degree of technological competence by the teachers who had been trained, the Department of Education saw the need of incorporating ICT training as an important part of a global and integral training Program Catalan teacher trainers were about to receive in two different programs: Programa de Formació per a l' Ensenyament de les Llengües Estrangeres a l' ESO and the Programa de formació del Professorat de Llengües a l' ESO. These two programs started in 2004 and the trainers who took part in them and received specific ICT training are in turn in charge of delivering these contents onto other teachers belonging to all areas of the Catalan geography. Initiatives such as the Catalan Department of Education are encouraging other teacher preparation institutions to develop teacher capacity for using technology.

The delivery of the training contents, the analysis of the comments by teachers in the forums and –above all- the quantitative and qualitative results achieved in order to obtain useful information on what kind of specific training these teachers would need, constitute the basis upon which the empirical part of this thesis is to be built. The results obtained will shed light on and provide essential information

from which the implementation of an instructional model for English Language Teachers could be established.

The possibility of designing and implementing these courses in the Catalan Department of Education of the Generalitat de Catalunya constituted a privilege for me at the same time that it constituted an incomparable platform from which to test, change and disseminate good practice on the use and implementation of ICT into language teaching processes. The possibility of reaching teachers from the whole of the territory opened up unexpected horizons to explore and revealed itself as a challenge to meet.

VI.I. METHODOLOGICAL APPROACH. MAIN JUSTIFICATION

In this second part of this doctoral thesis, once the theoretical framework has been established, there appears the need of specifying the way of studying the object of the research in its context in order to identify later on some techniques and instruments adequate for this methodology of research. It is a matter of situating the research in one of the alternative approaches of research to establish a departing point, to define its basic positions so as to facilitate its understanding.

The present research departs from a position of improvement of the confrontation among paradigms and methods, bearing in mind that we will try to integrate and complement different methodologies in order to account for a methodological pluralism. The reasons by which this thesis was conceived emerge from the following questions:

1.- Are Catalan language teachers receiving proper training regarding Information and Communication Technologies?
2.- Which are the ICT competencies a language teacher should master in order to account for a successful integration of ICT in teaching and learning processes?
3.- Which are the ICT-based tools and resources which could account for a successful integration of ICT into English as a foreign language classrrom?
4.- Which elements condition the effectiveness of the integration of Information and Communication Technologies in teaching and learning processes?

These questions will direct us to some specific techniques of obtaining and analyzing the information. The itineraries, the perspectives used to give answer to the suggested question marks are several and offer different types of understanding of the posed questions. In our case it will be a matter of building new knowledge that can describe the processes and the practices... that take place around this research topic.

Among the different paradigms in which educational research is situated: empirical, interpretative and socio-critical; the developed research takes as main or basic reference the interpretative paradigm as the preliminary element that informs in the way of proceeding and of understanding the different conclusions which will be reached.

The interpretative paradigm places us, not in the face of the construction of scientific theories that can be checked or proved scientifically, but in the face of the construction of interpretative reports that collect the complexity of the educational action without aiming at its generalization.

The assumptions that characterize this paradigm are:

- Social science is fruit of the knowledge obtained and accepted by processes of reflection, systematization and rigor carried out with the aim of interpreting and understanding reality.
- The goal of science is not to arrive to a unique truth or general rule but to describe and to explain the reality from the perspective of the individual.
- The investigated subject and the investigator constitute an interacted reality, that is, an open and unfinished reality.
- Subjectivity is presented as the form of access to knowledge. Objectivity is addressed to the meanings while looking for the inter-subjective agreement among those involved in the investigated situation.
- Induction is the strategy to access to knowledge. Knowledge is more ideographical than normative.
- The methodology used is inductive. From the collected data conceptualizations are developed in order to understand reality, not to validate hypothesis or preconceived theories.
- Methodology and investigator have effects on the investigated object and the investigation. The object of study must be accessed in a natural way to exert the minor influence on what is being observed.

- The investigator must not be affected by his/her beliefs, predispositions... trying to place himself/herself objective and free from preconceptions.
- Validity is intended more than reliability; since results will try to reflect what happened, what was perceived.

Cohen, Manion and Morrison (1990) -as many other authors do- establish the following characteristics that differentiate the interpretative paradigm from the positivist one:

a) People are deliberate and creative in their actions, they act deliberately and create meanings in their actions and through them (Blumer, 1969)

b) People build actively their social world. (Becker, 1970)

c) Situations are fluid and keep changing rather than fixed and static, events and behaviors evolve with time and are seen affected by the context.

d) The events and the individuals are unique and mostly not due to generalizations.

e) The social world will have to be studied in its natural state, without the intervention or manipulation of the investigator (Hanmersley and Atkinson, 1983)

f) The faithfulness towards the phenomenon that is studied is basic.

g) People interpret events, contexts and situations, and act on the bases of these events.

h) There are multiple interpretations and perspectives on an event or situations.

i) Reality is complex and multi-folded.

j) Many events can not be reduced to a simplistic interpretation, therefore dense descripctions (Geertz, 1973) are essential, making reductionism impossible.

These traits have been compiled by different authors with both a didactic and divulgative aim, as they are presented in the following chart:

132

Parameters	Interpretative – hermeneutic – ideographic Paradigms
Foundations	Phenomenology, etnomethodology, simbolic interactionism , anthropology
Reality	Dynamic, multiple, holistic, divergent, intangible, complex
Aim of the research	Understand and interpret reality, perceptions, intentions, interests and actions meant so that people. Understand social relationships.
Relationship object-subject	Influence of the values in the research. Object and investigator are influenced mutually. Implication and interrelation are low. Subjectivity and intersubjectivity.
Knowledge Types	Practical, based upon ideographic comprehension
Values	Influence of values in the process of research.
Relationship theory-practice	Interrelated, although the results of the research have little effects on the practice.
Innovation	Analysis of differences, cultural positioning, description and influence of contexts, evaluation of processes and results.
Credibility criteria	Credibility, confirmation and triangulation
Methodology	Qualitative, inductive
Methodological Process	Election of the subject and purpose. Access to the field, context, negotiation, feasibility, negotiated commitments. Collection of information, reduction, analysis, confirmation for participants. Elaboration of categories and concepts Approach of understanding hypotheses. Elaboration of theories
Instruments and Techniques	Fieldwork instruments, participant observation, interviews, life histories, narrations, documents, records, etc. In minor degree are used mixed questionnaires or other instruments more characteristic of quantitative methodologies.
Data analysis	Qualitative data. Reduction and analysis through analysis of texts, analysis of contents, conceptual maps..

Interpretative Paradigm: theoretical grounding and main traits

133

The paradigm described until now is especially adequate for the present research, since it is not an extended situation in terms of time and the number of implicated people. The institutional area which is more suitable since the aims of the interpretative paradigm is not the search of a general norm but a better knowledge and interpretation of the reality that surrounds us, and the educational reality it forms part of.

As for the characteristics of the methodology used in the interpretative paradigm they remain reflected in the following chart:

Aspects	Traits of the methodology
Concept of education	Experiences by the participants
Interests	Know about the participants involved in the process: directive politicians, professors, students.
The policies and the reforms	Mediators
Research Problem	Theoretical-practical of environmental character to interpret and understand the world of the feelings, the effectiveness, on perceptions, sensations, feelings, to include beliefs in the social and educational relationships of every type considering the contents.
Design	Open to possible contingencies
Sample	Not determined and subject and dependant of participant informants
Techniques for data collection	Collection in normal working environments, without control or manipulation of what is natural. Non-aggressive techniques.
Report and diffusion	Wide descriptions of the environments, contexts, situations, incidents (ethnographic).. The reports and, especially the conclusions, will be adapted and adjusted according to the audiences: individuals, groups, communities and/or academic areas.

Interpretative Paradigm: traits of the methodology

Thus, the techniques and instruments used in the research can be defined:

a) According to the type of research that they are associated with and the type of data that provides: mixed (quantitative and qualitative). It aims to obtain quantitative data not subject to the subjectivity of the investigator and, at the same time, data and information of qualitative type.

b) According to the compilation of the information; the technique of the questionnaire is used as a strategy of approach to the reality indirectly. The used instrument is the questionnaire, as it has been indicated, in order to deepen in the subject of study

The reports and the conclusions will be adequate and adjusted according to the audiences, individuals, groups, communities and academic areas. According to criteria of coherence among the object of investigation presented and the paradigm in which it is circumscribed, the modality of research and the developed techniques will be characterized as descriptive methodology.

This methodology is one of the most used methodologies in educational research. It aims at describing and documenting the reality of the phenomenon investigated in their natural situation; throughout quantitative data. Descriptive methodology is adequate to the research developed after the obtained information is described, compared and classified in order to obtain a general description of the object of study, it describes the determining factors so as to later on carry out studies in more depth.

This modality of descriptive intention tries to identify relevant psyco-pedagogic phenomena and the variables that intervene in it as a previous step for posterior studies. It addresses to the present and, therefore, it can help in those problems in which without having the necessary data, and interrelation there is a suitable context in which they can be generated. Apart from collecting data, descriptive

investigatory action attempts to give answer to the questions about the present and the state of any educational situation, which becomes one of the main purposes of this research and usually has implications beyond the limits of what has been studied (Mateo, 1997).

So, the utilization of a descriptive methodology allows us to pick up and to analyze information from an exploratory perspective and it can constitute a contribution to orientate future correlation, predictive or experimental studies.

There are several types of descriptive studies; among them we distinguish the evolutionary, survey-based studies, case studies and observational studies (Arnal, 1992). Of among all these possibilities, and in order to carry out our research we have selected the use of the questionnaire, after considering that it constitutes the best instrument to gauge the opinions, preferences or perceptions of the people who are object of interest for the researcher, in this case, language teachers. When applying such methodology, we consider six fundamental aspects, which have configured partially the design and the phases of our research (Mateo, 1997):

1) Identification and formulation of the problem

2) Identification of the necessary information to solve the problem

3) Election of the instruments: selection and creation

4) The selection of the population

5) Design of the data collection procedures

6) Data Collection

7) Analysis techniques and data interpretation

8) Conclusions: report of the investigation.

Otherwise, the way in which the instruments will be created with respect to the types of questions that are formulated, together with the posterior treatment of the obtained data configure a type of mixed methodology, which combines

quantitative (statistical treatment) and qualitative (descriptive treatment) methodology.

The modality or technique used is the questionnaire; it consists of the compilation of data related to the object of research by means of this technique. It can take different formats, from a reduced number of questions to a set of questions. This modality will be used at a determined part of our research in order to obtain information. The selection of the courses object of this study -the sample- has been intentional, bearing in mind their special traits and interests which have been developed according to the goals of the research.

The research that gives rise to the present thesis is, thus, of exploratory and descriptive nature (Bisquerra, 1989) and it is framed in the design of a fieldwork since it tries to describe and to analyze a given phenomenon, the delivery of six teacher training courses on the use of telematic tools and resources aimed at the technological capacitation of teachers.

We consider the study as a **fieldwork research** in which direct observation of the events in their natural succession is done (the questionnaire was presented to the students as an activity to carry out in the course) and **descriptive** since it focuses on a specific situation and a detailed description of the phenomenon which is the object of study in order to account for a better understanding. We will try to approach the object of study in a natural situation and with the maximum respect, without modifying the context or manipulating the variables. This methodology has been chosen because it allows identifying relevant psico-pedagogical phenomena and the variables that take part as a step prior to subsequent studies.

VI.II. OBJECTIVES OF THE RESEARCH

The overall goals of this doctoral thesis are classified onto two basic categories:
General Objectives:
- To analyze the educational potentialities of ICT in the teaching of English as a foreign language.

137

- To provide an overview of the current ICT training offer especially aimed at English as a foreign language teachers, regarding the incorporation of ICT from a pedagogical rather than technical perspective.
- To create a blended instructional model dedicated to language teachers and facilitate tools, resources and strategies to integrate ICT and to encourage collaboration and co-operation among them.
- To analyze the effectiveness of this instructional model through its contribution to improve the quality of teaching English through the use of new technologies and study its viability as Action Plan.
- To prepare teachers to demonstrate fundamental technology competencies using technology as a tool for teaching and learning, enhance communication and reflection on their teaching.
- To prepare teacher and teacher educators in the use of technology-rich environments by modeling and facilitating tools and resources as well as didactic strategies to be used.

Specific Objectives

- To use Blended Learning (Web-based Training and on-site training) as specific methodology to train teachers.
- To define and classify those telematic tools and resources useful for the teaching of languages and the inclusion of didactic strategies to contribute to its development.
- To create a set of training modules to be delivered both on-site and virtually which could constitute an Action Plan addressed to English Language Teachers.
- To set the basis to create and develop a community of practice, set in virtuality to enhance and promote lifelong high-quality training to those teachers.

VI.III. Phases Of The Research:

In this section we will account in detail for the different phases of the investigation and will set up the different sections that constitute them. Our investigation is to be divided in four different moments:

138

Phase I: Preparatory phase	A. Study of the literature related with the subject object of study	Revision of books, articles, conference proceedings, research, etc.	
	B Definition of the design of the research	Goals of the study and the methodology to be used. Concretion of the problems to study. Bibibliographical revision	
	C Creation /Selection of the sample. Courses.	Definition and knowledge of the population and sample creation.	Selection of courses upon which research has been carried out.
	D Instruments for data collection:	D.1. The Questionnaire:	- First version - Validation by experts - Pilot Test and Reliability - Definite version
		D.2. Virtual learning environments. Tools for collaborative working: BSCW, Moodle	
	E. Design of Instructional material. Evaluation and creation of training modules.		
Phase II: Implementation Phase.	A.- Application of the questionnaire		
	B.- Distribution of instructional materials		
	C- Use of different web-based materials and communication tools.	Use of the posts in the forums to collect qualitative data	
Phase III: Analysis of the results.	Treatment of the data	Quantitative: questionnaire Qualitative: Forums interventions	
	Analysis and description of the results		
Phase IV: Elaboration of the final report	Elaboration of the final report. Final conclusions		

Phases of the Research

139

VI.III.i. Phase One: Preparatory phase:

It includes all the tasks carried out before the fieldwork takes place, it involves the following aspects:

VI.III.i.i. Study of the existing literature

It consists of a thorough examination of the literature related with the subject object of study. Revision of books, articles, conference proceedings, research on the topic ...etc.

Taking as a departing point a detailed and accurate reading of documents, articles, books, and research results on the topics that have been previously tackled in the theoretical part of this thesis, that is the integration of ICT in teaching and learning processes, the use of web-based tools and training modalities, the training that English Language teachers receive regarding ICT, the first reflections and questions emerged and started shaping the main body of this research. The revision of the literature also provided sufficient information about the variables to consider in this research that could help us to construct the different instruments to collect data, such as the questionnaire, together with the techniques that could be useful to analyze and interpret the results that they provided. The information obtained would also be used in the final report and in the final conclusions.

Once these first steps of bibliographical revision had been carried out, one of the main objectives of this thesis was clear, it would be intended to deepen into the state-of-the-art of the ICT training that English language teachers of public centers of secondary Education belonging to the whole of the Catalan territory receive by means of a descriptive analysis whose results would allow us to offer a training alternative.

VI.III.i.ii. Design of the research: Objectives and methodology

In this phase there have been specified the goals to be achieved with this study and the methodology to be used. A bibliographical and documentary revision is carried out in order to account for a better concretion of the problems to study.

VI.III.i.iii. Sample Selection. Courses

This part includes the creation of a data base of the population to study and decide which sample will be used and why. The selection of the courses in which the different materials were used and tested, constitutes another important part of this section.

The information on which the whole research project is based was obtained from a questionnaire-based survey (quantitative) passed on to 71 teachers and from the interventions by teachers (qualitative) in the forums on a sample of 159 teachers, representative of the Primary and Secondary education teachers of English as a foreign language.

Initially, when this research started, the idea was to include into the sample the teachers belonging to both Primary and Secondary Education which had registered to participate in the courses given in the geographical context of Tarragona during 2004-2005, and to extract and obtain qualitative and quantitative information out of the different instruments of data gathering. Since my integration within the Department of Education of the Catalan Government in Barcelona in the year 2005 with the objective to develop and implement a model of ICT-based courses addressed to English as a foreign language teachers I had the possibility to have access to teachers and trainers who came from different locations in the Catalan territory: Tarragona, Lleida, Terres de l' Ebre, Barcelona Ciutat, Barcelona Comarques, Girona...

The possibility of widening the scope of the research to the whole of the Catalan territory given by the circumstances was made possible, and it was thought that

141

the incorporation of the vision of all those teachers would enrich and provide with more significance the results obtained after the research. On the one hand, many of the teachers and trainers come from different backgrounds, rural, urban and attend different realities in their High Schools. The technical equipments and facilities of the different schools constitute another important aspect to bear in mind, especially regarding the fact that the geographical origins of teachers and trainers is so diverse that the incorporation of these teachers in the sample could incorporate many variables of rich interest into our research.

The courses out of which quantitative information was extracted were:

2003- 2004	Guia per l'explotació d'eines i recursos telemàtics a l'aula d'anglès. CEIP Saavedra 18/3/2004 13/5/2004. QUESTIONNAIRE
2004- 2005	Guia per a l'explotació d'eines i recursos telemàtics per a l'ensenyament d'idiomes 30/9/2004 – 1/12/2005 Escola Oficial d' Idiomes Tarragona
2004- 2005	Aprofundiment de recursos telemàtics i creació de material electrònic a l'aula d'anglès (II) Facultat de Ciències de l'Educació i Psicologia – Universitat Rovira i Virgili (Tarragona). 10/2/2005 21/4/2005 . QUESTIONNAIRE
2004- 2005	Tècniques Audiovisuals per l' aprenentatge de les llengües estrangeres. Roquetes febrer-maig 2005
2004- 2006	Pla de Formació del Professorat de Llengües Estrangeres Departament d' Educació de la Generalitat de Catalunya. QUESTIONNAIRE
2004- 2006	Pla de Formació del Professorat de Llengües (Català i Castellà) Departament d' Educació de la Generalitat de Catalunya.

Courses to which the questionnaire was passed

Otherwise, qualitative data was gathered from all the forums of discussion, starting in 2004 and ending in 2006. It has to be said that the **fieldwork was carried out between March 2004 and March 2006.**

The profile of the teachers attending the different courses varied depending on the program in which the course was emplaced. Thus, in the first four courses: Guia per l'explotació d'eines i recursos telemàtics a l'aula d'anglès, Guia per a l'explotació d'eines i recursos telemàtics per a l'ensenyament d'idiomes, Aprofundiment de recursos telemàtics i creació de material electrònic a l'aula d'anglès (II) and Tècniques Audiovisuals per l' aprenentatge de les llengües estrangeres, teachers were Secondary Education teachers, mainly. Nevertheless, some of them were teachers who possess the Primary School teacher qualification and accessed via a process to Secondary education (only first and second course of Compulsory Secondary Education). Although their profile will be later on exemplified after the analysis of the quantitative data, these teachers were in-service teachers and their main aim when registering for the courses was to acquire pedagogical knowledge basically on the use of ICT in their classes. The average teachers had never been in contact with technology, but showed interest and eagerness towards technology, to try it and implement it.

The second group of teachers attending the courses which were placed within the teacher training programs of the Department of Education possessed a different profile. These teachers had been selected in order to participate in a Program to train teachers to become trainers; some of them already had some training experience, whereas others did not. The fact was that most of them excelled at their jobs, due to their researches, practices, experience, publications … and this fact made of the group a high quality one in order to develop research around them. The contact with technology of these teachers, whom we can consider experts in the teaching of languages, was, nevertheless, scarce and most of them had very little knowledge on the use of the diverse telematic tools and resources in their teaching practices. Thus, both groups of teachers, which at first glance would be considered quite different, presented similarities on their approach towards technology and their use and implementation in teaching and learning practices.

VI.III.i.iv. Instruments for data collection:

VI.III.i.iv.i. The Questionnaire:

With respect to the process of construction of the questionnaire, it was created paying attention to the bibliographical revision that had taken place previous to the creation of instruments for data collection instruments, to other similar researches about the subject and bearing in mind the main goals being brought up in the research, The questionnaire and its creation involved the following steps:

1ª) Construction of a first version of the questionnaire
2ª) Validation of the questionnaire on the part of the experts (Judgment by experts)
3º) Pilot Test and Reliability
3ª) Elaboration of the definite version of the questionnaire, from the observations carried out by the experts.

Once the information related with the subject of study had been revised, analyzed and interpreted, the objectives had been clearly specified and the sample carefully selected, we started with a planning and elaboration of the questionnaire, in order to address it to English language teachers who were participating or would participate in the future in training courses related to the acquisition of ICT skills, which would help them to integrate satisfactorily technology in their teaching procedures.

VI.III.i.iv.i.i. Elaboration of the first version.

The design of the questionnaire implies to formulate a set of questions that involve specifying ideas, beliefs or suppositions of the researcher related to the object of study. The election of the type of questions that are part of the questionnaire is narrowly related with the scheme of the research that we consider and with the type of information that we want to obtain. The fact of designing the questions of the questionnaire is not at all an easy task. A series of elements have to be

necessarily taken into account and there takes a long process of elaboration until the definite version is achieved.

The different elements that have been taken into consideration are the information used for the elaboration of the questionnaire, the validation process, the reliability, the pilot, the design, dimensions and variables of the definite questionnaire and the relationship of the variables of the questionnaire with the goals to be achieved.

As far as the information used for the elaboration of the questionnaire is concerned, there has been important revision of the literature on the subject. Researches related directly or indirectly with the subject of this study and the use of questionnaires in order to obtain quantitative and qualitative data that have been revised and belong to authors such as Cabero (1998), Smith (1998), ASTROLABE (2000 b), Alvarez and other (2002), Perez and other (2002, Castaño (1994), Centre Comenius (2002), and Meza and Hernández (2002), among others.

The process of elaboration of the questionnaire involved a complex procedure, the nature of the questions, the way in which they are planned, the order in which to specify the different questions... All these elements conform and affect directly the results obtained (Duverger, 1996). Attempts were made not to leave any important element aside and the whole process of creation was heavy and difficult, it involved discussion with colleagues and experts. There was revision of the literature and of the questionnaires designed in other studies that had relationship with the object of our study: the use of ICT in the educational field, the attitude of teachers and trainers towards the use of ICT, training and formative needs of teachers. The bibliography used was very useful to help us delimitate the object of study in the initial steps of our research the same as the information and variables we wanted to obtain. Likewise, the plans of formation by the Department of Education were revised in order to pick up indicators related with the formative variables.

To obtain and to delimit information and to detect the variables that influence on the ICT training was another element to be considered when creating this instrument. For the formulation and disposition of the different questions in the first draft, we followed a series of recommendations carried out by Rodríguez and alter (1996) with respect to:

1) Order of difficulty, inserting easy questions at the beginning

2) Formulating concrete questions, avoiding ambiguity.

3) Using simple and clear language and suitable vocabulary bearing in mind the target public.

4) Asking different types of questions.

It was decided to divide the questionnaire in the following sections, as it can be seen in Annex 2 of this thesis:

A. PERSONAL IDENTIFICATION DATA: Age, Teaching Level, Place of work

B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES

- Connectivity and access to technological resources

C. ICT COMPETENCIES:

- Usage of ICT

- Mastery in the usage of determined telematic tools and resources.

D. ICT IN ENGLISH LANGUAGE TEACHING

- Which tools are mostly used by teachers in English Language Teaching?

E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.

The first version of the questionnaire came off constituted by **5 main dimensions and 20 questions.** Once constructed this first version of this instrument, there appeared the need to validate it.

The validation process tries to determine if the procedure or instrument used in the research measures in fact what it is intended to measure, that is, if the

146

information that is going to be extracted from the tool is what we really aim to obtain. The process tries to determine the way in which reality is reflected in the sense that the difference in the punctuations gives evidence of the existing differences among the individuals in the studied traits.

There are different types of validations and the means that are used in order to test it. We decided to use the validity of contents because we considered that it was the method that could provide us with more information about the objective, that is: Were the contents of the items appropriate? To which degree the items in the instrument represented a determinate thematic universe? In fact it was the representation or significance of the items with respect to the subject that we intended to investigate what became object of our attention. In order to test validity we used a Judgment by Experts technique.

The selection of the experts was carried out with regard to the three axes:

- Secondary school training in ICT.
- The methodological and pedagogical implications of using ICT in teaching and learning processes.
- The knowledge English language teachers had of ICT-based tools and resources.

We chose different groups of experts:

A. Experts in Didactics and School Organization, methodology of the research, ICT and teacher training.
B. Experts in the Didactics of English as a second language.
C. Experts in Educational Technology.
D. Members of different educational institutions.

The experts selected were a total of fifteen: nine doctors of several universities of Catalonia and Spain (Universitat Rovira I Virgili, Universitat de les Illes Balears, Universitat d' Alacant, Universitat de Barcelona, Universitat Pompeu Fabra,

147

Universitat Autònoma de Barcelona, Universitat de Lleida) of great experience in the field of the didactics and school organization, in methodology of the research, in computer means and ICT and its educational potential. Otherwise, different members of different units in the Department of Education belonging to both the Programs and Training Division and to the ICT Area, Inspectors, teacher trainers, and representatives of the Centre de Recursos de Llengües Estrangeres were asked to participate in this process of validation.

The chosen university professors count with great experience in the field of the didactics and school organization and methodology of the research, in computer means and educational technology and above all, specialists on teacher training processes, especially those which involve web-based teacher training. The representatives from the Catalan Department of Education likewise are great experts in instructional design and ICT implementation in teaching and learning processes. In order to carry out with this process of validation we counted with:

 1) Four full professors of the Faculties of Sciences of Education of the Universitat Rovira i Virgili, Universitat de les Illes Balears, Universitat Pompeu Fabra and Universitat de Barcelona. These professors have written deeply on topics which range from the changes that the incorporation of ICT into teaching and learning processes to the development of instructional materials regarding the implementation of new technologies in teacher training, 2) Two doctors in English Philology, specialists in the didactics of the English language, specifically regarding the teaching of English as a Foreign language, from the Universitat Autònoma de Barcelona and the Universitat de Lleida, 3) One doctor, specialist in Teacher Training, from the Universitat Pompeu Fabra, 4) Two representatives from the Centre de Recursos de Llengües Estrangeres from the Department of Education, 5) Two teacher trainers, doctors in Didactics of the English Language 6) Two English language teachers (One belonging to Primary Education and the other belonging to Secondary Education) 7) Two Inspectors (Foreign Languages Area) from the Catalan Department of Education.

148

The procedure to locate and to contact the experts was done by searching for those specialists related to the research field of or work whose studies, researches and expertise could be of help for our study. We looked for experts in the Educational technology field by searching in the different Universities databases for streams of investigation that could be of interest and suitable for our investigation. We also looked for researchers of several universities of whom we had knowledge due to their articles, documents or books which would have been published or would be in the teacher training area of influence. As far as the practical part was concerned, we tried to locate teachers who were still in class of whom we had references in order to include their opinions, in this case they were: teachers of English as a second language. As far as the institutional sector was concerned it was decided to include those professionals in the sense that they constitute the organ from which decisions which affect the training programs addressed to Catalan Teachers are taken.

VI.III.i.iv.i.ii. Validation of the questionnaire on the part of the experts

After the experts were located, communication with them was carried out through e-mail. Initially they were asked if they wanted to co-operate, after analyzing the questionnaire many of the experts coincided that it reflected and contained the precise items that would shed some light on the topics that were going to be analyzed in this study, though there were some appreciations made, which we took immediately into account and several changes were introduced in order to create the final and definite version of the instrument.

The comments and observations recommending certain modifications on the part of the experts included the redistribution and improvement of the questions of the questionnaire, based mainly in: compacting the questionnaire better, a better sequencing of the elements, specification of determinate items, clarification of terms, improvement of the writing, and unification and changes in the punctuation scale.

Once the mentioned modifications had been made, the questionnaire went back to the experts that had revised it initially, and to the tutor of the doctoral thesis. Once all these members gave their approval to the version, we proceeded to create the definite questionnaire.

VI.III.i.iv.i.iii. Pilot Test. Reliability and validity of the questionnaire

In order to obtain information about the correct delivery of information by means of the questionnaire, we carried a pretest which was passed to 25 teachers. This pilot was also aimed at testing different course contents, web-based tools and collaborative environments and included different elements. It was called The N-@ble Project.

As far as the pretest of the questionnaire was concerned, those teachers were representatives for the universe which would constitute object or field of work of our study, so that it was passed to them in order to extract reliable information. The results obtained in this pretest showed that:

- The reported teachers did not have doubts about the questions
- There were some concepts (Webworkheets, collaborative environment, technical instruction…) which were not clear at all, although they were directly directed to obtain information on the previous knowledge that teachers have of ICT-based tools and resources as well as training, so they were included as well.
- The questions posed covered the main areas of the subject of study. They agreed that all the basic areas were covered and that there was no outstanding element that did not appear in it as far as their experience and their previous knowledge related to Information and Communication Technology was concerned.

It was seen that questionnaire was understood and that the different questions extracted the information we wished to obtain, that they didn't confuse the reader or generate ambiguity. The questions satisfied the needs of the reported

teachers and there were some slight changes related to terminology introduced according to different suggestions that teachers had made.

Carmines and Zeller (1979) state that the "reliability of an indicator concerns the extent to which an experiment, test or any measuring procedure yields the same results on repeated trials". The assessment of the reliability provides our research with clarity about the exactitude of the different measures extracted from the instrument, and measures, at the same time its consistency. That is, the calculation of the coefficient of reliability measures the coincidence or lack of coincidence of the answers. The instrument will become more reliable as the measures of the studied phenomenon show similar results.

In order to calculate the reliability there are different strategies or techniques depending on the reliability type which is made use of. For our research we decided to use the method of the Universe of Items, since it is the method which best suited the type of instrument which we wanted to make reliable. With this method, the reliability coefficient indicates if an observed punctuation (in a sample of items) estimates correctly the real punctuation (universe of items).

With the objective to obtain the reliability index for our instrument, the questionnaire, we resorted to Cronbach's coefficient alpha, the statistic test of internal consistency. Cronbach's coefficient alpha is a generalization of Kuder and Richardson's coefficient (1937) in order to estimate the reliability of dicotomic scales. The alpha's reliability coefficient is used as a criterion to evaluate to which extent a test or scale is composed by sufficiently homogenous items, that is, what is verified is how much in common there is in the items. Afterwards, we followed the procedures established by Cabero (1998) en the process of validation of his questionnaire *Cuestionario de Usos de los medios audiovisuales, informáticos, y nuevas tecnologías en los centros andaluces",* and Marcelo (1996) for the validation of his *"Cuestionario de Necesidades Formativas de Asesores".*

The analysis of reliability allows us to study the properties of the scales of measurement and the elements that are normally used and of the elements that constitute them. The procedure carried out by the analysis of reliability calculates a number of measures of scale reliability which are normally used and which also provide information about the relationships among the individual elements of the scales. According to McGraw and Wong (1996) "the most fundamental interpretation of an ICC is that it is a measure of the proportion of a variance that is attributable to objects. Common examples of ICCs in the literature are twin correlations, Cronbach's alpha, heritability coefficients, Kish's rate of homogeneity (Kish,1965), and measures of reliability that arise from either classical test theory or generalizability theory (Cronbach, Gleser, Nanda, & Rajaratnam, 1972).

The intraclass correlation coefficients can be used to calculate estimations of the interexaminer reliability, which was determined using a statistical method described by Cohen (1969). As an example there could be asked: Does the questionnaire measure the client's satisfaction successfully? The analysis of reliability will be able to help to determine the degree in which all the elements of the questionnaire are inter-related, to obtain a global index of replicability or the internal consistency of the scale on a whole and identify problematic elements which should be excluded from the scale.

The results can be statistical, descriptive for each of each variable and for the scale, statistical summaries, which compare the elements, correlations and inter-element co-variances, reliability estimations, ANOVA's analysis of variance, coefficients of intraclass correlation, Hotelling's T square and Tukey's test of additivity. The different models of reliability are:

- Alpha (Cronbach). It is model of internal consistency, based upon an inter-element correlation rate.
- Split-half reliability. This model divides the scale into two parts and examines the correlation among both sides.

- Guttman Scaling. This model calculates Guttman's inferior limits to achieve reliability.

- Parallel. This model assumes that all elements have equal variances and error variances through replicability.

- Strict parallel. This model assumes the parallel model assumptions and it also assumes that the averages are equal through the elements.

We applied this coefficient to the following questions and items:

C. ICT COMPETENCIES: - Mastery in the usage of determined telematic tools and resources- :

- Question 6: Appraisal of the usefulness of different telematic tools and resources.

- Question 7: Appraisal of the level of competence in the use of different tools and resources.

- Question 8: Appraisal of the level of use of ICT (as communication tool, as self-training tool...)

D. ICT IN ENGLISH LANGUAGE TEACHING

- Question 9: Which tools are mostly used by teachers in English Language Teaching?-

- Question 10 - Which factors determine that teachers use more ICT in teaching and learning processes?

- Question 10.b. - Which factors determine that teachers don't use more ICT in teaching and learning processes?

E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.

- Question 12: What type of ICT training would teachers like to receive?

Expectations towards the training action

153

After the application of this coefficient, the obtained results which are included in the correspondent annex can be observed from the chart below:

QUESTION	CRONBACH'S ALPHA
C. ICT COMPETENCIES	
Question 6 Usefulness of different telematic tools and resources.	,8227
Question 7: Level of competence in the use of different tools and resources.	,8735
Question 8: Use of ICT	,8890
D. ICT IN ENGLISH LANGUAGE TEACHING	-
Question 9: Which tools are mostly used by teachers in English Language Teaching?-	,8830
Question 10 – Which factors determine that teachers use more ICT in teaching and learning processes?	,8658
Question 10.b. - Which factors determine that teachers don't use more ICT in teaching and learning processes?	,8382
E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS. –	
Question 12: Expectations towards the training action	,9070

Reliability coefficient for some items in the questionnaire

The values which are close to the maximum value (1) show that the reliability index found are quite acceptable. According to Bisquerra (1987: 189) the correlations which are between 0,8 and 1 are considered very high. From this opinion we believe that the questionnaire, an important instrument central to this research possesses a high degree of reliability.

VI.III.i.iv.i.iv. Elaboration of the definite version

154

This section includes the design, development, dimensions and variables of the definite questionnaire. After having introduced all the changes and suggestions by teachers and experts, we proceeded to the creation of the ultimate and definitive version of it. As it was said previously and it can be observed in the annex which included the two versions, the initial and the final one, the final version of the questionnaire which was passed to the teachers who participated in this research and belonged to different backgrounds addressed the following items:

A.PERSONAL IDENTIFICATION DATA:	Age, Teaching Level, Place of work
B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES	Access to the Net from home and school Type of connection
C. ICT COMPETENCIES:	- Mastery in the usage of determined telematic tools and resources.
D. ICT IN ENGLISH LANGUAGE TEACHING	- Which tools are mostly used by teachers in English Language Teaching? - Which factors determine that teachers use more ICT in teaching and learning processes?
E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.	- What type of ICT training teachers would like to receive. Expectations towards the training action.

A. PERSONAL IDENTIFICATION DATA: Age, Teaching Level, Place of work

B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES

    - Connectivity and access to technological resources

    - Access to the Net from home and school

    - Type of connection

C. ICT COMPETENCIES:

    - Usage of ICT

- Mastery in the usage of determined telematic tools and resources.

D. ICT IN ENGLISH LANGUAGE TEACHING

- Which tools are mostly used by teachers in English Language Teaching?

- Which factors determine that teachers use more ICT in teaching and learning processes?

E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.

The final version of the questionnaire came off constituted by **5 main dimensions and 20 questions.**

DIMENSIONS
A.PERSONAL IDENTIFICATION DATA:
B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES
C. ICT COMPETENCIES:
D. ICT IN ENGLISH LANGUAGE TEACHING
E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.

A. PERSONAL IDENTIFICATION DATA: Age, Teaching Level, Place of work

This part of the questionnaire compiles information about different aspects related to the age, the teaching level of teachers participating in the courses: (Primary, Secondary Education and others, such as adults), the gender, the place of work (High School, School…) and the area of work, that is, if the High school or school is situated in a city, town or village. The information obtained from these data has allowed us to contextualise the field of the research and to establish different relationships and differences towards the personal and professional traits of the teachers that constituted the participating population in our research.

A.TEACHER'S IDENTIFICATION DATA
- Age
- Gender
- Teaching Level
- Years of teaching experience
- Geographical Area

B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES

By means of these questions, the information we wanted to obtain was related to the type of connectivity and access to technological resources of teachers, both from home and from their places of work. That is, the possibility of access to the Net of teachers and thus to the different ITC-based tools and resources that it offers to them in terms of both training but also to provide support for teaching. Teachers are enquired if they have a computer both at home and at work and the time they have had it. Regarding the connectivity, they are asked about the type of connection they have and the place from which they connect more to the Internet (school or home).

B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES
- Disposal of computer at home
- Disposal of computer at work
- Access to the Net from home
- Access to the Net from school
- Type of connection (Modem, ADSL...)
- PLace from which they connect to the Internet more frequently

C. ICT COMPETENCIES:

This section tries to evaluate the answers that teachers provide to the importance of the usage of ICT in teaching and learning practices on the one hand, thus, they

are asked how do they appreciate and consider ICT: as tool for personal communication, as tool for collaborative and cooperative learning, as tool central to teaching processes, as tool secondary to teaching processes, as tool to search for information, as word processor, as tool to manage images and sound, as self-training tool, as tool to develop administration tasks, as tool to manage personal tasks (scheduler...)...

As far as the mastery and competence in the usage of determined telematic functions, teachers are asked about their skill in terms of the usage of telematic tools as a means of personal communication; as working tools, as a training tool and as a tool to develop personal and management tasks. In the third part teachers are asked about their competence in using the computer and the specific tasks they carry out with it. They are asked why they use the computer: as communication tool, as word processor, as image processor, as tool to carry out self-training activities, to work collaboratively, to search for information, to manage personal information, to develop ludic activities....

Throughout the questions that conform this section we would try to obtain fundamental information on the knowledge and mastery that teachers have of ICT tools and resources; thus, the information we will be able to gather will be on the one hand to perceive the degree of competence that teachers have in relation to the usage of telematic tools and resources and on the other to know if the utilization they make of the different ICT-based tools come from the training they have previously received (if it is the case) and which are the functions which are used the most. These answers will become of great help in order to know more accurately about the usage that English as a foreign language teachers make of ICT, both at home and at their place of work, in their personal and professional spheres and could help us to obtain an idea of why certain functions are more or less used by them. Finally we will discover some of the reasons which prevent teachers from using these tools.

C. ICT COMPETENCIES:
- - Usage and appreciation of ICT
- - Mastery and Competence in the usage of determined telematic functions
- - Usage of the computer to carry out functions

D. ICT IN ENGLISH LANGUAGE TEACHING

In this section we will try to determine which tools are mostly used by teachers in English Language Teaching and why are they used either as central or peripheral to English as a foreign language teaching processes. In this sense, teachers are asked why do they use certain telematic tools and resources: to communicate with students, to have access to reference tools, to give support to their teaching practice by accessing to virtual libraries, virtual resources centers, by accessing to WebPages for teachers, to OWLs (On-line Writing Labs), to educational websites… To use didactic activities such as WebQuests, web worksheets, self-study quizzes, weblogs, e-lessons; to create electronic material, to participate in telematic projects… Secondly in this section we will make reference to which factors determine that teachers use more ICT in teaching and learning processes? Lack of technical and pedagogical training, barriers to have access to telematic tools and resources, lack of time and knowledge, scarce hardware and multimedia resources, lack of habits, difficulties in the teaching centers, scarce training offer…

The answers to this section will account to acquire an accurate idea of which is the interest of these teachers in receiving or bettering their training in the acquisition of ICT skill and which are the didactic and technical aspects (both related to the teaching of English as a foreign language and other which may be more general) upon which they would wish to receive specific training.

159

D. ICT IN ENGLISH LANGUAGE TEACHING
- Why do English language teachers use ICT-based tools and resources?
- Which tools are mostly used by teachers in English Language Teaching?
- Which factors determine that teachers use more ICT in teaching and learning processes?

E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.

This final part is directly linked to one of the main points of interest of our research: on the one hand copse the knowledge those teachers have of their previous ICT training, their appraisal and opinion will shed some light to many questions. On the other hand teachers are asked about specific training needs in the acquisition of both technical and pedagogical skill in order to teach English as a foreign language: questions are clear and enquire teachers for specific responses: They want to receive specific training in order to: communicate with students, to have access to reference materials and communication means, to give support to teaching procedures (Virtual Resource Centers, educational websites, cyber listening labs), to be able to appropriately use different didactic activities such as WebQuests, web worksheets, e-lessons, Weblogs....; to be able to create electronic material, to be able to participate in telematic projects...

In the end there is an open part in which participants in the courses can suggest and propose activities or tools upon they would wish to receive training.

E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.
- Appraisal of previous ICT training
- Training needs
- Course expectations
- Others

As far as the variables in our study which are present in the questionnaire, they differ one from another in the measurement level, also known as scale of measurement. Cea d' Ancona (1996) defines a variable as any object or characteristic quality which contains at least two attributes", a variable is any measured characteristic or attribute that differs for different subjects. Variables can be quantitative or qualitative. Quantitative variables are measured on an **ordinal**, **interval**, or **ratio** scale; whereas qualitative variables are measured on a nominal scale. Measurements with ordinal scales are ordered in the sense that higher numbers represent higher values. However, the intervals between the numbers are not necessarily equal. Equally, nominal measurement consists of assigning items to groups or categories. No quantitative information is conveyed and no ordering of the items is implied. Nominal scales are therefore qualitative rather than quantitative.

The type of variables included in our study is both ordinal and nominal:

-Age: Ordinal
-Teaching Level: nominal
-Geographical level: nominal
-Computer at home: nominal
-Computer at school: nominal
-Internet connection at home: nominal
-Internet connection at school: nominal
-Where do you connect to the Internet?: nominal
-Valuate the utilities of ICT (12 subgroups): Ordinal
-Valuate your mastery of the functions according to your competence (12 subgroups): Ordinal
-ICT training Ordinal
-Why do you use ICT as English as a foreign language teacher? (19 subgroups): Ordinal

-Valuate in which way these reasons can determine that teachers use ICT (6 subgroups): Ordinal
-Valuate in which way these reasons can prevent teachers from using ICT (7 subgroups): Ordinal
- I would like to receive specific training in the use of these tools (19 subgroups): Ordinal

Type of variables

VI.III.i.iv.ii. Virtual learning environments: Tools for collaborative working:

The practical part of this research project started in 2003. The fact of choosing a suitable learning environment through which instructional basic courses on the use of ICT for English as a foreign language teachers could be given and delivered was a decision hard to take. By then BSCW, Basic Support for Cooperative Work, was the collaborative environment and the platform used to distribute instructional materials and to support on-line courses at Universitat Rovira i Virgili (Tarragona). It was mainly for this reason that we decided to use this platform upon which the virtual part of our blended courses were to be sustained.

The help of University staff who offered technical support and attendance was another factor which contributed to the election of this platform. In the following years Open Source platforms were gaining fame and both the University and the Department of Education adopted Moodle as virtual training tool, and the two latest courses (2005-2006), center of our research thesis- were given using that support. Although the potentialities of Virtual Learning Spaces have been previously exposed, in order to show the differences among them and their basic utilities for the blended instructional approach we used to deliver our courses, both platforms will be briefly described.

VI.III.i.iv.ii.i. BSCW

BSCW, Basic Support for Cooperative Work, (**http://bscw.gmd.de**) is a WWW based groupware application that supplies a system of "shared workspaces" where a

162

group of distant collaborators can share information with the only aid of a standard web browser. Shared workspaces provide:

- file upload and download,
- document revision and rating,
- event notification,
- threaded discussions,
- personal and group agenda,
- user authentication,
- user and group management,
- user roles definition, etc.

BSCW provides a multilingual interface, a useful system of document revision and rating, personal and group agendas, different access rights for instructors and students, integrates searches on the web, electronic communication support including e-mail, discussions and chatting, etc. This system, described as a tool to support collaboration in educational projects was selected in the first stage of the research to achieve certain objectives and, particularly, due to its usability and user-friendly characteristics. Teachers taking part in the different courses were basically unaware of the basic communication tools in the Internet and did not possess skill or much ability to cope with technology.
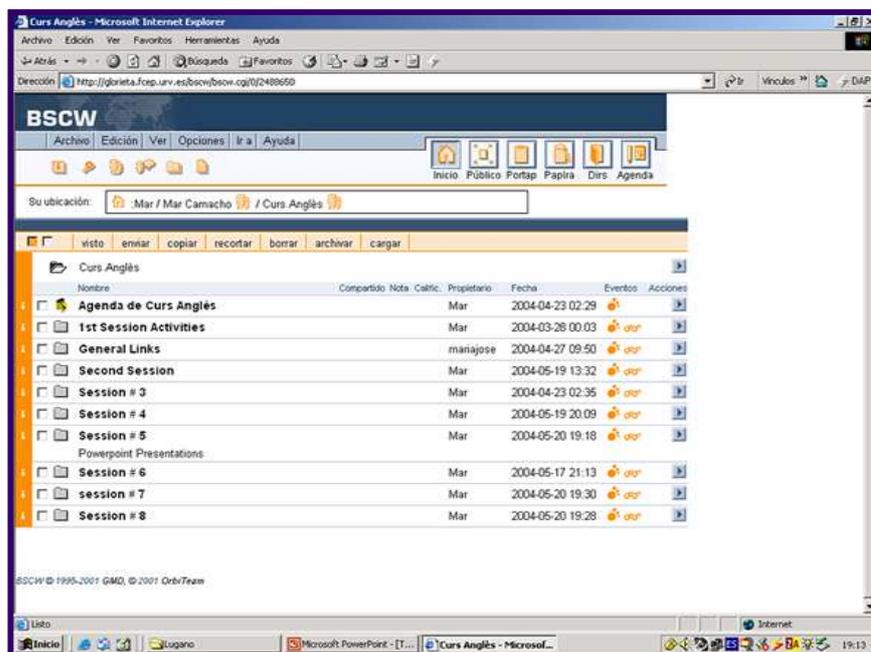
BSCW course interface

Collaborative space of the course: "Guia per a l'explotació d'eines i recursos telemàtics per a l'ensenyament d'idiomes" 30/9/2004 – 1/12/2005 Escola Oficial d' Idiomes - Tarragona

http://glorieta.fcep.uv.es/bscw/bscw.cgi

According to this fact, and among the reasons to use BCSW as platform to develop the online teacher training part in our courses, BSCW can manage in a natural way easy documents created with word processors or other authoring software, all of them can be hyperlinked together in an appropriate structure of teaching materials. Nevertheless, and according to our opinion, the importance of BSCW relies on its "shared workspace", essentially a folder that a group of users can share to collaborate in a wide sense, which incorporates an event management mechanism that keeps a user informed about the recent actions from the rest of collaborators in the workspace (González et al. 2005). These facilities can promote not only cooperation between instructor and learner so that the expert provides coaching and scaffolding, but cooperation between course participants allowing the free exchange of ideas and outcomes. When courses end, BSCW allows maintaining the collaboration between instructors and learners and it was made known to teachers that they could exploit it in the future with their own students

164

and that they would be able to continue collaborating among their own educational centers.

Due to all the afore-mentioned potentialities of the platform we used several of its utilities such as the forums in order to obtain useful and valuable information regarding the attitudes and the training needs of the teachers who attended the courses.

One of the first characteristics that can be highlighted of this instrument is its simplicity in both the handling and planning processes. One session is enough to show the course participants how to use it as well as the necessary applications to start to work, the meaning of the most important icons and the functions that are going to allow an effective use of it. Although the platform has limited capacity for its users, it is big enough not to provoke difficulties during its usage and in the storage capacity of the folders.

Another point to be pointed out is the multiplicity of possible uses offered by the environment: possibility of storage, creation of different versions of documents, creation of folders for subjects, compatibility with different programs, easiness for the electronic mail delivery, use of agendas, creation of debates and notes... All these tools helped to promote communication and reflection at the time that teacher participants acquired importance in managing their own space.

In this sense the platform has allowed us to create different folders; including the course contents organized into different session folders and which keep up available for teachers throughout the course. The global vision it offers allows the teacher to introduce new changes etc... The creation of a collaborative folder was used to collect the different contributions that the participants developed throughout the course regarding groupal tasks and common tasks they wanted to shared or that they had to construct together. Another folder created was aimed at collecting all the materials and contents that teachers thought of interest and relevant to the integration of ICT into their teaching practices, thus, they collected articles, interesting websites Urls, images, etc…

165

The particularity of being able to be informed daily about the activity of every one of the folders: those that had been read, those that had been modified... was a potentiality of the environment which became of great help in order to be aware and acquainted of the teachers movements and facilitated – at the same time- the introduction of qualitative and quantitative elements of evaluation. An exact tracking of the interests and worries of teachers in every moment of the course was essential to obtain an approximate idea of the development of the course and the introduction of new strategies and streamlines that could be followed up in the future, in order to improve and enhance the potentiality of the environment.

The possibility of creating forums of debates for each of the topics that we had dealt with, the contributions of these debates and the natural way with which teachers can take part in them allowed a very detailed evaluation of the quantitative and qualitative contribution of teachers and to evaluate qualitatively the process of development of the different subjects. This made possible the collective creation of documents related to events, news, declarations, and helped to create a general sense of identity, and therefore, the creation of a community of practice.

The use of BSCW promoted the communication, by mail or other asynchronous tools among the components of the course during periods in which they did not attend on-site sessions. It also favored the external participation of other professionals of the educational World (Institute of Sciences of Education, Virtual Resource Centers, Department of Education authorities…), whose intervention was interesting due to their positions. These external participants were also allowed to take part in the training process and apart from being external observers, they could also post comments in the forums of discussion and observe the training process in situ. The perception of the problems, barriers that teachers encounter with when facing the integration of ICT into their teaching and learning practices was extremely important to us, at the time that teachers saw that educational authorities were aware of the process and that their needs and petitions were at least listened and paid attention to.

The classroom journal that teachers kept throughout the process reflected the process as it was written by the course participants. It conveys the debate on the criteria of evaluation and classification of the different tools and resources used and other aspects that the participants suggest and are interesting to obtain. The use of the platform has promoted the development of more autonomous and more participative educational practices. This platform proved as a very useful tool to collaborate, to communicate, to transfer the training received to the real practices at schools, to open the training process to the participation of other interested agents who are really involved in the educational management. Within the educational system, teacher training needs pose radical and innovative challenges to be achieved in the quest for new systems of quality and life-long processes and this requires necessarily the integration of technological and high-quality resources into the methodology.

VI.III.i.iv.ii.ii. Moodle

The implementation of an Open-source Learning Management System platform **MOODLE** http://moodle.org/ started in the year 2005 and it was chosen to give response to both the teachers training needs and on the other hand to our individual needs as teacher trainer. The organization of a blended-based course on ICT and English language teaching for the last two courses: "Pla de Formació del Professorat de Llengües Estrangeres Departament d' Educació de la Generalitat de Catalunya and Pla de Formació del Professorat de Llengües (Català i Castellà) Departament d' Educació de la Generalitat de Catalunya was done through a Moodle platform.

Moodle (Modular Object–Oriented Dynamic Learning Environment) is a software package for creating Internet-based courses and websites. Each participant or teacher has only one account for the whole system and each account can have different access rights. Teachers of a course have full control over the course content. Different course formats are available to trainers and teachers together with a wide array of possible course activities. Moodle often offers a wealthy

167

assortment of features that often exceeds those of other environments. On the one hand, it includes a highly dynamic and functional site which provides support and a network of worldwide users that give quick responses to any question. A Moodle course contains elements on the page that can be modified, repositioned or deleted. Classically, there are "blocks" on either side which account for different special functions. These core blocks can be organised automatically, either numerically or within sequential weeks.
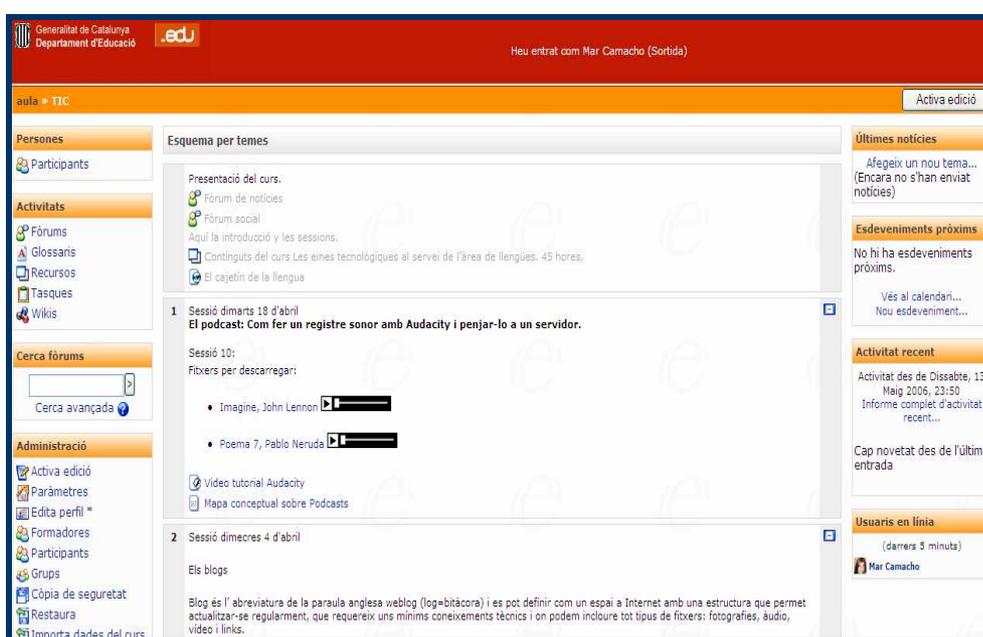
Moodle interface for the Department of Education Training program
Pla de Formació del Professorat de Llengües Estrangeres Departament d' Educació de la Generalitat de Catalunya.
http://phobos.xtec.net/comunitatdellengua/aula

Robb (2004) accounts for several of the potentialities of Moodle which make of it a distinctive environment.

- Extensibility: new functions can be created and activated.
- Selection of interface languages

168

- Record-keeping, Logs and Tracking. Moodle logs every click that students make for navigational purposes. Teachers can easily get full reports of the activities of individual students, or of all students for a specific activity.

As far as the different possibilities that Moodle offers for the delivery of both blended and on-line contents, we would like to point out the following main traits:

- **The Lesson Module** which provides information in small portions and allows to ask a comprehension question about what they have just learned and then, according to the response, branches out.
- **The Journal Module** is a place for each user to keep a learning diary, or to respond to other demands specified by the instructor.
- **The Assignment Module** allows course participants to submit a file for assessment and feedback from the instructor.
- **The Attendance Module**
- **The Questionnaire Module** elicits student opinions for further discussion either online or in class.
- **File Submissions**: A full file management system which allows both students and teacher to access files over the Internet.
- **Discussion Forums:** allow the students to interact with the trainer and the other course participants on specified topics. Its messages are also sent as e-mail to the learners registered e-mail addresses as long as they have subscribed to that specific forum.
- **"Hide Until" feature** allows the trainer to hide all materials, contents and contributions from the other learners for a specified length of time, after which they become available to all.

169
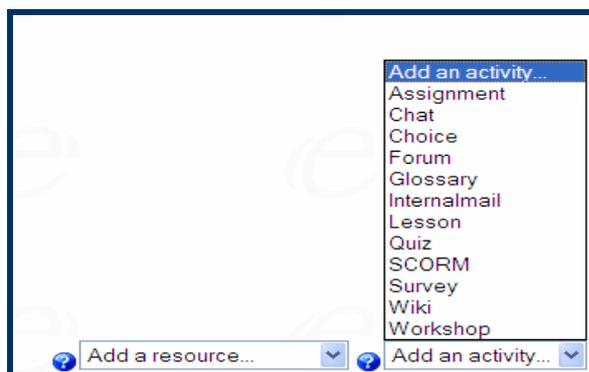
Example of the different activities to be created under a Moodle environment

Some of these tools that have been used of this Moodle platform have provided very useful so as to set the basis to create a solid virtual learning community formed by teachers of English as a foreign language, belonging to both Primary and Secondary education. The different tools we have used have helped us to gather essential information regarding both the training needs of this collective at the time that teachers have been instructed in the usage of the different tools and resources available to them in the learning environment.
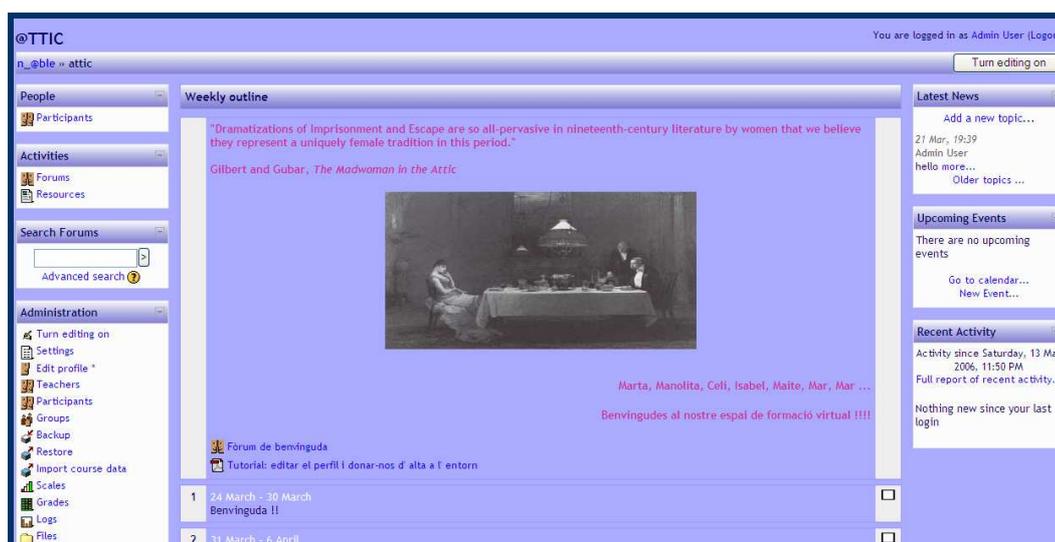
Moodle interface for the course

170

Tècniques audio-visuals per l' aprenentatge de les llengües estrangeres
http://phobos.xtec.net/mcamacho/moodle

Above all Moodle has facilitated communication among the members participating in the training courses, favoring thus, the creation of a virtual community and generating constant knowledge fluxes of experience sharing and exchange of thought regarding topics which ranged from the deep integration of ICT into their teaching and practices to the recommendation of books, films or museums.

Example of the Moodle forum interventions
Pla de Formació del Professorat de Llengües Estrangeres Departament d' Educació de la Generalitat de Catalunya.
http://phobos.xtec.net/comunitatdellengua/aula

Despite all these features, Moodle contains tools which provide very suitable possibilities to language teachers. After receiving training in the use of ICT-based tools, platforms, resources, teachers should be able to include and integrate them successfully into their teaching practice. The potentialities that Moodle offers to create and develop activities regarding the creation of electronic activities which could be of help for English as a foreign language teachers are the following helped

171

us to decide for this platform as well: **the quiz-making function:** to make different types of quizzes. Quiz types relevant to language teaching are: Multiple choice, True/False, Numerical, Matching, Description, and Cloze, and the **Hot-Potatoes** quiz generator http://www.halfbakedsoftware.com whose activities can now be integrated into Moodle with full reporting; teachers can view their learners' scores, time started, and lapsed time. However, the introduction of these modules will constitute part of other training modules to be developed in the future.

VI.III.i.iv.v. The courses. Design of Instructional material. Evaluation and training modules.

As it has been previously stated, six teacher training courses organized both by the Institute of Sciences of Education of the Universitat Rovira i Virgili and the Department of Education have constituted the object of our deep research analysis. These courses have taken place in Tarragona and Barcelona and English as foreign language teachers from the whole of the Catalan territory have provided a privileged collective upon which this investigation has been centered. The courses have suffered some changes in the contents as technological advances and new tools appeared, although they have maintained the first objective under which they were created: in these courses teachers would receive training with the main objective to allow them to acquire the basic skill and competence in the use of ICT that would allow them to integrate successfully technology into their teaching practice.

In order to obtain meaningful and relevant data that could serve us to account for future training actions addressed to English as foreign language teachers it was thought to put the course contents under evaluation and analysis. After having devoted much time investigating and researching on the different use that English as a foreign language teachers could make of technological tools. After having deeply analyzed many of them and once their educational potentialities and usefulness for teachers of English as a foreign language were secured, I proceeded with the development of the contents of the course. The first course I developed "Guia per l'explotació d'eines i recursos telemàtics a l'aula d'anglès" took place in Tarragona. From this course the **"The N-@ble Project"** was born,   since it aimed at the teacher's capacitation on the use of different telematic tools and resources to be later on used in the English as a foreign language classroom. The course took place from November 2003 to March 2004 and 25 teachers belonging to both Primary and Secondary Education attended and finished it. From the results obtained, which came basically from the teacher's perceptions and opinions and

from the first questionnaire which was passed to them, different changes were introduced in order to improve the course materials, the course contents, the different tools used during the course and the communication means with which teacher and participants exchanged and shared communication.

The following courses all took place in the following academic year 2004-2005, "Guia per a l'explotació d'eines i recursos telemàtics per a l'ensenyament d'idiomes" also set in Tarragona during October 2004 and February 2005, "Tècniques audio-visuals per l' aprenentatge de les llengües estrangeres", which took place form December 2004 to March 2005 in Terres de l' Ebre (Southern Part of the Tarragona province) and finally "Aprofundiment de recursos telemàtics i creació de material electrònic a l'aula d'anglès" which took place in Tarragona from February to May 2005. The lessons learnt in the courses helped us to revise and improve their contents and to use new technological resources as they emerged.
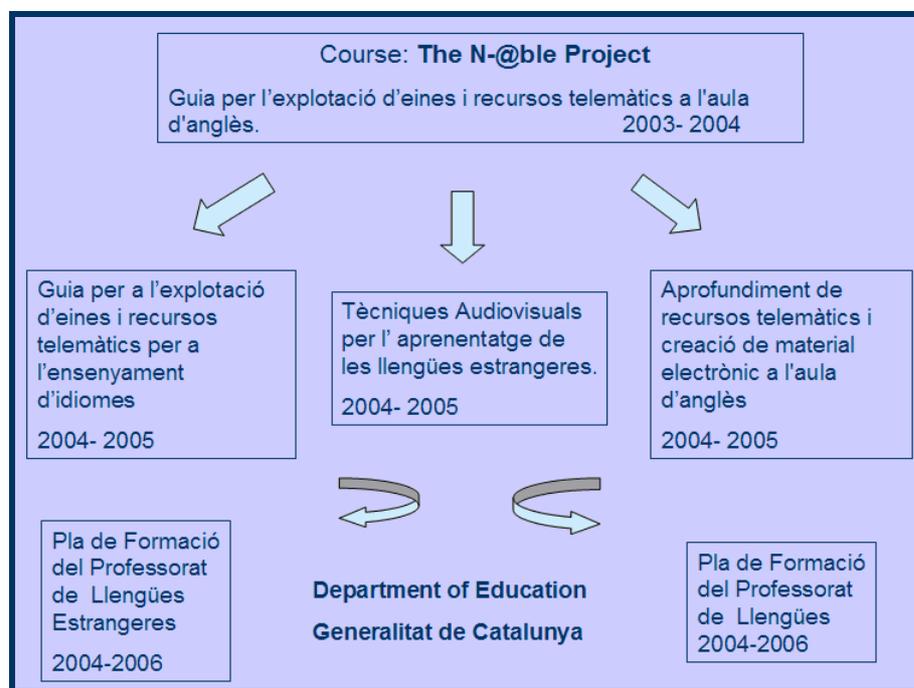
Teacher Training Courses of the research

To conclude, in February 2005 I started training teachers in the use of ICT for the Department of Education, with a national overview and teacher participants from all the Catalan area. The project continued all throughout the 2005-2006 academic year. The courses are set within a program which instructs trainers in the acquisition of reflective practice in order to attain to the obtention of changes in the classrooms regarding the teaching of the languages.

The results to the questionnaires and the contents of the different forum interventions were gathered all along these years in the mentioned courses. The courses contained an important part of on-site training although for the first time the blended approach was used, thus, an average of 25% of the training contents were delivered on-line. Although there were several instruments which served me to collect data and relevant information to create and develop material, prior to the course's beginning several training modules were prepared. The assumption was that teachers did not have much knowledge on the use of technological tools and resources and that the courses would be specially centered on giving them this kind of instruction: how to use effectively certain tools, resources and activities which would allow them to integrate technology in class. Nevertheless, the aim was not that of providing them with technical skill, though there was some need for it, but attention would be more focused upon providing them with the didactic skill to integrate technology from the area of languages.

Basically, the courses followed the same pattern, the number of participants and the virtual environment used to provide on-line training are concerned, the courses had the following traits:

PERIOD	COURSE	MODALITY	PARTICIPANTS	LENGTH
2003-2004	Guia per l'explotació d'eines i recursos telemàtics a l'aula d'anglès. Tarragona	Blended On-site 70% On-line 30%	Primary and secondary English as a Foreign Language teachers	30 HOURS
2004-2005	Guia per a l'explotació d'eines i	Blended On-site 60%	Primary and secondary English	30 HOURS

175

	recursos telemàtics per a l'ensenyament d'idiomes Escola Oficial d' Idiomes Tarragona	On-line 40%	as a Foreign Language teachers	
2004-2005	Aprofundiment de recursos telemàtics i creació de material electrònic a l'aula d'anglès (II)– Universitat Rovira i Virgili (Tarragona).	Blended On-site 70% On-line 30%	Primary and secondary English as a Foreign Language teachers	30 HOURS
2004-2005	Tècniques audio-visuals per l' aprenentatge de les llengües estrangeres. Roquetes. Terres de l' Ebre.	Blended On-site 60% On-line 40%	Secondary Education English as a Foreign Language teachers	30 HOURS
2004-2006	Pla de Formació del Professorat de Llengües Estrangeres Departament d' Educació de la Generalitat de Catalunya	Blended On-site 70% On-line 30%	Secondary Education English as a Foreign Language teachers	15 HOURS 45 HOURS
2004-2006	Pla de Formació del Professorat de Llen-gües (Català i Caste-llà) Departament d' Educació de la Gene-ralitat de Catalunya.	Blended On-site 70% On-line 30%	Secondary Education English as a Foreign Language teachers	15 HOURS 45 HOURS

PERIOD	COURSE	VIRTUAL. ENVIRONMENT	# OF PARTICIPANTS
2003-2004	Guia per l'explotació d'eines i recursos telemàtics a l'aula d'anglès. Tarragona	BSCW	25
2004-2005	Guia per a l'explotació d'eines i recursos telemàtics per a l'ensenyament	BSCW	24
2004-2005	Aprofundiment de recursos telemàtics i creació de material electrònic a l'aula d'anglès (II)–	BSCW	26
2004-2005	Tècniques audio-visuals per l' aprenentatge de les llengües estrangeres.	BSCW/MOODLE	14
2004-2006	Pla de Formació del Professorat de Llengües Estrangeres	BSCW / MOODLE	20
2004-2006	Pla de Formació del Professorat de Llen-gües.	BSCW / MOODLE	50

Finally, the course contents, together as their objectives have experimented various changes. Regarding their structure and depending on the settings, schedule and calendar requirements, the courses varied one from another although the general structure followed the same scheme.

COURSE 1:
Guia per l'explotació d'eines i recursos telemàtics a l'aula d'anglès. 2003- 2004
COURSE STRUCTURE:
LENGTH: 30 HOURS NUMBER OF TRAINING SESSIONS: 10 (3 hours approximately) DISTRIBUTION OF TRAINING SESSIONS: 7 ON/SITE / 3 ON-LINE
COURSE CONTENTS:
MODULE 1:   ON-SITE SESSION Course Presentation. Introduction to the use of the virtual Platform. Self-presentation activities. MODULE 2:   ON-SITE SESSION ICT in the Digital Era. The teacher's role in ICT-based settings. New competencies. Barriers for a successful integration of ICT.Participation in web-based forums. MODULE 3:   ON-SITE SESSION The WWW. Reference materials for English Language teachers: dictionaries, encyclopaedias, translators … MODULE 4:   ON-LINE SESSION – Practical workshop Educational use of reference materials for the English as a foreign language class. MODULE 5:   ON-SITE SESSION Communication tools: synchronous and asynchronous tools (I) Educational uses. MODULE 6:   ON-LINE SESSION Communication tools: synchronous and asynchronous tools (II) On-line meeting: forum, chats and electronic messengery. MODULE 7:   ON-SITE SESSION Searchers and inquiry-based activities: Introduction to WebQuests and Treasure Hunts MODULE 8:   ON-LINE SESSION Resources for English Language Teachers (I): virtual resource centers, OWLs, On-line Grammars. Student's and Teacher's Websites. MODULE 9:   ON-LINE SESSION Resources for English Language Teachers (II): virtual resource centers, OWLs, On-line Grammars. Student's and Teacher's Websites. Activities for its didactic Exploitation MODULE 10:   ON-LINE SESSION Taxonomy of Internet-based activities: songs, web worksheets, e-lessons, quizzes, puzzle… Didactic exploitation of the activities

COURSE 2:
Guia per a l'explotació d'eines i recursos telemàtics per a l'ensenyament d'idiomes 2004- 2005
COURSE STRUCTURE:
LENGTH: 30 HOURS NUMBER OF TRAINING SESSIONS: 10 (length of each session: 3 hours approximately) DISTRIBUTION OF TRAINING SESSIONS: 6 ON-SITE / 4 ON-LINE
COURSE CONTENTS:
MODULE 1:   ON-SITE SESSION Course Presentation. Introduction to the use of the virtual Platform. Activity: self-presentation. Communication tools: educational potentialities MODULE 2:   ON-SITE SESSION ICT in the Digital Era. The teacher's role in ICT-based settings. New competencies. Barriers for a successful integration of ICT. MODULE 3:   ON-SITE SESSION The WWW. Reference materials for English Language teachers: dictionaries, encyclopaedias, translators. Educational use for the English class. MODULE 4:   ON-LINE SESSION The Mass-Media in the Internet: radio and television bradcasting. MODULE 5:   ON-SITE SESSION Searchers and meta-searchers. Inquiry-based activities: WebQuest and Treasure Hunts MODULE 6:   ON-LINE SESSION Treasure hunt creation MODULE 7:   ON-SITE SESSION Resources for English Language Teachers: virtual resource centers, OWLs, On-line Grammars. Student's and Teacher's Websites. MODULE 8:   ON-LINE SESSION Resources for English Language Teachers: virtual resource centers, OWLs, On-line Grammars. Student's and Teacher's Websites. Didactic Exploitation activities. MODULE 9:   ON-SITE SESSION Taxonomy of Internet-based activities: songs, web worksheets, e-lessons, quizzes, puzzle… Didactic exploitation of the activities MODULE 10:   ON-LINE SESSION Introduction to the creation of electronic activities with Hot Potatoes.

COURSE 3:
Aprofundiment de recursos telemàtics i creació de material electrònic a l'aula d'anglès (II)–
COURSE STRUCTURE:
LENGTH: 30 HOURS NUMBER OF TRAINING SESSIONS: 10 (length of each session: 3 hours approximately) DISTRIBUTION OF TRAINING SESSIONS: 7 ON/SITE / 3 ON-LINE
COURSE CONTENTS:
MODULE 1:   ON-SITE SESSION Communication tools: blogs and introduction to the use of the virtual Platform. Activity: self-presentation. MODULE 2:   ON-LINE SESSION - PRACTICAL WORKSHOP Creation of a personal or class blog. MODULE 3:   ON-LINE SESSION Integration of audio and video-based resources into the blog MODULE 4:   ON-SITE SESSION The WWW. Reference materials for English Language teachers: dictionaries, encyclopaedias, translators … Educational use MODULE 5:   ON-SITE SESSION Searchers and meta-searchers. Inquiry-based activities: WebQuest and Google Tools MODULE 6:   ON-LINE SESSION Design and creation of a WebQuest (with templates). MODULE 7:   ON-SITE SESSION Resources for English Language Teachers: virtual resource centers, OWLs, On-line Grammars. Student's and Teacher's Websites. MODULE 8:   ON-LINE SESSION Resources for English Language Teachers: virtual resource centers, OWLs, On-line Grammars. Student's and Teacher's Websites. Strategies for their didactic usage. MODULE 9:   ON-SITE SESSION Taxonomy of Internet-based activities: songs, web worksheets, e-lessons, quizzes, puzzle… Didactic exploitation of the activities MODULE 10:   ON-LINE SESSION Introduction to the creation of electronic activities with Hot Potatoes.

COURSE 4:
Tècniques audio-visuals per l' aprenentatge de les llengües estrangeres. 2004-2005
COURSE STRUCTURE:
LENGTH: 30 HOURS - NUMBER OF TRAINING SESSIONS: 10 DURATION OF EACH TRAINING SESSION: 3 hours app. DISTRIBUTION OF TRAINING SESSIONS: 6 ON-SITE / 4 ON-LINE
COURSE CONTENTS:
MODULE 1:   ON-SITE SESSION Course Presentation. Introduction to the use of the virtual Platform. Self-presentation MODULE 2:   ON-SITE SESSION ICT in the Digital Era. The teacher's role in ICT-based settings. New competencies. Barriers for a successful integration of ICT.Participation in web-based forums. MODULE 3:   ON-SITE SESSION The WWW. Reference materials for English Language teachers: dictionaries, encyclopaedias, translators … MODULE 4:   ON-LINE SESSION – Practical workshop Educational use of reference materials for the English as a foreign language class. MODULE 5:   ON-SITE SESSION Communication tools: synchronous and asynchronous tools. Educational uses. MODULE 6:   ON-LINE SESSION Introduction to blogs. Practical workshop: creation of a class blog. MODULE 7:   ON-SITE SESSION Searchers and inquiry-based activities: Introduction to Treasure Hunts MODULE 8:   ON-LINE SESSION Resources for English Language Teachers (I): virtual resource centers, OWLs, On-line Grammars. Student's and Teacher's Websites. MODULE 9:   ON-LINE SESSION Resources for English Language Teachers (II): virtual resource centers, OWLs, On-line Grammars. Student's and Teacher's Websites. Activities for its didactic Exploitation MODULE 10:   ON-LINE SESSION Taxonomy of Internet-based activities: songs, web worksheets, e-lessons, quizzes, puzzle… Didactic exploitation of the activities

COURSES 5/6:
Pla de Formació del Professorat de Llengües Estrangeres. Departament d' Educació de la Generalitat de Catalunya. 2004- 2006
COURSE STRUCTURE:
LENGTH: 45 HOURS (In the Department of Education courses the training contents were delivered in two different academic years and respectively in two blocs of 15 and 45 hours. NUMBER OF TRAINING SESSIONS: 20 DURATION OF EACH TRAINING SESSION: 3 hours app. DISTRIBUTION OF TRAINING SESSIONS: 12 ON-SITE / 8 ON-LINE
COURSE CONTENTS:
YEAR 1 (2004-2005)
MODULE 1: ON-SITE SESSION Course Presentation. Introduction to the use of the virtual Platform BSCW. Communication tools: synchronous and asynchronous tools. Educational potentialities MODULE 2: ON-SITE SESSION ICT in the Digital Era. The teacher's role in ICT-based settings. New competencies. Barriers for a successful integration of ICT. MODULE 3: ON-LINE SESSION Communication tools: synchronous and asynchronous tools . Activity: self-presentation and debate participation. MODULE 4: ON-SITE SESSION The WWW. Reference materials for English Language teachers: dictionaries, encyclopaedias, translators. Educational use MODULE 5: ON-SITE SESSION Searchers and meta-searchers. Inquiry-based activities: WebQuest and Treasure Hunts MODULE 6: ON-LINE SESSION Treasure hunt creation MODULE 7: ON-SITE SESSION Introduction to blogs. Potentialities of this tool into education. MODULE 8: ON-LINE SESSION Creation of a blog

COURSE CONTENTS:
YEAR 2 (2005-2006)
MODULE 9:   ON-SITE SESSION Course Presentation. Introduction to the use of the virtual Platform MOODLE. Communication tools of the platform. Creation of a personal profile. MODULE 10:   ON-SITE SESSION Elements for the creation of a virtual community. Introduction to the use of the environment. MAMBO. How to send contents and distribution of tasks among the group participants. MODULE 11:   ON-LINE SESSION Development of the tasks. Send contents. Web of the month, article of the week… MODULE 12:   ON-SITE SESSION Introduction to digital video (I) MODULE 13:   ON-SITE SESSION Introduction to digital video (II) MODULE 14:   ON-LINE SESSION Creation of personal spaces within Moodle MODULE 15:   ON-SITE SESSION TRaining regarding the management of personal spaces in Moodle MODULE 16   ON-SITE SESSION Introduction to audio free software. Audacity. Practical workshop. MODULE 17:   ON-SITE SESSION Introduction of audio and video resources into blogs: Podcasting. MODULE 18:   ON-LINE SESSION Introduction of audio and video resources into blogs (II): Podcasting and videoblogging. MODULE 19:   ON-SITE SESSION The creation of a virtual community. Tools for sindication MODULE 20:   ON-LINE SESSION Narrative didactic sequencies introducing audio and video devices.

VI.III.i.iv.v.i The N-@ble Project

As it was said previously, the "**N-@ble project**" (2004) emerged as an instructional proposal aimed at training English language teachers (Secondary and Primary Education) in ICT-based settings in order to help them to reach success in the acceptance and implementation of technology into their teaching practices and to achieve, at the same time, quality standards in the new teaching processes related to ICT. The initiative was aimed at promoting exchange of experiences among teachers via collaborative work, as well.

This initiative came out to provide response to an increasing training demand by a collective of teachers of English as a second language belonging to both Primary and Secondary Education. From the Institute of Sciences of Education (ICE) of the Universitat Rovira i Virgili in Tarragona a first implementation of this training course was carried out from February 2004 to May 2004 upon 25 teachers of English as a foreign language, whose common trait was their eagerness to learn and acquire both pedagogical and technical ICT skills to be implemented in their classes. The whole course had a total length of 30 hours of blended training (30% online and 7% on-site training), divided into ten sessions, as it has been stated before in the development of course contents for each course.

The "**N-@ble project**" sought to accomplish the following main objectives:

- Analyse the educational potentialities of ICT in the teaching of English as a foreign language.
- Create a virtual instructional model dedicated to teachers of English aimed at facilitating tools, resources and strategies to integrate ICT and to encourage collaboration and cooperation among them.
- Analyse the effectiveness of the instructional platform used through its contribution to improve the quality of teaching English through the use of new technologies.

Specific Objectives:

- Use of Web-based and on-site training as specific methodology to train foreign language teachers.
- Define and classify those telematic tools and resources useful for the teaching of English as a foreign language and the inclusion of didactic strategies to contribute to its development.
- Research on the latest trends in technology related to ELT.
- Create elements of communication and cooperation to enhance collaboration and experience exchanges among teachers.
- Facilitate to teachers an attractive means to familiarise with, which would enable future research in this context.

A process of research on this field of knowledge embodied different activities which ranged from the visit and interviews to different experts to deep literature reading. The access to different studies carried out in this field, such as the report "The Impact of Information and Communication Technologies on the Teaching of Foreign Languages and on the Role of Teachers of Foreign Languages" commissioned by the Directorate General of Education and Culture of the European Union, and the attendance to different lectures given by experts on ICT environments revealed themselves as really important for the successful theoretical basis of this initiative.

The framework of research of this project was initially shaped within the context of the teaching of English as a foreign language through the use of ICT in Catalan Primary and Secondary Education -both compulsory and post-compulsory-. The main aim of this project was that of testing and evaluating certain course contents that had been especially created and addressed to English as a foreign language teachers in the use of ICT and to test, at the same time, the suitability of a virtual platform, BSCW, to support the whole training process and to contribute in an effective way to widely spread good practice not yet established but tremendously useful from the viewpoint of ICT implementation in teaching processes.

Using the Internet effectively in English as a second language instruction requires that the teacher has ready access to a collection of web resources of quality, utilize teaching techniques to make effective use of those resources in the classroom and is at the same time able to find additional resources to suit his/her students´ needs. In order to provide these teachers with specific training for the acquisition of ICT skill at the beginning of the teacher training course teachers were given access to BSCW and to the web-based instructional platform, whose main aim was that offering online support and training during the course. Prior to the use of BSCW, a really basic space had been created to support the process, and it included the following sections: Training modules, Communication, ICT tools and resources, multimedia and users. The discovery of BSCW soon revealed that the use of that collaborative environment would enhance the development of the ability to collaborate and co-operate by means of the different communication tools in included, all together in a process which involved experience sharing among other important factors.

Already in 2003, when this project was born, the main aims when first developing and conceiving the N-@ble project sought to answer the following assessment needs:
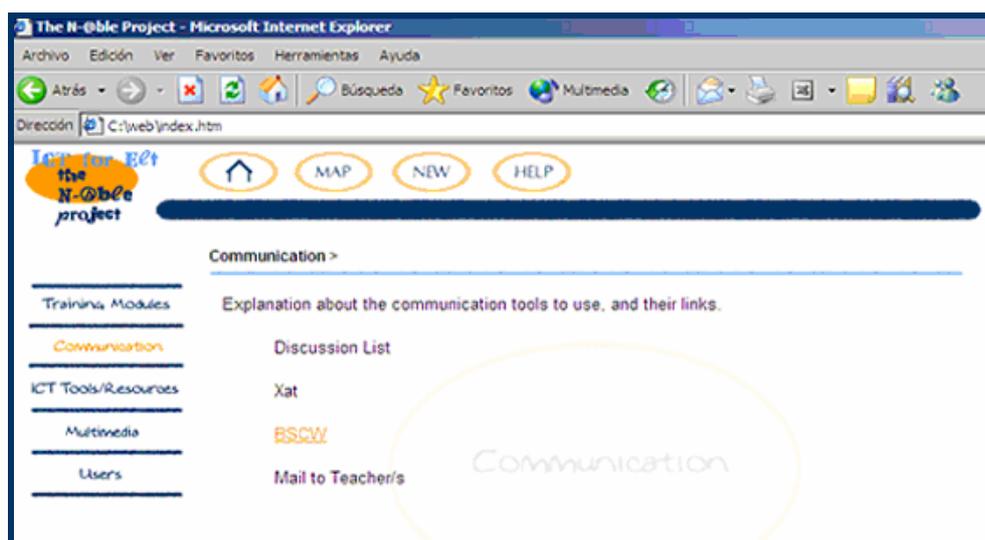
Interface of the first initial web-based space to give support to the training process 2003

The suitability of the virtual training platform, BSCW in this case, to support on-line training processes.

The creation and widening of a virtual learning community of teachers set in ICT-based environment.

The detection of specific training needs of teachers of English in ICT-based settings.

The effectiveness of the training modules created specifically for this course its contribution to enhance and promote the integration of teachers of ICT-based tools and resources into their teaching practice.

The first course was given from February to May 2004. Throughout this period teachers were introduced to basic notions on how to use a workshared space and received both technical and pedagogical instruction related to the use of ICT in the teaching of English as a foreign language. On the whole, teachers attended seven on-site sessions with a length of three hours which took place weekly whereas the remaining hours (9) were devoted to online training. The different training modules were monographic and teachers were acquainted with aspects which ranged form the search for information in the Internet to a brief introduction on how to create electronic materials to be carried out in class.

The Internet provides the teachers of English with a vast range of varied and rich educational tools and resources upon which a detailed and exhaustive overview has been carried out throughout this training project. These tools and resources contain information that can be of help in the task of introducing new technologies within the teaching process. The tools of communication in Internet - both synchronous (chat, whiteboard, audio and videoconferencing…) and asynchronous (mailing lists, electronic discussion lists, e-mail, collaborative environments…) constitute an important part of tools to be analyzed, especially in those aspects that concern the teaching of English as a foreign language and to the uses a teacher may retrieve from: The Chatroom and the Chat Center, the Web-based Message Board, the Student´s Discussion Pannel, English Learners Computer

Forums, Web-mail, Virtual Exchanges, E-Pals Club, Mailing Lists, Help Center on English-related questions, ,..

Resources such as Educational Websites, Virtual Language Centers, Online English Grammars, Virtual Libraries, Electronic Magazines, Dictionaries and Reference Materials, On-line encyclopaedias and Glossaries, Language Translators, OWLs (On-line Writing Labs), English Search Engines, CyberListening Labs, On-line Radio, Television and Press, Creative Teaching Websites, etc... have been presented to teachers. Finally, a taxonomy of the possible activities a teacher of English may resort to at certain moments include: Webquests, E-Journals, Lesson plans, Thinkquests, Webworksheets, Self-study quizzes, Web-reading comprehension exercises, Songs and poems, Wordsearch games, Grammar quizzes, Scavenger Hunts, Treasure Hunts, Brainbuilders, Crosswords and puzzles, Story Box, Vocabulary Builders, Virtual Games and jokes, electronic Flashcards, British and American Culture e-materials, Speech activities, Sequential creations, Virtual Role-playing, etc... A general vision of these elements was given to teachers.

Special emphasis was put upon training those pedagogical aspects which would enable teachers to incorporate the mentioned tools and resources into their day-to-day classes, since that was their main concern. Thus, as a final activity of each on-site training they were required to develop some online research on the given topic and share it with the course members and the trainers, bearing in mind always the pedagogical part of it and the way in which a determined activity or resource could be exploited in class.

Among the most important outcomes, it was seen that research and collaboration were basic and many of the teachers used communication tools such as the forums and e-mail to share experiences with the rest of the participants, to report incidences and to communicate with the trainers. After having acquired some technological competencies teachers became more involved in the training project and started to critically select, adapt, apply and develop those ICT tools and resources to be used in their own classrooms. Modules on ICT, teaching

methodology and instructional research complemented the modules on tools, resources and activities for the teacher of English.

One of the main concerns of the participants in this course was not only the acquisition of technical skill related to the use and management of ICT in their own teaching and learning processes, but the importance of the pedagogical skill which is closely related to the first, as it will be seen both after the analysis of the data obtained.

Image of the N-@ble course, Tarragona, March 2004

VI.III.ii. Phase Two: Implementation Phase.

This phase includes all the fieldwork, that is, it includes all the data collection process carried out in order to obtain information by means of the questionnaire application, the distribution of instructional contents and the use of different virtual environments and their web-based communication tools.

VI.III.ii.i. Application of the questionnaire.

The questionnaire was distributed during 2003-2005 to 71 of English as a foreign language teachers belonging to both Primary and Secondary Schools and to different geographical areas of the territory. This fact allowed us to take this group of teachers as a significant sample to obtain objective and reliable data after the process of analysis. As it was mentioned previously in this thesis, the questionnaire posed questions which were grouped into five main dimensions:

A.PERSONAL IDENTIFICATION DATA:	Age, Teaching Level, Place of work
B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES	Access to the Net from home and school Type of connection
C. ICT COMPETENCIES:	- Mastery in the usage of determined telematic tools and resources.
D. ICT IN ENGLISH LANGUAGE TEACHING	- Which tools are mostly used by teachers in English Language Teaching? - Which factors determine that teachers use more ICT in teaching and learning processes?
E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.	- What type of ICT training teachers would like to receive. Expectations towards the training action.

Dimensions of the questionnaire

VI.III.ii.ii. Distribution of instructional materials

The different instructional materials were distributed and delivered in different ways. When the virtual training platform was BSCW, the materials were put under disposal of trainees in shared folders that participants shared and commented on. The different forms of materials used ranged from simple Word processor documents, PDFs, images, webpages and others. Participants in the courses had to acquire different skill regarding the tasks that were recommended to them, that

is: upload and download documents and images, hyperlink creation, insert images, attach files to e-mail messages…

The tasks asked to participants of those courses that were carried out under the Moodle platform didn't differ much from those which used BSCW and the functions that participants had to master included the creation of folders, the uploading and downloading of documents, the creation of hyperlinks, the attachment of documents to e-mail messages, the conversion to PDF documents…. Generally materials used to be uploaded into the courses folders in the platforms and divided according to the sessions the course had. Nevertheless, the usage of the different training platforms required from participants to be familiar with different communication tools which became the basis of communication and interaction through the courses. The materials extracted out of those communication tools constitutes a solid basis of qualitative data which resulted from opinions and forum posts, e-mail messages, chat conversations, instant messengery informal discussions and provided a variety of rich material out of which interesting information was to be extracted.

VI.III.ii.iii. Use of different web-based materials and communication tools

When trying to introduce certain communication tools upon teacher's practices, it is obvious that teachers need to receive training in the usage of them. Communication tools became a basic and essential element common to all courses given which helped to consolidate groups and even communities but also which determined to a certain extent the good functioning of the different courses. As it was stated before, the different communication tools which were used in the courses in order to establish thorough and fluid interaction and exchange among participants and among trainer and trainees were the following: forums (formal and informal), Chats, E-mail, Distribution lists, Internal mail (Moodle), Course calendar, Group Schedulers, Instant messengery (IM), Blogs and fotologs, Wikis …

191

The relevant information that has been extracted from these tools provides interesting and essential qualitative data that will be analyzed in the following sections. This information usually contains facts and opinions and allows the researcher uses in order to account for a more exact composition of the research scope.

VI.III.iii Phase III: Analysis of the results. Analysis and interpretation of the information and of the results obtained after the research.

After having established the research objectives, and the phases of creation and implementation of instruments for data collection have been finished, this part will be devoted to tackle the analysis of the data (both qualitative and quantitative) which have been obtained by means of the different instruments that have been created to gather this essential information.

VI.III.iii.i. Treatment of the data.

In this phase, we will proceed to provide a thorough and accurate analysis and description of the results obtained after having introduced the different instruments for data collection. The interpretation of the information and of the results obtained after the research has been carried out taking into consideration both qualitative and quantitative research methods. Thus, the treatment of the data has been carried out with the help of the SPSS program for quantitative results and Nudist 6 in order to analyse the qualitative results obtained.

VI.III.iii.i.i. Analysis of quantitative data

In order to analyze the information from a quantitative point of view, we adopted SPSS for Windows 10.0 as an analysis tool. To prove and analyze the research purpose, the analysis methods used included correlative analysis and multiple regression analysis. After the analysis of the items of the first dimension we will draw a detailed description of the population with which we have worked and finally there will be an accurate description of all the information found, starting

by means of a uni-variant description of global character and we will conclude with a correlational study among different variables.

There exist different types of correlational studies which are mainly related to the nature of the variables and to the type of intended hypotheses. When dealing with nominal scales and qualitative data, the contingency coefficient C and Phi are used, whereas when dealing with variables which are interval and nominal, then there will be used the analysis of variance (ANOVA), which is used to test hypotheses about differences between two or more means.

The correlation between two variables reflects the degree to which the variables are related. The most common measure of correlation is the Pearson Product Moment Correlation (called Pearson's correlation). Pearson's correlation reflects the degree of linear relationship between two variables. It ranges from +1 to -1. A correlation of +1 means that there is a perfect positive linear relationship between variables. Samely, a correlation of -1 means that there is a perfect negative linear relationship between variables. A correlation of 0 means there is no linear relationship between the two variables. Correlations are rarely if ever 0, 1, or -1.

All the information in the questionnaire has been processed, which has allowed us to obtain a global vision of the obtained responses. This section is devoted to thoroughly examine which have been the results obtained after this stage. In order to start analysing these results we will follow the same order in which the dimensions of the questionnaire were established.

DIMENSIONS
A.PERSONAL IDENTIFICATION DATA:
B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES
C. ICT COMPETENCIES:
D. ICT IN ENGLISH LANGUAGE TEACHING

193

> E. APPRAISAL OF ICT TRAINING. COURSE
> EXPECTATIONS. TRAINING NEEDS.

Within each dimension we will follow the order of the different questions posed.

A. PERSONAL IDENTIFICATION DATA:

The information obtained from these variables allows us to know more about the personal and professional situation of the 71 teachers who participated in this research. The first nine questions of the questionnaire refer to both personal and professional data related to the teachers participating in the training courses and objects of our study. The main characteristics of this first dimension are centered upon the different group of variables:

1. Variables which refer to personal traits: gender and age.
2. Variables which refer to professional questions: teaching level, years of experience ...

A. TEACHERS IDENTIFICATION DATA
- Age
- Gender
- Teaching Level
- Years of teaching experience
- Geographical Area

Teachers identification data

As far as the age of the teachers participating in the different courses is concerned, it is seen that the age of teachers of English as a foreign language in Catalonia who participated in this research is distributed in the following way:

194
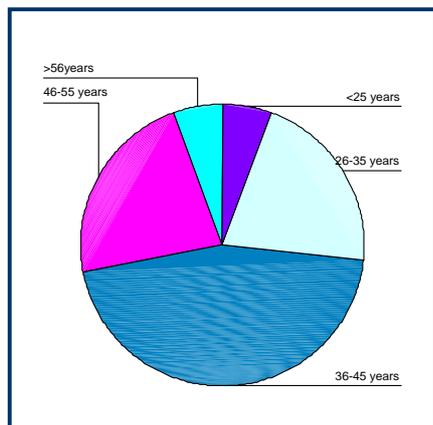
		Frequency	Percentage
Valid	<25 years	4	5,6
	26-35 years	15	21,1
	36-45 years	32	45,1
	46-55 years	16	22,5
	>56years	4	5,6
	Total	71	100,0

Teachers percentages according to age

As it can be observed from the chart, it can be appreciated that 5,6 % of teachers are minor than 25, 21,1% range from 26 to 35 years, 45,1% of them are between 36 and 45 years old, 22,5% are between 46 and 55 and only the remaining 4% are older than 56.

We would like to point out that the major percentage of teachers is situated in the 36 to 45 year-old band, followed by the second largest group, which is conformed by teachers whose age oscillates between 46 and 55 years old. The third group is that formed by young teachers from 26 to 35 years, and a 5,6% is constituted by teachers who are younger than 25. From this information we can elicit two important facts: on the one hand the band which outstands as the larger in number is the 67 % of teachers who range from 36 to 55 years old; whereas if we analyse the data from another viewpoint it can also be observed that the 71% of the teachers participating in this research are younger than 45 years.

Thus, data indicate that a high degree of teachers are middle-aged, with certain experience and professional maturity, this fact contributes to provide our study with more credit and these results will add relevant information when correlated with other data.

If we take into consideration the different correlation charts that can be analysed, that is age-teaching level, age-geographical area, age-computer at home, age-

195

computer at school, age-Internet connection, there are many considerations to be made. The different charts are not included but can be directly consulted in the appendix: the different conclusions of these **correlations** are the following:

1.- Age-teaching level: In both teaching level groups – Primary and Secondary School levels -, the most predominant band is that which encompasses the sector between 36 and 45 years, being the less numerous the groups of teachers who are under 25.

2.- Age-geographical area: Taking into consideration the different areas of procedence of teachers, data show that in Tarragona, a wide band of teachers belong to the group who are between 36 and 45 years old, and they are followed by this other group whocse age ranges from 26 to 35 years old. In Girona the pencertage is similar: teachers on a whole range from 26 to 35 or from 36 to 45 years old. In Barcelona, the band moves on and it is perceived that teachers participating in the courses are between 36 and 45 and even almost half of the total number of participants are between 46 and 55 years old. Similarly, in Lleida the age of this teachers also osciles between 36 to 45 and from 45 to 55 years old. It is very interesting to see that young teachers provine from both Tarragona and Girona and that the band which oscillates between 25 to 35 years old is the least frequent. Young teachers (25 to 35) do not take part in this courses in the same frequency that older teachers (older than 36) do.

3.- Age - Computer at home and school: there are no significant results in this section. All teachers of all ages have access to the internet form home and from school or High Schools.

4.- Age - Origin of connection: It is significant to see that young teachers (from 25 to 35) prefer to connect to the Internet from home, whereas there is the group of teachers who are older (36 years old and onwards) who prefer to access the Internet from school or High school. Again, the group of teachers who are older than 46 years old have similarities with the younger group and results show that they like to connect from home rather than from school.

As far as the gender is concerned there is a predominant presence of women, 65% in front of the 25 % which stands for male teachers.
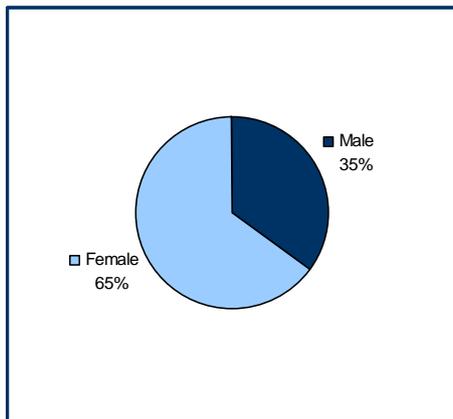
Gender

		Frecuency	Percentage
Valid	Male	25	35,0
	Female	46	65,0
	Total	71	100,0

Teachers Percentage according to gender

Regarding the teaching level, and as it was said before, the research is centered upon teachers from both Primary and Secondary Education, though courses initially had been conceived and designed for Secondary School teachers. Since we saw the interest and attention paid by Primary teachers who asked to participate in the courses, it was thought that their contributions could be used to analyze the competency level and the attitudes that those teachers had towards the use of technology in teaching and learning practices.
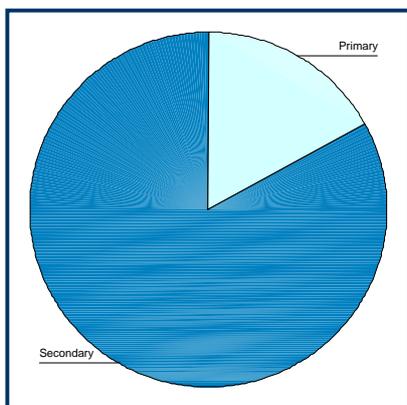
		Frequency	Percentage
Valid	Primary	12	16,9
	Secondary	59	83,1
	Total	71	100,0

Teachers Percentage according to teaching level

As it can be observed from the chart, participant teachers belonged to Secondary Education in an 83,1 % whereas Primary Education teachers conformed the remaining 16,9 %.

Regarding the years of teaching experience, the following chart shows the data distribution according to the years of teaching experience of teachers participating in the different courses. As it can be appreciated percentages are quite similar among the teachers who have been working from 7 to 12 years (29%), those who have been working from 13 to 20 years (23%) and with the group of teachers who have been teaching from 4 to 6 years (20%). The remaining 28% is distributed into the groups which have fewer percentages of answers: teachers with little experience, from 0 to 3 years (13%) and very experienced teachers (15%), who have been teaching more than 20 years:
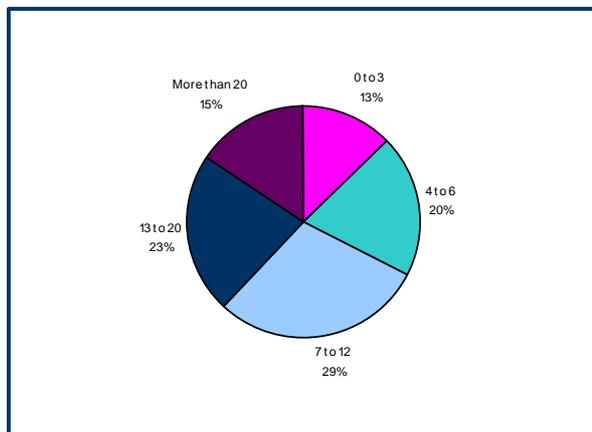
Years of Teaching Experience

		Frequency	Percentage
Valid	<3 years	4	5,6
	4-6 years	15	21,1
	7-12 years	32	45,1
	13-20 years	16	22,5
	>20 years	4	5,6
	Total	71	100,0

Years of Teaching experience

198

Considering the geographical area of precedence, it has already been stated that the different courses given during this research period and which were object of our study are the following:

TARRAGONA	Guia per l'explotació d'eines i recursos telemàtics a l'aula d'anglès. CEIP Saavedra 2003- 2004
TARRAGONA	Guia per a l'explotació d'eines i recursos telemàtics per a l'ensenyament d'idiomes 2004- 2005
TARRAGONA	Aprofundiment de recursos telemàtics i creació de material electrònic a l'aula d'anglès (II) 2004- 2005
TARRAGONA	Eines telemàtiques I audio-visuals per al professorat d' angles 2004- 2005
TARRAGONA/ BARCELONA/ LLEIDA/ GIRONA	Pla de Formació del Professorat de Llengües Estrangeres Departament d' Educació de la Generalitat de Catalunya 2004- 2005
TARRAGONA/ BARCELONA/ LLEIDA/ GIRONA	Pla de Formació del Professorat de Llengües (Català i Castellà) Departament d' Educació de la Generalitat de Catalunya. 2004- 2005
TARRAGONA/ BARCELONA/ LLEIDA/ GIRONA	Pla de Formació en Pràctica reflexiva del Professorat de Llengües Estrangeres Departament d' Educació de la Generalitat de Catalunya 2005-2006
TARRAGONA/ BARCELONA/ LLEIDA/ GIRONA	Pla de Formació en Pràctica reflexiva del Professorat de Llengües Estrangeres Departament d' Educació de la Generalitat de Catalunya 2005-2006

At the beginning of the research the object of study of this thesis were going to be the teachers from the Tarragona province, and in fact four courses were given exclusively to those teachers. When we started working for the Department of Education I was given the opportunity to address the courses to participants in Programs of Catalan national coverage, thus, teachers from the four Catalan provinces: Barcelona, Tarragona, Lleida and Girona could have access to the courses and it is for this reason that in the percentage tables teachers from Tarragona conform the largest group. The percentages of the courses given are as follows:
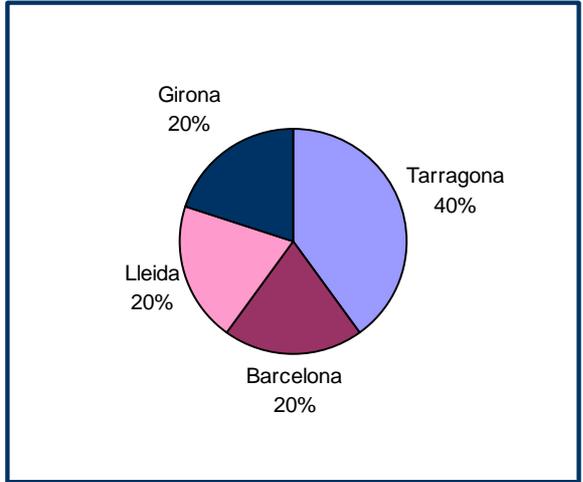
Totality of courses given by Geographical area

Teachers belonging to the geographical area of Tarragona could have access to 40% of the total number of courses given, whereas teachers belonging to the rest of the Catalan provinces could only have access to the 20% of this total. On the other hand, if we analyze in terms of the geographical area in which they work, the totality of teachers who took part in the courses, responded the questionnaire and gave their opinions towards the use they made of and the competency they had in ICT the results were the following:
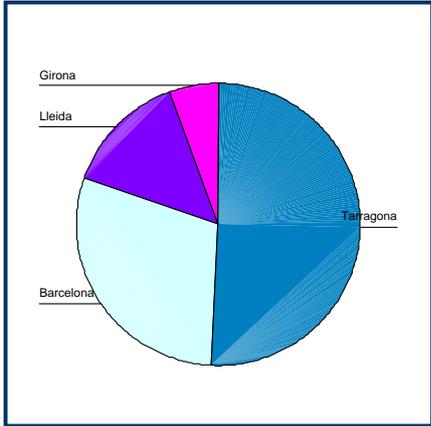
		Frequency	Percentage
Valid	Tarragona	36	50,7
	Barcelona	21	29,6
	Lleida	10	14,1
	Girona	4	5,6
	Total	71	100,0

Teachers percentage according to geographical area of procedence

200

As it can be seen, the 50,7% of teachers came from Tarragona, 29,6 % came from Barcelona, 14,1% originate from Lleida and the remaining rest 5,6% work in Girona.

B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES

There are instances in which teachers who attend courses cannot accomplish properly certain and determined course requirements due to the lack of equipment both at home and at school. Connectivity is also another of the aspects which prevents teachers to follow on-line courses properly; this is why we included these questions in the questionnaire. They refer to the teacher's disposal of computers at home, at work, the access they have to the Net, if it they log on to the Net from school or from home, the type of connection they have etc...

B. CONNECTIVITY AND ACCESS TO TECHNOLOGICAL RESOURCES
- Availability of computer at home
- Availability of computer at work
- Access to the Net from home
- Access to the Net from school
- Type of connection (Modem, ADSL...)
- Place from which they connect to the Internet more frequently

a. Availability of computer at home
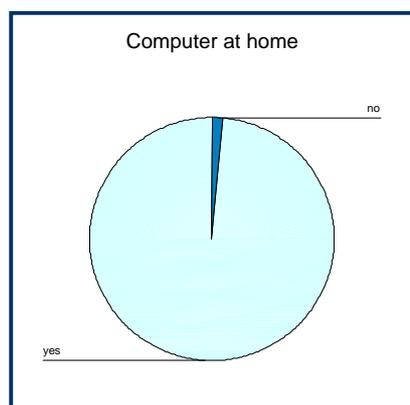
Computer at home

		Frequency	Percentage
Valid	no	1	1,4
	yes	70	98,6
	Total	71	100,0

b. Availability of computer at school
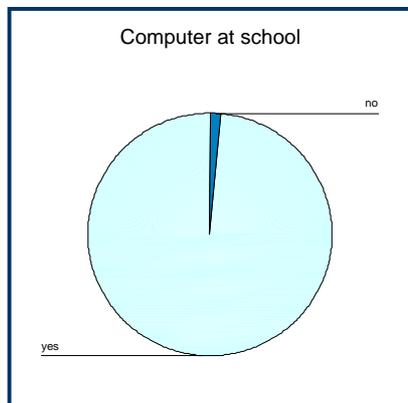
Computer at school

		Frecuency	Percentage
Valid	no	1	1,4
	yes	70	98,6
	Total	71	100,0

As it can be perceived from the tables, almost the totality of teachers (98,6 %) have at their disposal a computer at home and at school. Although it is evident, teachers would not enroll to blended courses if they did not have a good Internet connection and, of course a computer to use.

Regarding the Internet connection at home, it can be seen from the chart, that the groups of teachers that have an Internet connection at home, be it ADSL (broadband) or by modem, are the largest, whereas there is only a 9,9% of the teachers who do not have Internet connection at home.

Internet connection at home
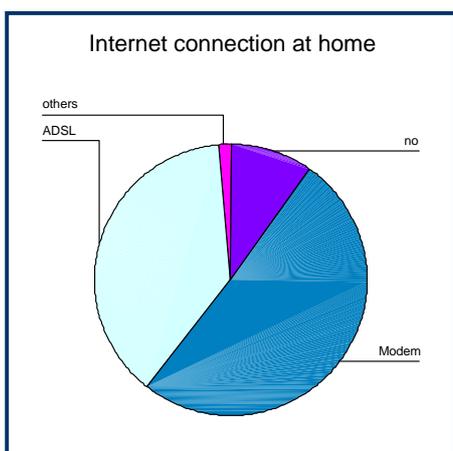
		Frecuency	Percentage
Valid	no	7	9,9
	Modem	36	50,7
	ADSL	27	38,0
	others	1	1,4
	Total	71	100,0

202

Internet connection at home

As far as the connectivity of teachers at school data is concerned, similar results are revealed: only 1,4% of teachers who answered the questionnaire do not have Internet connection at school:
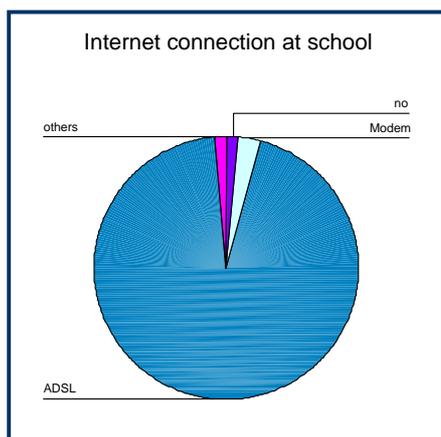
		Frequency	Percentage
Valid	no	1	1,4
	Modem	2	2,8
	ADSL	67	94,4
	others	1	1,4
	Total	71	100,0

Internet connection at school

As far as **correlations between age and teaching level, or age and geographical procedence** are concerned there are some very relevant facts which need to be considered. Regarding age, it is interesting to see –as it was already said previously- that Primary school teachers belong to a scope of age which ranges from 25 to 45 years, they constitute quite a young group. On the other hand, Secondary school teachers, which are the largest group of teachers taking part in this research are older; 24 of them are between 36 and 45 years old, followed by 16 teachers whose age ranges from 46 to 55. From this information it can be deduced that Primary Teachers start taking conscience that they need training earlier than Secondary School teachers do, since they participate

in formative processes later on.
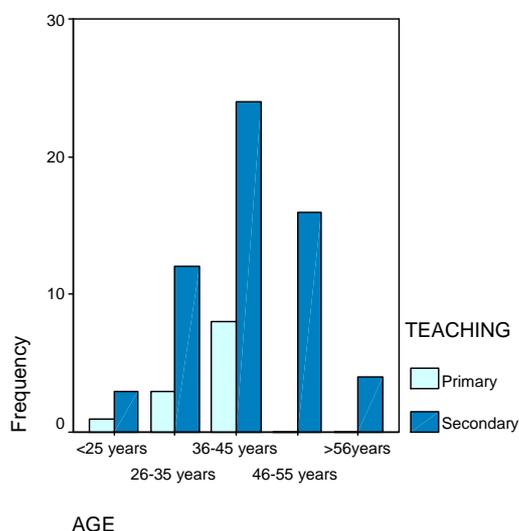
	TEACHING LEVEL		Total
AGE	Primary	Secondary	
<25 years	1	3	4
26-35 years	3	12	15
36-45 years	8	24	32
46-55 years	0	16	16
>56years	0	4	4
Total	12	59	71

Correlation Age-teaching level

As far as the correlation **Age-Geographical Area** the scale of age which is highest is the one which ranges from 36 to 45, in which there is a representation of teachers coming from all parts of the Catalan territory. However, taking into consideration the geographical origin, it is interesting to see that the majority of teachers coming from the area of Barcelona (30% of the total number of teachers) who took part in the courses are mainly from 36 to 55, teachers coming from Girona (6% of the total number) belong to this same age scale, that is from 36 to 45, and teachers coming from Lleida (14%) are between 36 and 55 years old. It is curious to see that there was no teacher younger than 36 receiving or either asking for training. In Tarragona, there is a clear average of teachers from 25 to 45 years old (89%), whereas only a 11% are older than 45.

C. ICT COMPETENCIES

As far as the mastery and competence in the usage of determined telematic functions are concerned, teachers are asked about their skill in terms of the usage of telematic tools as a means of personal communication; as working tools, as a training tool and as a tool to develop personal and management tasks. The third

204

part involves the teacher in asking about his/her competence in using the computer and the specific tasks s/he carries out with it. They are asked why do they use the computer: as communication tool, as word processor, as image processor, as tool to carry out self-training activities, to work collaboratively, to search for information, to manage personal information, to develop ludic activities....

As far as this first usage of ICT as a communication tool is concerned, almost the 75% of the teachers see the need of technology and its potential as tool to communicate (ratings from 4 to 6). However, teachers do not see the same for the second usage: teachers appreciate to a large extent the usage of ICT as communication tool, however they consider that the use of ICT as a tool for collaborative learning, and rate this usage less, being 4 the rating that achieves the higher percentage. It is important to mention that the 18.3% of teachers who did not answer this question mainly did not answer because they didn't understand the meaning of the different tools used or it was because they had never tried o participated in a collaborative environment.

As far as the teacher's appreciations of ICT in relationship to teaching and learning procedures, it is curious to observe that whereas they consider the importance of ICT as a tool to support teaching procedures in a 81 % (ratings range form 4 to 6), they don't see the relevance of ICT as central to teaching procedures, and the 57% of them rate this usage as being inferior (3 to 4).

Regarding the rest of utilities, teachers value the search for information as one of the highest of the utilities by which they take ICT into account 77,5% rates 5 to 6). They value the usage and utility of technological tools as tools to work in a 76,1% (rates 5 to 6) and in a 70% they consider that ICT has an important usage as tool to carry out administrative tasks. It is rather contradictory to see that on the other hand teachers do not see the need of technological tools as tools to manage personal taks, being this one utility the one they consider the least important of all of them (63,3% rates 1-3).

As a general conclusion, we can summarize the ICT appraisal that teachers have of several tools in the following graphic. The information has been gathered from the data obtained in the questionnaires and taking into account only those answers that have obtained the maximum score (6) by teacher participants in the courses.

From the results obtained, it seems that teachers appraise ICT as a tool to work in a 24%, as tool to search for information (20%); in the third place the most appraised utility of ICT is to manage administrative tasks (18%), as a tool for personal communication (17%), as a tool to support teaching procedures (11%) , as a tool to enhance collaborative learning 12,7% , as a tool to manage personal tasks (3%) and finally as tool central to teaching (5,6%), as it can be seen in the chart below:
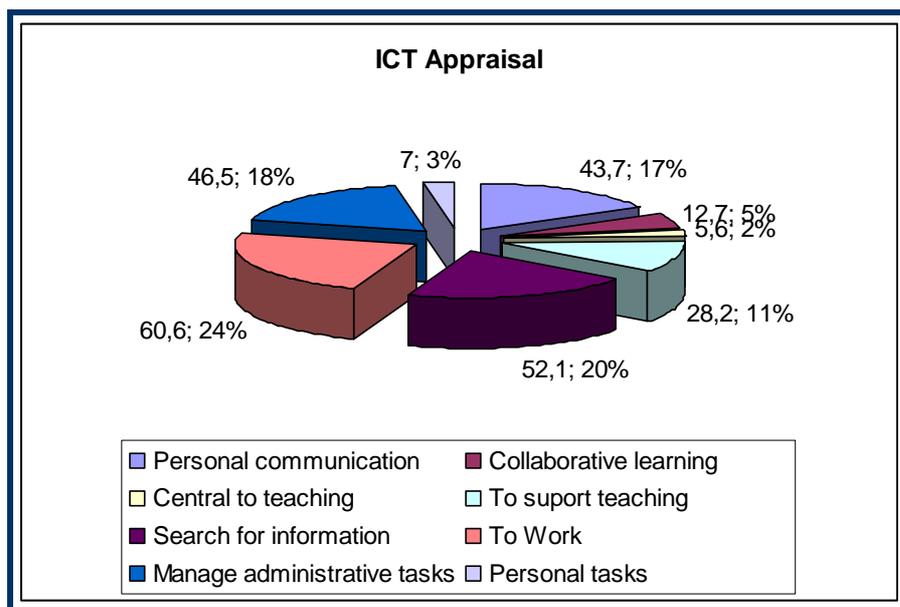
ICT Appraisal

b.- MASTERY AND COMPETENCE IN THE USAGE OF DETERMINED TELEMATIC FUNCTIONS

As far as the competences teachers attribute to themselves in relation to a satisfactory use of ICT. This is an important section since it tries to evaluate the answers that teachers provide in relation to the mastery and competence in the usage of determined telematic functions, teachers are asked about their skill in terms of the usage of telematic tools as a means of personal communication; as working tools, as a training tool and as a tool to develop personal and management tasks.

As it can be elicited from all the data and graphics analysed, information which can be consulted in the corresponding annexes, and in the previous graphics, 45 % of teachers who rated 6 (the highest rate) consider that they possess a good competency in the use of e-mail, if we take into account the other groups which rated their competency level as 4 or 5, the total number reaches up to the 85%. As far as distribution lists are concerned, teachers manifest in a 45,1 % that they lack competence in the usage of this communication tool. Significantly teachers qualify their competence in the usage of forums as being very low, and the number of them who rated the tool between 1 to 3, that is a low competence goes up to the 73 %. Chats are another tool upon which teachers manifest their lack of competence and skill, and the 62 % of the total number of the teachers asked manifest having no competence at all or only few knowledge in the usage of this tool.

On the other hand, electronic messengery seems to be a tool that teachers seem to have some competence on, the 33% manifest having a good competence on its usage, however, there is another focus that states not having any competence at all, although it does not reach the levels of previous tools (40%). As far as collaborative environments are concerned, an important part of the whole group of interviewed teachers (73,2%) state that they do not have any or have scarce competence in their use in teaching and learning practices. Regarding the use of word processors, teachers make evident their competence on its usage and the number of teachers who rated their level of competence between 4 to 6 goes up to the 78,9%. The treatment of images is maybe the tool upon which there is not

much distinction among teachers, and each rating obtains the same percentage. The teacher's competence in using ICT to search for information is another of the most common competence (69 % of teachers rated their competency level from 4 to 6), together with the use of e-mail.

The competence in the usage of ICT as self-training tool is maybe one of the most important questions for our research and it is curious to observe that 49,3 % of teachers reveal that they have few competence for self-training in ICT-based settings. The remaining 41% (teachers who rated from 4 to 6) states that they possess some competence in it, although the higher percentage belongs to the group who rated 1 to this competence, that is, they manifest having no competence at all.

As far as the competence to carry out administrative tasks through the use of ICT results show that teachers provide to be highly competent and almost a 60 % rated this competence as high (5 to 6). However, the results which demand for the teachers 'competences in the use of ICT in order to carry out personal tasks is much more low: 42,3 % manifest having no competence at all in managing ICT for personal tasks, whereas the 16,9 % rated 2, that is up to 69 % of teachers do not have any competence in using ICT tools for personal management.

Mastery and Competence in the usage of telematic functions
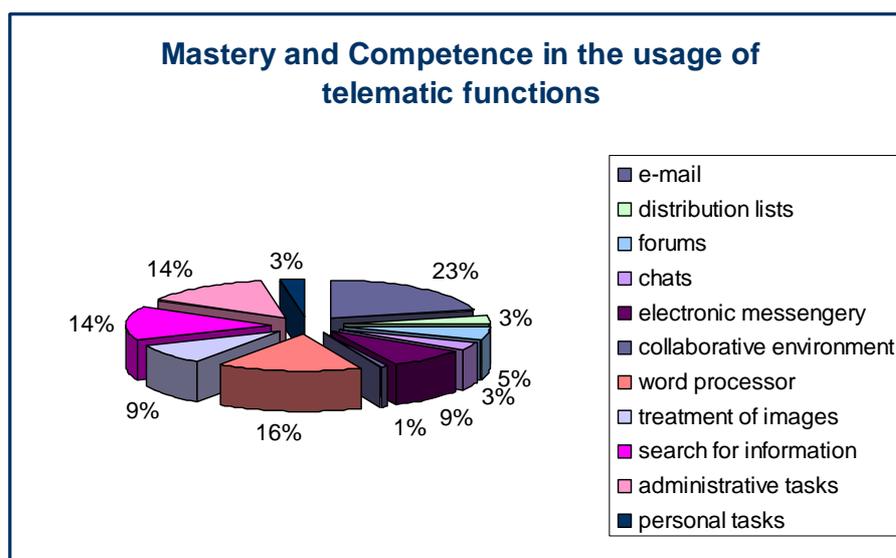
Mastery and Competence in the usage of telematic functions

Taking all the information as a whole, teachers excel at using e-mail in a 45%, at using Word Processors in a 33,8%, at searching for information (29,6%), at carrying out administrative tasks 22,5%, at using electronic messengery, 18,3%, at managing treatment of images 18,3%. Nevertheless, teachers seem to have less competence in the usage of chats (7%) and forums (11,3%) and the development of personal tasks with ICT (5,6%), which constitute the functions upon which teachers feel less competent. Significantly, the ability to participate in collaborative environments is again a very low-rated competence (only 1,4%). It is also significant that teachers recognize their lack of competence regarding self-training (11,3%).

c. How would you qualify your usage of the computer to carry out different telematic functions?

The third part involves the teacher in answering about his/her competence in using the computer and the specific tasks s/he carries out with it. Asked why they use the computer: as communication tool, as word processor, as image processor, as tool to carry out self-training activities, to work collaboratively, to search for information, to manage personal information, to develop ludic activities....the responses were as follows:

Usage of the computer:

As Internet tool for communication

As tool to work

As tool for self-training

As tool to carry out activities related to their job

As tool to work collaboratively

As tool to communicate via e-mail

As tool to carry out administrative tasks

As tool to participate in ludic activities

As tool to chat

The answers can be observed in the following graphic:
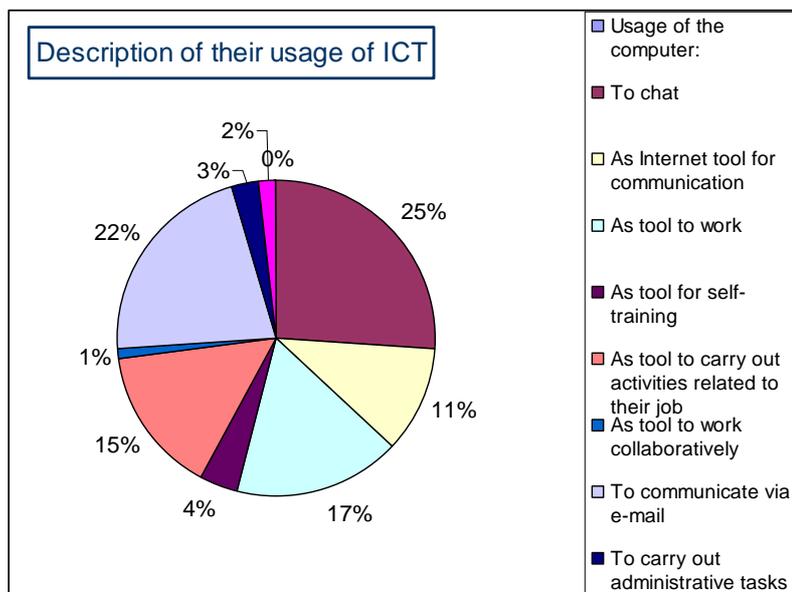
As it can be observed from the chart, teachers use and define their competences differently. On the one hand, 25% of them use computers in order to chat, 22% use them to communicate via e-mail, 17% as tool to work, 15% as tool to carry out activities related to their job, 11% as an Internet tool for communication, 4% as tool to carry out administrative tasks, 3% as tool for self-training, 1% as tool to work collaboratively and finally 1% as tool to participate in ludic activities.

A common competence which is unknown or mastered by the vast majority of teachers is the participation in the COLLABORATIVE ENVIRONMENTS. Again, they use ICT in order to work collaboratively in a 1%, while it is also surprising to observe that only the 4% of these teachers use 4% to self train.

D. ICT IN ENGLISH LANGUAGE TEACHING

In this section the questions that have been posted try to obtain information on which tools are mostly used by teachers in English Language Teaching and why are they used, as central or peripheral to English as a foreign language teaching processes. In this sense, teachers are asked why do they use certain telematic tools and resources: to communicate with students, to have access to reference tools, to give support to their teaching practice by accessing to virtual libraries, virtual resources centers, by accessing to webpages for teachers, to OWLs (On-line Writing Labs), to educational websites…? To use didactic activities such as WebQuests, webworksheets, self-study quizzes, weblogs, e-lessons; to create electronic material, to participate in telematic projects… Secondly, teachers are asked regarding the factors which determine that they use more ICT in teaching and learning processes. Thus, the lack of technical and pedagogical training, barriers to have access to telematic tools and resources, lack of time and knowledge, scarce hardware and multimedia resources, lack of habits, difficulties in the teaching centers, scarce training offer… account for different responses they can provide to this question.

The answers to this section will account to obtain information which will be later on contrasted with that obtained after having analyzed the qualitative data, which is more focused in these aspects. The results will serve to acquire an accurate idea of which is the interest of these teachers in receiving or bettering their training in the acquisition of ICT skill and which are the didactic and technical aspects (both related to the teaching of English as a foreign language and other which may be more general) upon which they would wish to receive specific training.

Regarding the utilization of different tools, resources and Internet-based activities, it has to be borne in mind that many teachers had not even heard of many of the tools proposed. Many answers given to specific questions were left blank. However, the information gathered from these questions revealed itself as extremely essential for this research since it provides a realistic framework of which is the knowledge of the teachers and can help us to adopt criteria in the development of training modules to be implemented in the future.

211

The question posed in the questionnaire was: "Which tool do you use in your English as a foreign language class?" In order to classify and organize the answers, we decided to subdivide this question upon three main categories:

a. Communication Tools in ELT:
-   e-mail
-   forum
-   chat
-   electronic messengery
-   collaborative environments
-   blogs

b. Internet Resources in ELT:
-   Usage of reference materials: dictionaries, translators, encyclopaedias
-   Virtual resource Centers
-   Educational Portals
-   Websites for English Language Teaching
-   Online Listening Laboratories
-   Cyber-listening Labs

c. Internet-based activities in ELT:
-   WebQuests
-   Webworksheets
-   Self-study quizzes
-   E-lessons

Apart from the usage of these tools, resources and Internet-based activities, there is a foruth category which encompasses the following items:

d. Usage of ICT in ELT:
-    **for Communication purposes**
-    **to create electronic material**
-    **to participate in telematic projects**

The results obtained from the analized data appear represented by means of the following charts. These results show diverse as follows:

a. Use of Communication Tools in ELT

a. Use of Communication Tools in ELT

b. Internet Resources in ELT:
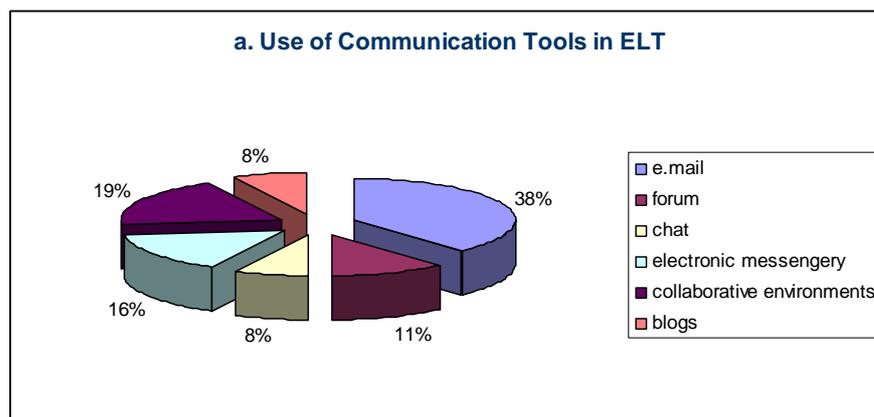
b. Internet Resources in ELT
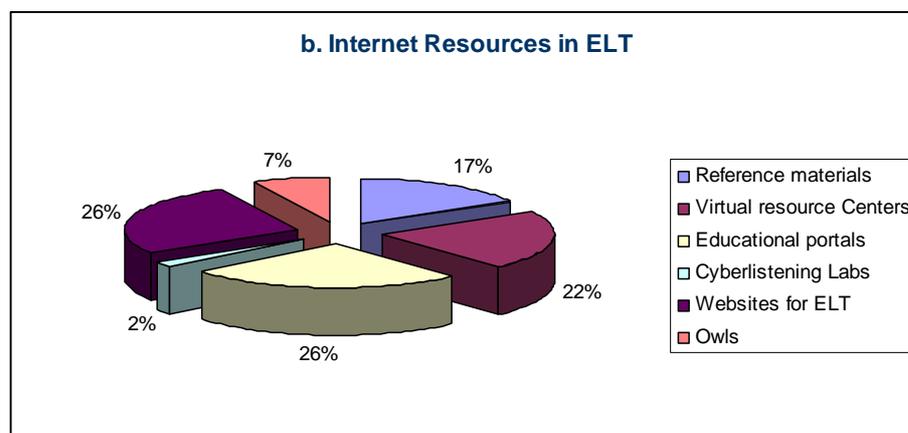
c. Internet-based activities in ELT:
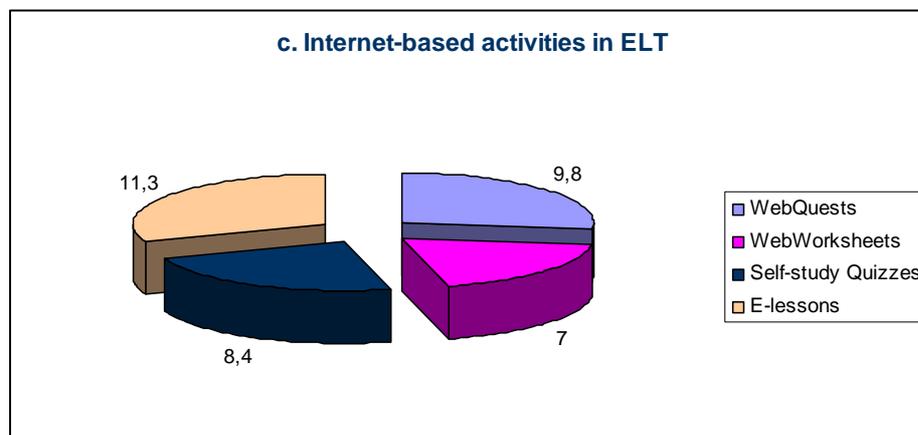
d. Usage of ICT in ELT:

From all these data, at can be observed that the tools and resources that are mostly used by English as a foreign language teachers in their classes are in terms of communication tools the e-mail (14%), collaborative environments (7%), electronic messengery (5,8%), forums (4,2%) blogs, (2,8%) and chats (2,8%). Although blogs have been adapted more recently into teaching and learning practices it seemed to us important to include them in the questionnaire.
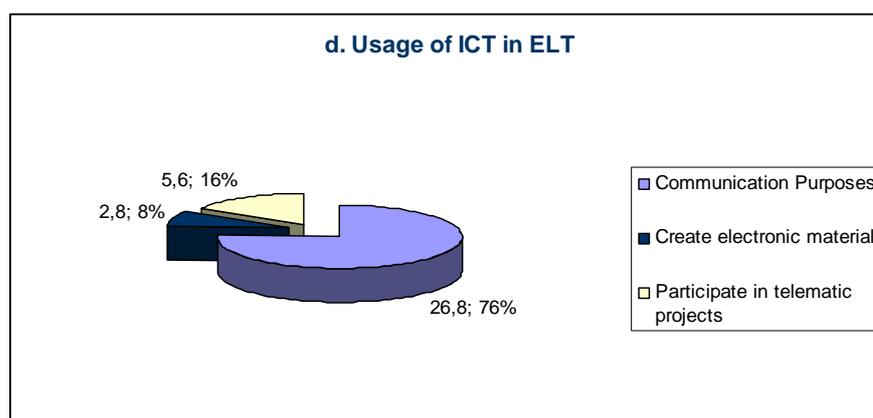
Regarding Internet resources, the Websites exclusively addressed to English Language Teachers (36,%), Educational Portals (35,2%), Virtual resource Centers (29,6%) and reference materials (22,6%) excel as the most important and used by

teachers. As far as the activities are concerned, teachers use e-lessons in a 11,3%, WebQuests in a 9,8%, self-study quizzes in an 8,4% and e-lessons in a 7%. Considering the fourth category, that is the usage of ICT in ELT, it seems that most teachers still use ICT in order to accomplish certain communication objectives in a 26,8%, followed by a 5,6% of teachers who use them to participate in telematic projects or by the 2,8% of teachers who resort to ICT in order to create electronic material.

These low rates indicate the scarce knowledge that English as a foreign language teachers have of the existence of the numberless Internet tools, resources and activities to which they can recur when considering introducing ICT into their teaching procedures.

d.2 Which factors can determine that teachers use ICT in ELT?

Among the factors which determine that teachers use ICT in their teaching practices, which could also be considered as barriers (both attitudinal and infrastructural) teachers were asked upon the following items:

- the lack of both technical and pedagogical training
- the difficulty to access resources
- the lack of time to prepare resources
- the lack of specialized training programs
- insufficient equipments in the centers
- difficulties in the teaching centers (access to computers, schedule problems...)

The same factors appear in the qualitative analysis of data which will be developed in the following pages of this practical part of the research. The results obtained are showed in the following chart:

215

Barriers preventing the teacher's use of ICT

Barrier	Value
lack of technical/pedagogical training	61
difficulty to access resources	42,2
lack of time to prepare resources	39,4
lack of specialized training programs	50,7
insufficient equipments	50,7
difficulties in the teaching centers	31
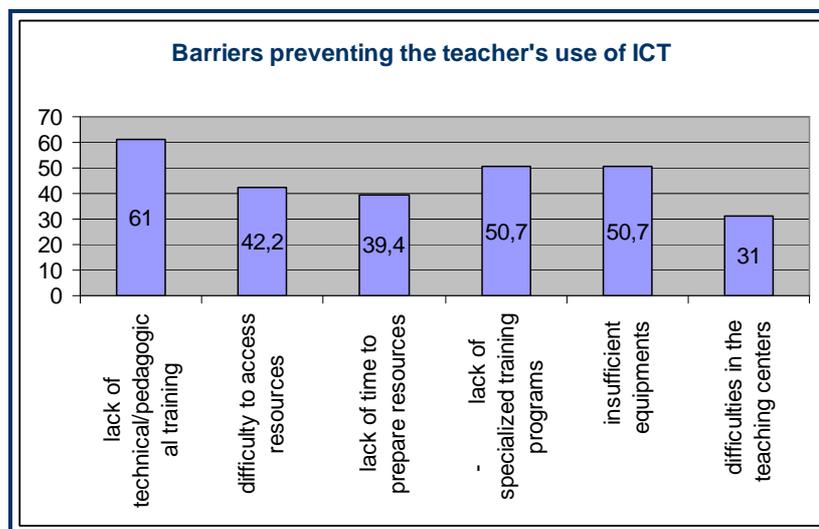
As it can be noted from the chart, the results obtained reveal that 61% of the teachers participating in the training courses consider the lack of both technical and pedagogical training is the most outstanding factor which prevents them from using ICT in their teaching practices. 50,7 % of teachers state that the lack of specialized training programs addressed to them, that is special courses regarding the use and implementation of ICT tools and resources in the English as a foreign language classroom, is another important factor which impedes a good implementation of ICT. Similarly, 50,7% of teachers coincide in the lack of good equipments at schools and refer to their availability in order to carry out a good implementation of ICT-based resources and tools. The difficulty to access resources is another of the factors which the 42,2 % of teachers consider as a barrier. The lack of time to prepare resources and activities is considered by the 39,4% of teachers as another important impediment to successfully implement technology in their classes. Finally, the difficulties that arise in teaching centers related to the lack of adequate spaces, the technical support, the general equipment in the classrooms, the maintenance of this equipment, the language teacher's access to computers… is considered as an important factor by the 39% of teachers.

E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.

216

This final part is directly linked to one of the main points of interest of our research: on the one hand copse the knowledge that teachers have of their previous ICT training, their appraisal and opinion will shed some light to many questions. On the other hand teachers are asked about specific training needs in the acquisition of both technical and pedagogical skill in order to teach English as a foreign language: questions are clear and enquire teachers for specific responses: They want to receive specific training in order to: communicate with students, to have access to reference materials and communication means, to give support to teaching procedures (Virtual Resource Centers, educational websites, cyberlistening labs), to be able to appropriately use different didactic activities such as WebQuests, webworksheets, e-lessons, Weblogs....; to be able to create electronic material, to be able to participate in telematic projects...

E. APPRAISAL OF ICT TRAINING. COURSE EXPECTATIONS. TRAINING NEEDS.

- Appraisal of previous ICT training
- Training needs
- Course expectations
- Others

Appraisal of previous ICT training
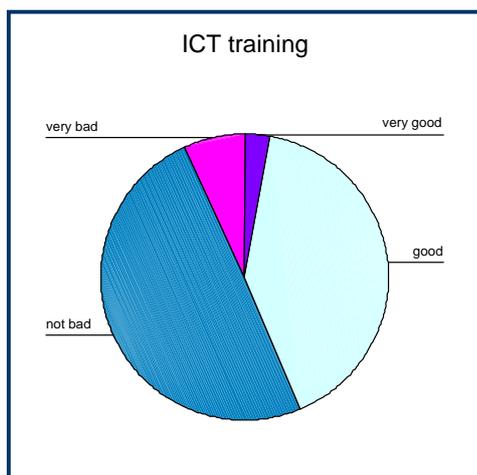
ICT training

		Frequency	Percentage
Valid	Very good	2	2,8
	Good	29	40,8
	Not bad	35	49,3
	Very bad	5	7,0
	Total	71	100,0

217

Appraisal of previous ICT training

Teachers evaluate and appraise the ICT training and basically, two large groups consider that their training on the use of ICT is not bad (49,3%), the 40,8% consider that it is good and the two remaining groups state on the one hand that their training in ICT skill is very bad (7%) and the 2,8% consider it to be very good. As far as the specific training

demands are concerned, a classification of the different training requirements has been done in accordance to the same subdivision of the training needs into the use of communication tools, resources and the development of different ICT-based activities. Thus, the first group, communication tools, is conformed by the use of e-mail. chat, forums, electronic messengery, blogs and collaborative environments.

Training needs: communication tools
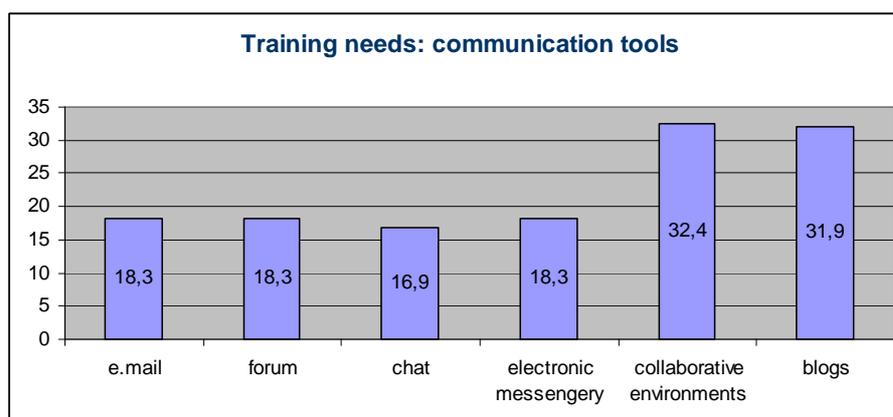
As it can be seen from the graphic, teachers manifest their need to receive training on the use of collaborative environments and blogs, although the rest of the tools have obtained similar demand by teachers. Significantly, teachers seem to be more aware on the use of the most common communication tools such as e-mail, forum and chats, although it is important to state that in the questionnaire they were asked specifically about the pedagogic use of these tools. Although many teachers know how to use them as users they lack the specific training on how to use them in their classes.

218

Training needs: resources

communication means/media	Reference materials	Virtual resource Centers	Educational portals	Cyberlistening Labs	Websites for ELT	Owls
25,4	21,2	31	29,6	33,8	31	32,3

When considering the training needs of the teachers participating in the different courses, the results indicate that teachers want to acquire training in the use of cyber listening labs, on-line writing labs, virtual resource centers, websites for English language teaching and educational portals. As it happened with the previous categories, the less demanded resource are the reference materials: dictionaries, on-line encyclopedias... since they constitute tools that teachers easily resort to in their tasks of searching for information in the Internet or when carrying personal and professional tasks.

Finally, as far as the training needs of teachers regarding electronic activities, teachers manifest their predisposition towards them since they believe they are easier to introduce in class, generally they can be used in an isolated manner and do not need to be a part of a long process. These activities can accompany determined lesson grammars carried out in class and complement them in some instances. Furthermore teachers feeling reluctant or unsure towards the use of technological tools in class believe that short activities are easier to use in early practices than communication tools or the use or other determined resources. Thus, teachers demand specific training in the use aft all e-activities proposed, whereas there has to be made a special mention to the creation of electronic materials, which teachers also demand.
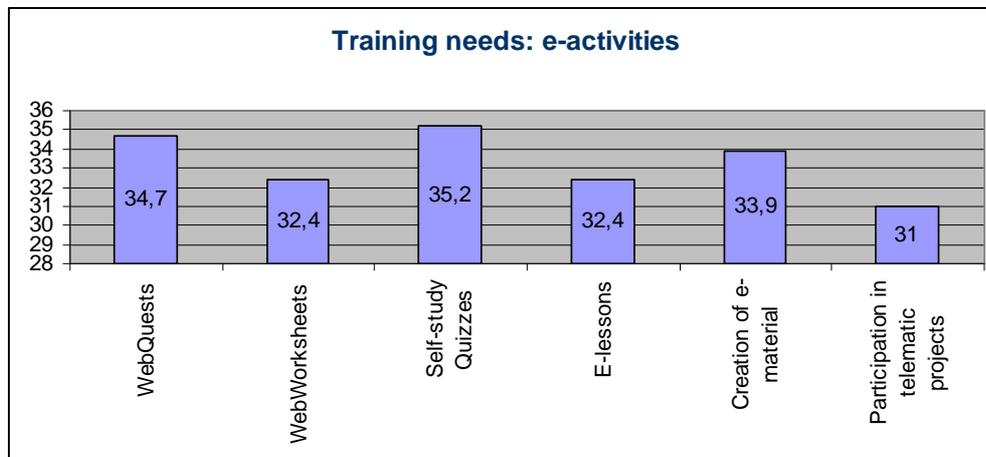
Training needs: e-activities

Activity	Value
WebQuests	34,7
WebWorksheets	32,4
Self-study Quizzes	35,2
E-lessons	32,4
Creation of e-material	33,9
Participation in telematic projects	31

When considering the training needs of the teachers participating in the different courses, the results indicate that teachers want to acquire training in the use of cyber listening labs, on-line writing labs, virtual resource centers, websites for English language teaching and educational portals. As it happened with the previous categories, the less demanded resource are the reference materials: dictionaries, on-line encyclopedias… since they constitute tools that teachers easily resort to in their tasks of searching for information in the Internet or when carrying personal and professional tasks.

E-activities constitute the smaller units within training programs because of the immediacy with which they can be taught and then later on implemented in class, and because they provide teachers with easy-to-use mechanisms with which they can feel more secure, especially in the first instances they start implementing ICT into their teaching practices: Webworksheets, self-study quizzes exemplify the usefulness of these activities and become two of the most demanded activities as far a ICT-based training is concerned.

VI.III.iii.i.ii. Correlational analysis of relevant data

As far as the correlational analysis of the data obtained is concerned, we will proceed to correlate ICT training, the most outstanding part of our research and

the data which interests us the most with determined variables applying both ANOVA and Pearson's correlation. The first correlation affects ICT training and variables which include age, teaching, geographical area, Internet connection at home, Internet connection at school and when do you connect to the internet) and as it is shown in the chart, there is no significative correlation among these variables. The relationship should be less than 0.05 in order to become significant.

ANOVA

		Sum of squares	g	average cuadratic	F	Sg
AGE	Inter-groups	1,211	3	,404	,43	,72
	Intra-groups	61,77	67	,922		
	Total	62,98	70			
TEACHING	Inter-groups	,624	3	,208	1,491	,22
	Intra-groups	9,348	67	,140		
	Total	9,972	70			
GEOGRAPHY	Inter-groups	2,732	3	,911	1,115	,34
	Intra-groups	54,70	67	,816		
	Total	57,43	70			
Internet connection at home	Inter-groups	1,384	3	,461	1,037	,38
	Intra-groups	29,79	67	,445		
	Total	31,18	70			
Internet connection at school	Inter-groups	,702	3	,234	2,540	,06
	Intra-groups	6,171	67	,092		
	Total	6,873	70			
Where do you connect to the Internet?	Inter-groups	,836	3	,279	,41	,74
	Intra-groups	45,55	67	,680		
	Total	46,39	70			

As far as the correlation existing among diverse variables in relation to ICT training, Pearson's correlation was used in order to see how it reflects the degree of linear relationship between two variables. As it was said previously, it ranges from +1 to -1. A correlation of +1 means that there is a perfect positive linear relationship between variables. Samely, a correlation of -1 means that there is a perfect negative linear relationship between variables. A correlation of 0 means there is no linear relationship between the two variables. Correlations are rarely if ever 0, 1, or -1.

221

After having used Pearson's correlation to analyze the rest of the data, it can be seen from the chart that there is significant correlation in the case of the variables ICT training and Tool for personal communication, tool for collaborative learning, tool for search for information tool to work, tool for self-training, tool to carry out administrative tasks (p<0.05). Similarly, it has been observed that there is also significative correlation among ICT training and the variables: Use of e-mail, Use of distribution lists, Use of forums, Use of chats, Use of electronic messengery, Use of word processors, Treatment of images, Search for information, Self-training, Carry out administrative tasks, Personal tasks. (See appendix for the chart).

Correlations

		ICT train	Personal Com.	Tool for collaborat learning	central to teach	To support teachin	To search fo Inform.	to work	to self-traini	To carry out Admin. tasks	Tool to manage personal tasks
CT training	Pearson's C.	1	-,440	-,425	-,159	-,104	-,275	-,512	-,329	-,512	-,232
	Sig. (bilateral)	.	,000	,001	,186	,388	,022	,000	,005	,000	,055
	N	71	71	58	71	71	69	70	70	70	69
Tool for personal communication	Pearson's C.	-,440	1	,430	,113	,063	,386	,576	,276	,423	,256
	Sig. (bilateral)	,000	.	,001	,346	,602	,001	,000	,021	,000	,034
	N	71	71	58	71	71	69	70	70	70	69
Tool for coll. learning	Pearson's C.	-,425	,430	1	,345	,367	,257	,296	,373	,327	,165
	Sig. (bilateral)	,001	,001	.	,008	,005	,056	,026	,004	,013	,220
	N	58	58	58	58	58	56	57	58	57	57
Central to teaching	Pearson's C.	-,159	,113	,345	1	,314	,185	,201	,391	,229	,501
	Sig. (bilateral)	,186	,346	,008	.	,008	,129	,095	,001	,056	,000
	N	71	71	58	71	71	69	70	70	70	69
Support teaching	Pearson's C.	-,104	,063	,367	,314	1	,505	,218	,557	,261	,306
	Sig. (bilateral)	,388	,602	,005	,008	.	,000	,070	,000	,029	,011
	N	71	71	58	71	71	69	70	70	70	69
Tool to search for information	Pearson's C.	-,275	,386	,257	,185	,505	1	,522	,524	,433	,237
	Sig. (bilateral)	,022	,001	,056	,129	,000	.	,000	,000	,000	,052
	N	69	69	56	69	69	69	68	68	68	68
Tool to work	Pearson's C.	-,512	,576	,296	,201	,218	,522	1	,328	,592	,392
	Sig. (bilateral)	,000	,000	,026	,095	,070	,000	.	,006	,000	,001
	N	70	70	57	70	70	68	70	69	69	68
To self-train	Pearson's C.	-,329	,276	,373	,391	,557	,524	,328	1	,458	,564
	Sig. (bilateral)	,005	,021	,004	,001	,000	,000	,006	.	,000	,000
	N	70	70	58	70	70	68	69	70	69	68
Tool to carry out Admin. tasks	Pearson's C.	-,512	,423	,327	,229	,261	,433	,592	,458	1	,459
	Sig. (bilateral)	,000	,000	,013	,056	,029	,000	,000	,000	.	,000
	N	70	70	57	70	70	68	69	69	70	68
Tool to manage personal tasks	Pearson's C.	-,232	,256	,165	,501	,306	,237	,392	,564	,459	1
	Sig. (bilateral)	,055	,034	,220	,000	,011	,052	,001	,000	,000	.
	N	69	69	57	69	69	68	68	68	68	69

**.Correlation is significative at 0,01 level (bilateral).
*.Correlation is significative at 0,05 level (bilateral).

When applying Pearson's correlation to the rest of the data, the results have shown that there is significative correlation between the variables ICT Training and the use of ICT as Communication tool, Tool to work (text processor...), Self-

training, Activities related to work, Search for information, e-mail. The following section, ICT training and the use of Dictionaries, translators, encyclopaedias, Virtual resource center, Educational portals, Websites for English language teachers, To create electronic material, To participate in telematic projects revealed significant correlation as well. Nevertheless, the sections which are related to the training needs revealed no significant correlation, mainly due to the fact that many teachers didn't answer the questions included since they did not know about the tools and resources and most of them had never heard of them prior to that moment.

VI.III.iii.i.i.i. Analysis of qualitative data

As far as the qualitative data analysis is concerned we used the program QSR NUDIST 6 so as to obtain significant results from the participation of teachers in the different courses forums. It is there where most interesting opinions were exposed and a thorough study of such contributions would show some light on the teacher's preferences, fears, and the attitude with which they confront their training related to the acquisition of ICT skills.

Non-numerical Unstructured Data * Indexing, searching and Theorizing. QRS NUD*IST 6, is a tool designed in order to help users in the management of non-numerical and non-structured data, structured in qualitative analysis in order to support data codification processes in a system of cataloguing. Most computer approaches to qualitative data analysis have concentrated on coding and retrieval of text. Among the different possibilities that this program offers, which are useful for our research we would like to point out:

> 1. the facilities for the storing of the researchers´ comments ("*memos*") which can be linked to index words or text segments.
> 2. the features for defining linkages between index words.
> 3. the use of variables and filters so that the search for text segments can be restricted by certain limitations.

223

4. the facilities for the retrieval of text segments with specified formal relations to each other.

5. the facilities for the retrieval of quantitative attributes of the database.

Other interesting traits of this program include relevant traits such as the different texts being interrelated and of unlimited flexibility; the existence of comprehensive hypermedia-like browsing tools for both document and indexing databases; the possibility to search for words and lexical patterns occurring in text and to combine this with indexing of the text; the ability to handle off-line textual and non-textual data as well as on-line data, the possibility to record textual comments in indexing categories, the support and exploitation of hierarchical indexing systems; and the mechanisms for creating new indexing categories out of existing ones, relating them to the data documents, which can be used for further analyses.

VI.iii.iii.i.i.i.i Creation of categories with NUDIST

In order to select and organize the information needed, there was an initial process of creation of categories and subcategories, which, at certain way could exemplify the need to gather information out of the forums and the intervention of teachers.

For this reason, we created the following chart which includes a subdivision of the different categories in which we have classified the different relevant contents as far as the teachers opinions regarding topics such as their access to the computer room, their training needs and lacks, their competences as far as the usage of ICT tools and resources are concerned. This information provides extremely useful since teachers are not really aware of providing information when they are answering tore posting comments in the forums, therefore, it is out of this details they provide that we have elicited the most important and revealing information of the research.

In order to account for an organization of the totality of interventions posted, we developed the following system of categories, and followingly, we proceeded to its analysis attending to qualitative data:

NUDIST CATEGORIES

A. GENERAL ASPECTS:	1.- EDUCATION IN THE XXIst CENTURY	NEED TO CHANGE	METHODOLOGY
			TRAINING
			CURRICULUM
	2.- ICT INTEGRATION IN T/L PROCESSES	ICT USAGE	ICT AS MEANS
			NATURAL INTEGRATION OF ICT
			ICT AS SOCIAL DIFFERENCE
			LIMITS AS ICT USERS
			CHALLENGES
		TEACHER'S ROLE	
		ATTITUDES	POSITIVE
			PESSIMISTIC
	3.- BARRIERS FOR A SUCCESSFUL ICT INTEGRATION	ACCESS TO COMPUTER ROOMS	
		INFRASTRUCTURE AND CENTER FACILITIES...	
		CONDITIONS	GOOD
			BAD
B. ICT TRAINING	4.- TRAINING NEEDS	ACQUISITION OF TECHNICAL ABILITIES	
		ACQUISITION OF PEDAGOGICAL ABILITIES	
C. COURSE EXPECTATIONS	5.- ATTITUDES AND FEELINGS	(PRIOR TO THE COURSE): FEAR	
		UNCERTAINTY	
		LACK OF CAPACITATION	
		SATISFACTION	
		FRUSTRATION...	
	6.- TRAINING DEMANDS	PEDAGOGICAL USE OF ICT	
D. ICT AND ENGLISH LANGUAGE TEACHING: TRAINING DEMANDS	7.- EDUCATIONAL USE OF THE INTERNET COMMUNICATION TOOLS	SEARCHERS	
		TELEMATIC PROJECTS	
		BLOGS	
	8.- EDUCATIONAL USE OF WEB-BASED RESOURCES	VRC, EDUCATIONAL WEBSITES...	
	9.- EDUCATIONAL USE OF ONLINE ACTIVITIES	ACTIVITIES OF SYNTHESIS: WEBQUESTS, TREASURE HUNTS ...	
	10. ATTITUDES TOWARDS THE USE OF TELEMATIC TOLS, RESOURCES AND ACTIVITIES	FEAR	
		UNCERTAINTY	
		LACK OF CONFIDENCE	
		SATISFACTION	
		PROUDNESS	
E. FEEDBACK AFTER TRAINING	ATTITUDES	CHANGE OF PERCEPTION	
		USAGE AND INTEGRATION OF ICT IN TEACHING AND PROCEDURES	
	COMMUNITY CREATION		

226

The first category, **GENERAL ASPECTS** encompasses the three following subcategories:

1.- **Education in the XXIst century**:
It includes the need to change **methodology**, **training**, as it has always been conceived, and certain **curriculum** patterns, which obviously need to be revised with the advent of those changes..

2**.- ICT integration in TEACHING AND LEARNING processes**: This subcategory covers the following items<. the usage of ICT, the definition of ICT as means or end, the natural integration of ICT, ICT as causing social difference, and the limits we teachers have as ICT users. The challenges that the integration of ICT suppose to TEACHING AND LEARNING practices, the transformation of the **teacher's role** and the most common **attitudes** used by teachers to confront change and overcome difficulty.

3.- **Barriers for a successful ICT integration,** that is how is the access of teachers to computer rooms, which is the infrastructure and center facilities they have to face and which type of conditions do they enjoy in order to guarantee a satisfactory integration of ICT into their dairy teaching practices.

The second category is **ICT TRAINING** and here there is special emphasis put upon the **training needs** that teachers have in general which obviously have to do with both the acquisition of technical abilities and of pedagogical abilities.

The third category constitutes the **COURSE EXPECTATIONS** that participants possess prior to receiving specialized ICT training. On the one hand, this category has to do with the ATTITUDES AND FEELING teachers experiment prior to the course such as fear, uncertainty, lack of capacitation, satisfaction, frustration …
The second main subcategory has to do with the TRAINING DEMANDS that teachers participating in the courses have and which have directly to do with their needs

and lack of knowledge. Thus, the pedagogical use of ICT becomes of extreme relevance.

The fourth category deepens in the speciality of teachers who participate in the courses and has to do therefore with **ICT AND ENGLISH LANGUAGE TEACHING: TRAINING DEMANDS,** the subcategories include the **Educational use of the Internet Communication Tools** such as searchers, the participation in Telematic Projects, Blogs, the **Educational Use Of Web-Based Resources** VRC, Educational websites…, the **Educational Use Of Online Activities** for example, the different activities of synthesis: WebQuests, Treasure Hunts … and finally this category has to do with the **Attitudes** of teachers towards the use of telematic tolls, resources and activities in their English as a foreign language classes: fear, uncertainty, lack of confidence, satisfaction, proudness...

Finally, the fifth main category deals with the **FEEDBACK AFTER TRAINING** and above all the **attitudes** that teachers have experienced after having been trained and received specific instruction respect the use of ICT tools and resources, thus, the teacher's change of perception on the one hand and the usage and integration of ICT these teachers put into practice in their teaching procedures constitute a part of this conceptual categorization. The creation of a Community of Practice is the second main category of this part and becomes according to our opinion the basis upon which XXIst century lifelong training is to be based.

VI.iii.iii.i.i.ii. Results

VI.iii.iii.i.i.ii.i. GENERAL ASPECTS:

- Education in the XXIst Century.

Social changes affect the educational panorama. New opportunities need to be face under the light of a new and different context which does not have anything to do with the educational context of ten, fifteen years ago. This category encompasses the need to **change educational patterns,** from methodology to

training, as it has always been conceived, and certain curriculum patterns, which obviously need to be revised with the advent of those changes. As far as the opinions in this field are concerned, teachers seem to agree in the need of renewal of methodological patterns and in the fact that changes in XXIst century education pose a great challenge to teachers to be overcome. Obviously, teachers are aware of the need and necessity to change their role and move from the mere figure of knowledge transmitter to the figure of knowledge mediator, which accompanies the student along his or her learning process, and therefore there appears the process out of which both teacher and student learn from one another.

 Training is seen as the solution that will help them introduce changes in their teaching practices. Otherwise, the requirements to succeed in this methodological change require from teachers to spend enormous amount of time training preparing themselves for the change, and also adapting materials, redesigning them and getting accustomed to new environments: the computer-room, the virtual spaces, the new media...

However, as it will be observed later on, not all teachers agree in the need to include ICT within this methodology, and propose that the methodology has to be put at the service of teachers and that it always has to be in accordance to the teacher's profile. This need to change embodies the appearance of both positive and more pessimistic attitudes. Related to this, the **sense of disorientation and fear** pervades in many teachers who fear the loss of their traditional role with anxiety. Teachers see as very negative the attitude of many teachers who do not want to hear about change and state that age factor may be one of the causes which leads to this reluctance of many teachers to confront change both in their teaching practices and their processes of self-training. Otherwise, other teachers manifest from the very beginning their Availability to face change and to adapt to new times:

"I like the new proposals regarding the teacher's role: the teacher as designer of the student's learning scenarios and orchestrator of the learning process"

The emergence of new instruments and languages challenges teachers and reveals the necessity for them to be updated and well-trained and to combine new tendencies and resources with old and traditional ideas. The fact of living in a different society embodies the need to face new opportunities and to confront the harnesses of change.

Another of the concepts which is highly valued by teachers is the enhancement of **collaboration**, teachers see the need to share and collaborate in order to benefit from the knowledge and experience from others, this process will revert in a positive improvement of teaching quality standards. Thus the culture of collaboration becomes highly praised and valued and it is from this recognizement that a strong community of practice is grounded. This community will take benefit from the richness of the different collaborations and will have access to knowledge which is in constant change and evolution.

Otherwise, some teachers agree in the fact that there are other urgencies in the educational field of the XXIst century rather than ICT and their inclusion, although this is not a generalised and extended opinion. Among these urgencies teachers highlight the need to re-establish the good perception of teachers, the need to end with the apathy by families regarding education, the need to end up with violence, the need to develop a critical spirit on students, another repeated question which has been recurrent throughout the forums: What does society expect from teachers?

- ICT integration in Teaching and learning processes:

This is one of the debates which generated more discussion. On the one hand the introduction of ICT into teaching and learning practices becomes a problem to most part of the teachers. The general idea is that technology is deeply immersed in our day-to-day processes that teachers have to integrate it together with the subjects of major interest for them. The need to include ICT as methodology

constitutes another of the departing points of our discussions, but the effort of time and resources spent in adapting to this change becomes undoubtedly one of the major worries for teachers. The immediacy with which it seems that ICT have to be introduced causes them profound despair and uneasiness.

In order to classify the diversity of opinions generated around this topic, we decided to divide it into several other sub-categories: **ICT Usage,** the **Teacher's Role** and the **Barriers** which prevent teachers from successfully integrating technology into their teaching and learning practices.

As far as the teachers'**usage of ICT** is concerned, this first category includes the definition of ICT as means or end, the natural integration of ICT, the use of ICT in education as cause of social difference, and the limits we teachers have as ICT users. The challenges that the integration of ICT suppose to teaching and learning practices, the radical changes undergone in relation to both the teacher's and the student's **role** and the **attitudes** with which teachers confront change become the most important aspects to be pointed out in this analysis. Basically teachers manifest having **limitations** in the use of ICT, which range from the lack of technical knowledge on how to technically use different telematic tools to the need of pedagogically exploit ICT into their English as a foreign language classes. The need to integrate ICT-based proposals, to design and adapt learning spaces to the present necessities in order to approximate ICT to teaching practices in the classroom is seen by the major number of teachers, although there is enormous confusion on how to do it. Furthermore, there exists the extended opinion among teachers that many of them seem have a cultural prejudice that does not allow them to understand that ICT are not only mere tools, but other ways of perceiving cultural and conceptual relationships. The idea of changing such deeply-rooted perception constitutes another challenge to be overcome. Otherwise, in many instances teachers seem to relate ICT to the idea that things have to be quick, easy and dynamic and that ICT are against reflection. The claim to use ICT under both a conscious and critical perspective is widespread among teachers who do not see the utility of using technology at all, and furthermore, some of them introduce

231

the proposal of making the use of ICT into teaching and learning processes as optional and state that there are educational need more important than ICT and its integration into teaching practices.

The need to give prestige ICT is also another aspect that worries teachers, there are many instances in which students do not see the fact that ICT an contribute to develop their improvement of skills and abilities. The stress in the point that ICT and the Internet do not constitute a ludic tool is something that needs to be overcome in order to succeed implementing ICT rigorously is another of the aspects upon which teachers participants in this research agreed completely. The conception that ICT may cause a **social divide** was something which worried teachers since they evidenced the reality in which still not all students have access to technological resources and advances.

The assumption of moving towards a **natural integration of technology** in teaching and learning processes is a shared concept to which many teachers coincided. The invisibility of the means accounts for this concept: *"we, as teachers, will have not succeeded in integrating ICT until we are not aware of the tool that we are using"*. The fact that students are more aware and conscious of the use of ICT-based tools and resources helps to reinforce this idea and see the presence of the different media in the classroom in a more natural way that teachers do. The need to **homogenize** the use of ICT in the teaching centers together with the need to establish parameters which can contribute to the increase of quality standards in teaching becomes a need upon which many teachers agree. The lack of protocol and the necessity to take the realities of the teaching centres into account becomes extremely important to them. Teachers emphasize the need to work as ICT as essential, the need to work collaboratively as urgent and finally, the necessity to undergo a deep change as far as methodological criteria are concerned is seen as very urgent and outstanding.

Among the **initial attitudes** of teachers regarding the introduction of technology into their teaching and learning practices there were answers which ranged from

the most extreme reluctance and refusal to the excitement to try and face new challenges. Among the more pessimistic attitudes, teachers exposed their reluctance toward the fact that the introduction of ICT would suppose to them waste of time, waste of energy, waste of effort at the time that the sense of not feeling secure enough made them feel even restless and anxious. Before taking students to the computer room or before starting with students any type of didactic activity carried out with the use of any technological tool, teachers have to have designed and developed this activity, and they need to know how to do it in terms of pedagogical use of the tool in question. The lack of training is evidenced once more. The attitude of students who in many cases and due to ignorance perceive ICT as the source to carry out ludic activities constitutes another aspect which provoked uneasiness among teachers. Related to this, there was the concern that ICT could transform students into lonely and unsocial individuals, and that that kind of learning does not help students deepen into the objects of their study.

Teachers share the assumption that they have to take advantage of ICT and its communicative possibilities, especially for English as a Foreign language teachers, however, some of them exposed the need to use them from a very conscious and critical perspective and viewpoint. Among the positive attitudes revealed, teachers manifest that they spend much time preparing and learning how to use the different tools, but that the effort is worth doing. According to them, ICT potentialities account for better results by students, enhance communication and student's active participation in the English as a foreign language class. The effort carried out by educational institutions to support and provide infrastructure and resources to promote the introduction of teaching and learning practices is also highly valued and praised. The need to acquire competences regarding the use and deep knowledge of communication tools and resources is basic to become critical, challenging imaginative and ICT consumers, with the capacity to evaluate the materials and select attending to quality standards.

As far as the **teacher's role** is concerned, the changes that teachers have to undergo in order to succeed in the implementation of technology affect teachers and causes them profound despair. The need to receive training in order to confront challenges in role changing is again made evident in many contributions made by teachers throughout the course, but more specifically at the beginning and prior to receiving training.

Some teachers vindicate the traditional role of teachers: they expose the feeling that with the use of ICT the teacher loses power and the importance of many values will be lost. It seems to them that if technology permeates the whole of the educational process, then highly-praised traditional values such as the development of a critical sense to face life by students can be lost. With the advent of ICT they have the sense that maybe education can be richer although there will always be the necessity of a teacher who will transmit knowledge and human values. The main idea among the most reluctant and pessimistic teachers is that technology will never substitute "good" teachers. Another factor which prevents teachers from clearly seeing the need to use ICT in their teaching practices is that they do not perceive how they can directly apply ICT in their teaching area.

More optimistic teachers state the need to be ready and prepared in order to provide good response to teachers who are still reluctant and refuse ICT, they stress the idea that they have to be convincing and ready to provide suitable responses. They see technology as essential and the fact that it cannot be isolated from other practices, but deeply integrated in them. After receiving training, teachers make a reflection on how the use of technology affects their role and evaluate how it has changed:

"I look back and I see how my role has changed, but also the didactics: I have planned the activity, but it is the students who put it into practice. This is a step towards the teacher's role as mediator in the process of the student's access to technology …"

234

As far as the **barriers** for a successful ICT integration are concerned, emphasis will be put on aspects which range from the access of teachers to computer rooms to the type of conditions that teachers have to confront in order to guarantee a satisfactory integration of ICT into their dairy teaching practices. Regarding the different types of barriers which impede teachers from satisfactorily integrate technology into teaching and learning processes there are different categories in which the teachers' opinions can be circumscribed. The differences in opinion of the different teachers participating in the courses are in many of the cases directly related to the facilities they possess in their teaching centres in terms of infrastructure, connectivity, ratio student-computer, access to the computer room, existence of computers in the class, support and help to carry out activities using ICT … The barriers, according to this fact, are divided into the following groups:

a- Attitudinal barriers: teachers are reluctant to use technological tools due to the fact that they have never been instructed to use them and therefore, they feel self-doubting and insecure. The lack of technical knowledge constitutes another important factor which prevents teachers from using ICT tools, pessimistic teachers, afraid of changing their traditional role feel threatened and reject the use of technology. Comments such as "there's a long way to go" or "I can't do it" are frequent and recurrent. The fear not to be able to solve unexpected technical matters stops teachers from trying and visiting the computer room or from using technology in the classes. The sense of despair and the enormous quantity of time needed to acquire some training and then be able to use and implement the different technology-based activities pervades among them and it is not until they start receiving specific training on how to gradually use and implement these tools that they start to lose this feeling and to feel open to try. Often teachers regret their lack of imagination and pedagogic skill to be able to develop tasks based upon technology and to use them appropriately. Classroom order and discipline worries teachers, who feel that students react differently when dealing with technological tools and computers, since they consider that they are going to

participate in fun activities instead of taking part in current English as a foreign language class.

Among the positive attitudes collected in the forums interventions, teachers expose the good conditions from which they benefit in some centres, which allow them to use and implement technology satisfactorily. Teachers feel satisfied when after trying for the first time certain tools succeed and students provide them with very positive feedback. The possibility of sharing their emotions and fears with other teachers by means of the virtual environments used to deliver training (Moodle, BSCW) and the fact of perceiving that many teachers shared similar experiences made them feel more secure. **Collaboration** became crucial all throughout the process, comments by teachers enhanced cooperation and enabled them to change reluctant attitudes at the time that provided support when it was needed. Thus some of the most important attitudinal barriers could be overcome.

b. Infrastructure barriers: As far as the barriers which are more related to infrastructure are concerned, the different comments and posts evidence that there is a multi-varied reality in the Catalan educational framework which, in many cases, difficults the successful implementation of ICT in "English as a foreign language" classes. When referring to infrastructure we will refer to the facilities to which teachers can resort to in order to introduce ICT into their practices: connectivity to the Internet, technical endowments, ratio students per computer… In this sense, almost half of the participating teachers state that they have often problems regarding connectivity, the conditions of the computers in the computer room, which sometimes are different and contain different technical characteristics as well. The lack of ability to cope with the class in a different environment –the computer room- enhances their fear and makes them feel uncomfortable.

The lack of adequate spaces and equipment to work in the classroom under good conditions together with the high ratio of students from computer evidence some of the most outstanding features to be borne in mind when considering important

236

barriers. However, teachers manifest their hope and confidence in the arrival of new equipments to the centres which is becoming better every day and thank institutions for the effort they are carrying out. At the same time they relate the arrival of these new equipments to the acquisition of training to be able to use them appropriately taking always into consideration the pedagogic perspective.

The lack of homogeneous criteria in terms of networks, equipments, and training ... is another of the aspects evidenced by teachers, in this sense; they compare their situations and observe that every centre is different from the rest, that there is no protocol which could unify criteria. This protocol, they propose, could contain aspects such as the access to computer rooms, the equipments, the design and organization of work, the training to successfully use technical equipment and to successfully develop activities, the pedagogical use of the resources….

In general High schools are well-organised and dispose of schedules and programs to favour the access of all teachers and groups to computer rooms. Despite this fact, in the more concrete case of English as a foreign language teachers the conditions vary considerably. There are high schools which have a computer room exclusively to be used by English as a foreign language teachers, however, the resources are very limited, in many cases the computers are old and teachers consider these conditions not enough to guarantee a good implementation of ICT in teaching practices: *"the endowments to high schools are not sufficient, it is necessary to improve them and to obtain better conditions"* . This lack of equipment does not fit the teachers needs and is enough to prevent them from using the computer rooms.

Other teachers complain that in certain cases computer rooms are reserved to those subjects which belong to the technological and scientific field, which in some cases, seem to have prevalence over other areas such as languages. Teachers qualify this circumstance as "terribly unfair" and discriminatory. There are other cases in which language teachers state that they have the computer room reserved for one tour every week. Other teachers who are less lucky have to select

237

which of the groups they have will be able to access the computer room, since there are problems of timetables and room occupation which difficults the possibility of accessing the room with all groups. Nevertheless, other teachers manifest that there are many language teachers who have never used the computer rooms in their centres and that there are cases in which there is the material and the resources and teachers do not use them or they use only at the end of term or to watch films.

Regarding good conditions, there are teachers who manifest being privileged since they have well-equipped multimedia computer rooms only for their own access, with DVD, multimedia kits for students, laptops, wi-fi connection, webcams, microphones, loudspeakers…. Others have been asking and making demands and little by little have been able to obtain a little computer room, some computers... The fact of having a language computer room for English language teachers – according to them- favours the possibility of using multimedia and interactive materials and helps students to obtain better results, at the time that motivation is enhanced and participation actively promoted.

As a general conclusion we would like to gather the adjectives which summarise the variety of visions and perspectives under which teachers confront and face all the changes that affect them in the context of XXIst century education and the integration of technology.

POSITIVE CONNOTATIONS	PESSIMISTIC CONNOTATIONS
Necessary	Catastrophist
Attractive	Loss
Better	Disorienting
Motivating	Apocalyptic
Useful	Bittersweet
Updated	Contradictory
Noble	Exhausting

Fantastic	Unknown
Unthinkable	Conditioning
Enriching	Discourage
Confidence	Anxious
Overwhelming	Despair
Essential	Threatening
Exciting	Loss of time
Creative	Resistance
Vertiginous	Effort
Dynamic	Uneasiness
Flexible	Fear

VI.iii.iii.i.i.ii.i.i.   ICT TRAINING

Asked about ICT training, teachers emphasize the need to receive training in order to satisfactorily confront the challenges caused by the implementation of ICT in teaching and learning processes. Almost the whole of the teachers interviewed state the need to acquire pedagogic training rather than technical, although sometimes they consider that they have to be aware of the potentialities of the tools in order to be able to use them properly. The need to acquire pedagogic training to "educate with technology" rather than to "educate in technology" is evidenced by teachers in the post they place in the different forums; they want to know how to integrate the different resources but also to share them with other colleagues, at the time that they benefit from the contributions and experiences from other colleagues. The enhancement of **collaboration in training practices** is again relevant and praised by teachers, which wish to actively participate in the process of constructing knowledge and taking benefit from all the knowledge which is constantly generated. Apart from this, they highlight the necessity to acquire interpersonal resources: group dynamics and other humanistic tools in order to deliver learning in a successful way.

The need to relate ICT training to the center necessities is another essential aspect which according to teachers should be taken into consideration. Thus, this ICT training should be directly linked to the necessities of the teachers of the center and the realities of their students, it should be supervised by the administration, evaluated by competent authorities and in many cases it should also be transversal. Other teachers do not consider ICT training as essential or important and state that there are other important factors which should be paid attention to, which requires more attention on the administration part. The lack of homogeneous criteria in teacher training constitutes again the basis of many inequality situations in which teachers find themselves in the present time.

In general, most teachers agree in the fact that there is the need to rethink the role of centers in determining the training needs of the teachers. Once this first step has been carried out, the second part would be linked to the demand of specific ICT training which pertinent institutions (Universities, Department of Education - Teacher Training Programs) would have to provide response to. The attitudes of teachers regarding the need to acquire pedagogical training in the use of ICT differ significantly in the sense that some of them consider it as crucial and introduce quotes such as: "ICT tools constitute a never-ending field", this (the use of ICT in teaching practices) is something really heavy", whereas others consider it as one of the many remaining problems to be solved: *"I think that technology controls us, instead of us controlling technology", "We (referring to teachers) have to be very careful"*. Other comments such as *"the need to be trained in the use of ICT is evident, but exhausting, difficult for teachers, urgent, it has to be done patiently, with no hurry, with extreme confidence"* reveal the conflict through which many teachers undergo considering ICT training. Teachers also consider the possibility of ICT lifelong training, as a result of the changes in the different training models and see the need of enlarging the training process as very relevant and interesting.

VI.iii.iii.i.i.ii.i.i. ICT in ELT

The need to train teachers in the pedagogical use of web-based tools, on-line resources and e-activities becomes fundamental when taking into account a good implementation of ICT into teaching and learning practices. All along the training, teachers received specific information on the use of communication tools such as the blogs, of resources (the use of voice programmes, podcasting… and a multiplicity of telematic e-activities (treasure hunts, virtual notebooks…).

With the usage of ICT teachers become also aware of the fact that attention to diversity is also taken into account, students with different training needs can work at their own pace at the time that ICT generates positive attitudes on slow-paced students and enhances motivation.

The enormous variety of tools and resources in English language teaching is something that worries teachers to a great extent: *"Sometimes I feel lost in front of so many resources and have the sense that I am not using the correct one"*. The capacity of being able to choose properly and to use them attending to didactic aspects is one of the key points that this research wants to evidence: teachers want to acquire pedagogical knowledge in order to exploit tools and resources in the classroom, they repeat this idea of receiving pedagogic training apart of the great dose of imagination they need to have in order to motivate students. Teachers, obviously, have to be involved in the process:

"We have to know -from our training sessions- the possibilities of ICT and do not let them overwhelm us with the infinity of resources".

*"Little by little we have to familiarise with the tools, resources and activities and select them from those which can help us reach specific **didactic objectives**"*

The help they obtain from the training sessions is also evidenced, the results of this delivery of training have been spectacular and all teachers have become

involved in the use and creation of tools and activities. Even the most reluctant ones evidence a very positive change in attitude regarding the use of the mentioned resources after receiving specific training, as it can be seen in the following comments:

"The discovery of WebQuests and Treasure Hunts has supposed to me a change In methodology; traditional activities such as essay writing are easier to work within the Computer room"

"When students write on the computer are more aware of mistakes and can modify their writing easily"

"I prepare tests and activities of diverse typology to exploit them in class"

After the different courses started, there was a section named "Recommend us your favourite websit" which registered one of the highest levels of participation. Teachers made their recommendations and always included the way in which they use the tool, with the student's typology, the temporization of the activity… Teachers could benefit from the experiences of their mates who in fact had even tried the tools that recommended, thus, they had the feeling they could try those tools with certain guarantee and felt more secure in the use of the tools and activities. Furthermore, they provided feedback on the information exposed, and added their comments after trying the same experiences. Teachers used the platforms and their communication tools: forums, chats, wikis in order to develop this exchange of experiences and recommendations for the use of tools, resources and activities they though relevant and useful for the teaching and learning of English as a foreign language. Furthermore, they received this initiative as very positive and relevant to the whole formative process:

"I find this debate very interesting, useful, relevant, practical, dynamic and productive…."

242

After trying and experiencing with the use of different tools and resources, teachers become experts on their use and suggest to the rest how to use them appropriately, giving instructions and generating thus a **community of practice** which is in constant change and also constantly generating new knowledge and contents. "I suggest/ recommend/ have experienced with my students that…" are expressions which are frequently used. Collaboration becomes essential to account for a good implementation of ICT-based tools, resources and activities.

After this first contacts with the tools and resources, and once the initial fear is overcome, teachers manifest their wish to go further and to discover more:

"I'm determined to "try more and fit it in. I'm learning so much that I want to put it into practice and vary my teaching. I suppose this is a good start."

Furthermore, after having experimented with an important number of ICT tools and resources teachers acquire a condition of experts and each time become more **critical and selective** with the materials they encounter and evaluate.

" …it has many interesting ideas though it lacks a good classification and index"

The fact of teachers putting immediately into practice the tools and activities upon which they have received instruction becomes one of the most relevant factors of this research, and according to us, it constitutes the main objective that a training program should give priority to. The immediacy of this direct implementation in the classrooms of the training received proves that the training is useful and that teachers benefit from it; the process, will revert on the enhancement of quality and the improvement of the inclusion of technology in teaching processes.

The attitudes that teachers manifest can be considered as very optimistic and positive and contrast with the attitudes they manifested prior to receive the training: *"very interesting, visually attractive, charming, well-designed, fantastic,*

243

well-sequenced, didactically interesting, varied, enriching, integrated and significative usage of ICT, well-temporized, worth doing, interactive, multidisciplinary, didactic worksheets, practical, highly recommendable, wonderful, creative, helpful…".

VI.iii.iii.i.i.ii.i.i.   FEEDBACK AFTER TRAINING

Among the most outstanding attitudes evidenced on the teachers participating in the whole training process, we would like to point out thee basic aspects:

1.- the change of perceptions of teachers regarding the use and implementation of ICT-based tools and resources in their English as a foreign language classes.
2.- the usage and integration in the classroom of the mentioned ICT-based tools and resources bearing in mind their pedagogical utilities and potential.
3.- the need for further training.
4.- the creation of a community of practice which is constantly evolving and moving, generating knowledge and promoting exchange and collaboration.

The observations which make reference to the change that teachers participating in the courses have undergone regarding the use of technology in their classes. Aware of the change they have experimented their attitude is reflected:

"I look back to the past and think that one year ago I could not even think that I would trust so much in ICT as an alternative to my way of teaching".
"The fear of using computers had made of me an illiterate teacher, now, I am starting to overcome it and creating activities of my own. I can scarcely believe it!!"

After starting practising and introducing ICT into their classes the initial need to overcome fear has disappeared and it has been substituted with the willingness to experiment with new tools and put them into practise with students. The fact of being aware of diverse difficulties in the implementation of the resources does not

244

prevent them from using them as it happened when the course started, although they are conscious that at certain time technology or equipments cannot function properly and they have to be ready to face those difficulties. Teachers feel very motivated and manifest their illusion after the training has finished:

"It is worth the effort of changing: despite the energy we have spent, the valuation is satisfactory, my vision is highly positive and despite all the troubles I will go on using ICT in my classes."

"In the end, I have discovered the key underlying in the fact of working with technology. Doing it is wondering on the possibilities of which I am only aware of a very small part. The immensity of working with technology which overwhelmed me, now has become a challenge to me.

The thankful attitude towards the trainers also evidence the satisfaction manifested by teachers after the training received. Teachers, as it was said previously, demand **further training.** In this sense they agree on the fact that a certain continuity should be given to the whole training process and propose tools such as the virtual environment as an essential means to maintain the community and the delivery of training contents:

"I would like to know more"
"If I look back, I couldn't have imagined I'd be where I am and learning all that I'm learning. …. Your mastery is really important to me …"

The community would give continuity to the training process and would encourage teachers to go on experimenting tools and sharing their experiences with the other community members. ICT training allowed the teacher participants in the courses to know them better, to collaborate from distance, to share experience and above all to learn from others, which seemed fantastic to teachers. The huge participation and the creation of this community of practice unifies collaboration, training and exchange.

As a conclusion, positive attitudes prevail; the usability of the virtual environments and the training received has let them to use the tools addressed to them in a very didactic way, and this has allowed them to achieve good results in the student's work and also to self-assert as new kind of teachers. Although there is still a long way to go, as they say, teachers value all the time and dedication spent because it has helped to obtain **results in the classroom.** We would also like to point out the immediacy with which teachers integrate what they have learnt into their teaching practices.

> *"… I learn and I am quickly using it in my class…"*
>
> *"… You do see the end result of hours and hours in front of your screen"*

Teachers also make reference in a thankful tone to the dedication of the trainers and the patience with which they have been answering and **solving** their doubts. It has to be said that interaction and continuous communication among participants and the trainer was key to achieve a good working environment filled with positiveness and good feelings.

In terms of quantitative data, the number of text units that have been generated show the degree of interest of the topics that appeared in the forums:

A. GENERAL ASPECTS:

1.- EDUCATION IN THE XXIst CENTURY: 455 text units	**NEED TO CHANGE 84 text units**	**METHODOLOGY 61 text units**
		CURRICULUM 34 text units
2.- ICT INTEGRATION IN T/L PROCESSES	**ICT USAGE 407 text units**	**ICT AS MEANS 24 text units**
		NATURAL INTEGRATION OF ICT 56 text units
		ICT AS SOCIAL DIFFERENCE 27 text units
		LIMITS AS ICT USERS 2 text units
		CHALLENGES 65 text units

	TEACHER'S ROLE 109 text units	
	ATTITUDES 12 text units	POSITIVE 286 text units
		PESSIMISTIC 209 text units
3.- BARRIERS FOR A SUCCESSFUL ICT INTEGRATION	ACCESS TO COMPUTER ROOMS 59 text units	
	INFRASTRUCTURE AND CENTER FACILITIES… 146 t. u.	

B. ICT TRAINING

Regarding **ICT TRAINING** and here there is special emphasis put upon the **training needs** that teachers have in general which obviously have to do with both the acquisition of technical abilities and of pedagogical abilities.

Taking into consideration the second category, ICT Training, results provide the following text units:

| B.ICT TRAINING | 4.- TRAINING NEEDS 206 text units | ACQUISITION OF TECHNICAL ABILITIES 47 text units |
| | | ACQUISITION OF PEDAGOGICAL ABILITIES 95 text units |

The third category constitutes the **COURSE EXPECTATIONS** that participants possess prior to receiving specialized ICT training. On the one hand, this category has to do with the ATTITUDES AND FEELINGS teachers experiment prior to the course such as fear, uncertainty, lack of capacitation, satisfaction, frustration … The second main subcategory has to do with the TRAINING DEMANDS that teachers participating in the courses have and which have directly to do with their needs and lack of knowledge. Thus, the pedagogical use of ICT becomes of extreme relevance.

The third category, course expectations, offer us the following text units:

C.COURSE EXPECTATIONS 58 text units	5.- ATTITUDES AND FEELINGS 286 positive attitudes 209 pessimistic attitudes	(PRIOR TO THE COURSE): FEAR
		UNCERTAINTY
		LACK OF CAPACITATION
		SATISFACTION
		FRUSTRATION...
	6.- TRAINING DEMANDS 206 text units	PEDAGOGICAL USE OF ICT 95 text units

The fourth category embodied maybe the most relevant topics related to our research: ICT and English language teaching, it included categories such as the teachers specific training demands, and the educational use of tools, resources and e.activities specifically addressed to teachers in order to help them to implement those tools into their classes:

D. ICT AND ENGLISH LANGUAGE TEACHING: TRAINING DEMANDS 114 text units	7.-EDUCATIONAL USE OF THE INTERNET COMMUNICATION TOOLS 40 text units	SEARCHERS
		TELEMATIC PROJECTS
		BLOGS
	8.-EDUCATIONAL USE OF WEB-BASED RESOURCES 96 text units	çVRC, EDUCATIONAL WEBSITES...
	9.-EDUCATIONAL USE OF ONLINE ACTIVITIES 69 text units	ACTIVITIES OF SYNTHESIS: WEBQUESTS, TREASURE HUNTS ...
	10. ATTITUDES TOWARDS THE USE	FEAR
		UNCERTAINTY

	OF TELEMATIC TOLS, RESOURCES AND ACTIVITIES 286 + 209 -	LACK OF CONFIDENCE
		SATISFACTION
		PROUDNESS

The fourth category deepens in the speciality of teachers who participate in the courses and has to do therefore with **ICT AND ENGLISH LANGUAGE TEACHING: TRAINING DEMANDS,** the subcategories include the **Educational use of the Internet Communication Tools** such as searchers, the participation in Telematic Projects, Blogs, the **Educational Use Of Web-Based Resources** VRC, Educational websites…, the **Educational Use Of Online Activities** for example, the different activities of synthesis: WebQuests, Treasure Hunts … and finally this category has to do with the **Attitudes** of teachers towards the use of telematic tolls, resources and activities in their English as a foreign language classes: fear, uncertainty, lack of confidence, satisfaction, proudness...

Finally, the last category included feedback after training, the attitudes of teachers after having taken part in the courses, the changes of attitudes towards the use of technology into their teaching practices, and above all, all the comments which have enhanced the creation and fostering of a strong virtual learning community. The way in which teachers helped one another and shared ideas and experiences…

E. FEEDBACK AFTER TRAINING 93	ATTITUDES 286 209	CHANGE OF PERCEPTION
		USAGE AND INTEGRATION OF ICT IN TEACHING AND PROCEDURES
	COMMUNITY CREATION 160 text units	

249

Finally, the fifth main category deals with the **FEEDBACK AFTER TRAINING** and above all the **attitudes** that teachers have experienced after having been trained and received specific instruction respect the use of ICT tools and resources, thus, the teacher's change of perception on the one hand and the usage and integration of ICT these teachers put into practice in their teaching procedures constitute a part of this conceptual categorization. The creation of a Community of Practice is the second main category of this part and becomes according to our opinion the basis upon which XXIst century lifelong training is to be based.

If we place them according to the number of contributions received, within this category it can be observed that the aspects with which teachers seem more concerned about are, at least in terms of their participations in the forums of discussion: the education in the 21st century, the usage that we, as teachers can make of ICT into our teaching procedures, the attitudes which, significantly provide equal results regarding a positive approach towards technology, and the more pessimistic attitudes of teachers, especially when considering the initial parts of the course. The training needs, and the specific training demands they state regarding the usage of ICT constitutes another sector to be borne in mind: teachers have demands and they have to be listened to. To conclude, we would like to point out a sixth factor in importance, which is the elements in the forum that account for the creation of the community, one of the most relevant aspects and conclusions of this research.

The order of the topics, and therefore, its importance considering the number of contributions made by them in the forums of discussion is as follows:

1. **EDUCATION IN THE XXIst CENTURY 455 text units**
2. **ICT USAGE 407 text units**
3. **POSITIVE ATTITUDES 286 text units**
4. **PESSIMISTIC ATTITUDES 209 text units**
5. **TRAINING NEEDS 206 text units**
6. COMMUNITY CREATION 160 text units

7. INFRASTRUCTURE AND CENTER FACILITIES… 146 text units

8. TRAINING DEMANDS 114 text units

9. TEACHER'S ROLE 109 text units

10. EDUCATIONAL USE OF WEB-BASED RESOURCES 96 text units

11. ACQUISITION OF PEDAGOGICAL ABILITIES 95 text units

12. FEEDBACK AFTER TRAINING 93

13. NEED TO CHANGE 84 text units

14. EDUCATIONAL USE OF ONLINE ACTIVITIES 69 text units

15. CHALLENGES 65 text units

16. METHODOLOGY 61 text units

17. ACCESS TO COMPUTER ROOMS 59 text units

18. COURSE EXPECTATIONS 58 text units

19. NATURAL INTEGRATION OF ICT 56 text units

20. EDUCATIONAL USE OF THE INTERNET COMMUNICATION TOOLS 40 t. u

21. ACQUISITION OF TECHNICAL ABILITIES 47 text units

22. **CURRICULUM 34 text units**

23. **ICT AS SOCIAL DIFFERENCE 27 text units**

24. **ICT AS MEANS 24 text units**

25. **ATTITUDES 12 text units**

26. **LIMITS AS ICT USERS 2 text units**

Among the topics which generated less debate and therefore participation on the teachers part were the need of an integrated curriculum, the importance of ICT as causing social difference among students, the use of ICT as means, and the limits that teachers have as ICT users, the fears and constraints they have to face.

Although the totality of the forums interventions can be found in the annex section, a selection of the most relevant aspects have been classified and appear in the following thematic charts:

ACCESS TO THE COMPUTER ROOM

Al nostre centre, IES Can Puig a SAnt Pere de Ribes, estem de sort i disposem de tres aules d'informàtica. Al començament del curs es demana qui n'ha de fer ús "permanent" i es fa un calendari. Aquest calendari està penjat mensualment i tothom s'apunta si hi han aules disponibles. No hi han gaires problemes, excepte en moments "clau" com els finals de trimestre. Això em fa pensar que es fa servir l'aula, en alguns casos, com es fa amb els DVDs, per fer activitat "divertides" que omplin aquelles darreres classes "després de l'examen".....D'altra banda, al departament de llengües estrangeres estem , poc a poc, equipant les aules d'anglès i francès (tenim una aula materia per a cada curs d'ESO). Ara per ara tenim dos ordinadors a 3r.ESO i dos a 4r. ESO. És poquet però ja ens permet treballar la diversitat i fer una mena de "racons" de tant en tant

Quina sort lo de l'aula matèria!!! Ho trobo un gran encert i del tot necessari per crear ambient :-) Nosaltres tenim una aula d'anglès per cada dos profes i això també em permet fer la majoria de les classes (2 o 3 per grup) en aquesta aula però NO HI HA CAP ORDINADOR!!!! Ho hem reclamat 25000 vegades però no ens fan cas. Respecte a l'aula d'informàtica en tenim 3 i també fem lo del calendari a principi de curs i així anem tirant. Jo el tinc reservat una hora a la setmana per cada grup. El problema és la connexió que sovint falla i ja no saben com arreglar-ho!!!

A més a més, malgrat que tenim 3 aules amb uns 15 ordinadors a cada una sembla que de cop, tothom hi està interessat. Així, doncs t'has d'espabilar per poder fer la reserva. No obstant, jo ja de començament de curs vaig reservar dues hores a la setmana, una per cada curs de 1er ESO. Malgrat tot, hi ha vegades que entrar a Internet és impossible i quan s'aconsegueix sempre hi ha ordinardors que no van bé o altaveus que estan trencats.

A l'Eugeni D'Ors, Vilafranca, tenim uns 6 espais d'informàtica comuns a més de dues aules d'ESO equipats amb un ordinador per alumne. Tenim 4 pantalles digitals interactius a l'institut, una de les quals esta a l'aula d'idiomes. Potser que ens falta la imaginació per omplir tots aquests espais - ja hi arribarem

Al meu centre, IES Manolo Hugué, de Caldes de Montbui tampoc ens podem queixar. Tenim 3 espais d'informàtica força complerts, (10-12 ordinadors, projector, etc) i a més tenim 3 aules on hi ha un ordinador connectat a internet i projector amb pantalla gran. Fem també el calendari a principi de curs i ens funciona molt bé.

Al meu centre , SES Fonts del Glorieta d'Alcover, tenim 2 aules d'informàtica amb 8 ordinadors cadascuna, anem tots els grups de l'ESO una hora setmanal a l'aula, a l'hora d'anglès.Una de les aules no és massa bona, pero quasi sempre anem a l'aula que està més bé.Les aules són utilitzades en CV i tecnologia, però poca cosa més

Jo crec que tinc una situació molt privilegiada al meu Centre. De fet és un centre molt gran, però en aquest moment hi ha 10 u 11 espais d'informàtica, aules o com es vulguin anomenar. Tots están connectats en una intranet i amb internet per fibra òptica, la qual cosa permet una gran velocitat de descàrrega des d'internet. Un d'ells és només per a les llengües estrangeres. Tenim tres aules específiques per a llengües i l'espai d'informàtica amb 6 ordinadors només per nosaltres. També tenim accés a les aules generals amb una sol·licitud prèvia al coordinador d'informàtica al començament de curs o de trimestre.Portem anys demanant ajuts i beques per poder comptar amb tot això i hem tingut sempre la col·laboració dels equips directius, de l'AMPA i fins i tot del Districte d'Horta -Guinardó que ens proporciona una petita subvenció per mantenir un espai d'autoaprenentatge.Tenint tot això, la llàstima és que no tot el professorat del

departament de llengües estrangeres en fa ús.
Per tal de millorar l'ús de totes les instal·lacions i materials estem realitzant una avaluació interna del departament sobre el grau de coneixement que tenim el professorat de tot el que podem utilitzar, el grau de freqüència d'ús i el grau de satisfacció que tenim per poder comptar amb tot aquest material i eines de treball per a les nostres classes.
Donat el que acabo de llegir, veig que encara tenim molt de camp a córrer. El meu centre, IES Deulofeu de Figueres, té una dotació informàtica francament minsa. Hi ha 3 aules d'ordinadors, una de les quals és d'ús exclusiu pel batxillerat artístic i les altres dues són d'ús preferent per les classes de tecnologia. La resta d'hores que queden, poques, són per a compartir amb la resta de professorat. Malgrat tot, puc anar a l'aula amb 3 grups classe una hora a la setmana. Però en queden molts que no. És per això que hem començat a muntar una aula d'autoaprenentatge, i a intentar a millorar aquesta dotació ben aviat. Ideas welcome!!!!!!!!!!!!!!!!!
A l'IES Joan Coromines de Barcelona tenim dues aules d'informàtica d'ús general, una d'autoaprenentatge de català amb 10 ordinadors, l'aula de música amb 12 ordinadors i l'aula d'idiomes amb 7 ordinadors més tres laboratoris portàtils d'idiomes (les famoses maletes) i TV.Tots el professorat d'idiomes té, amb poques excepcions, una hora amb cada grup a l'aula d'idiomes.La connexió a Internet és força bona però hi ha dies i dies.No ens podem queixar tot i que tot es pot millorar...
A l'IES Palamós hi ha uns 600 alumnes i 3 aules d'informàtica, una de les quals és massa obsoleta per ser-hi comptada. A les 2 aules "decents" restants hi ha uns 12 ordinadors a cada una i la connexió sempre funciona força bé. Els ordinadors estan congelats (cosa que facilita el seu manteniment) i tenim "censurades" determinades pàgines gràcies a un filtre proporcionat pel Departament d'Educació. A l'assignatura d'idioma estranger tenim reservada una hora a la setmana a l'aula d'informàtica per a tot el curs, i si no hi ha espai per a tothom prioritzem els cursos baixos. En general, les aules d'informàtica estan molt sol·licitades.
A l'IES Vila-seca tenim dues aules d'informàtica amb nou ordinadors, més la dels servidor. Tenim al centre uns 350 alumnes de manera que queden poques hores disponibles per les altres àrees. Tenim uns quadarants horaris de caràcter setmanal on podem reservar aquestes dues aules quan no estan ocupades. Utilitzem aquestes aules d'una manera esporàdica però una companya del departament, que també esta fent un curs de TIC, i jo volem demanar tenir-hi accés de manera regular quan fem els desdoblaments l'any vinent. Caldrà prioritzar un o dos nivells perquè la dotació no dóna per més. La meva companya utilitza molt el portàtil i el canó de projecció a l'aula d'idiomes que està al costat d'una de les d'informàtica així que també proposarem passar-hi la connexió telefònica per tal de poder projectar material on-line.
No volem ni podem passar del 0 al 100 sinó fer-ho de manera progressiva a mesura que nosaltres aprenem a utilitzar noves eines i la dotació, previsiblement, va augmentant.
Una mica el que tothom. Som un institut de dues línies d'ESO. La dotació d'ordinadors és raonable (una aula amb més d'una dotzena d'ordinadors, alguns reubicats, i dos ordinadors a l'aula d'idiomes, sense connexió a Internet); però lluny de la integració òptima a totes les accions educatives.També l'accés a Internet és raonablement ràpid, si hagués funcionat durant el darrer mes i mig. L'altra pega és que aquests inconvenients els semblem percebre quatre. Que la integració de les TIC a les pràctiques docents és precària, molt precària, és una realitat palesa al meu centre. Una bona notícia: no hi ha congestió en l'ús de l'aula d'informàtica.

BARRIERS FOR A SUCCESSFUL INTEGRATION OF ICT

Al meu parer, el fi desitjable de la integració de la tecnologia en els processos d'ensenyament i aprenentatge és la imperceptibilitat dels mitjans. Així com ningú, quan es gira, agafa un bocí de guix i representa un exemple damunt la pissarra, no pensa que està fent servir un instrument tecnològic, ni quan per rentar-se les mans ha d'anar al lavabo i obrir una aixeta, i decidir a quina temperatura desitja el raig d'aigua, no pensa tampoc que està fent servir un altre instrument tecnològic; el repte de la integració del que ara anomenem TIC s'haurà assolit quan psicològicament, docents i aprenents, no siguem tan conscients que les estem utilitzant, eficaçment i de manera natural, per a aconseguir els nostres objectius, i, de fet, n'haguem oblidat fins i tot l'acrònim

Crec que tens molta raó, però també penso que això és més cosa nostra (dels docents) que dels alumnes. Ells ja ho veuen d'una manera natural i no ho perceben com un estri per aprendre.

Jo també crec que teniu raó tots dos però encara així és la nostra feina fer de les TIC una eina d'aprenentatge eficaç, només així les farem imprecindibles. Però, la veritat és que no entenia així aquest debat. Pensava que era en sentit més general; és a dir, integrar des d'inmigrants fins a alumnat amb diferents interessos, abilitats, etc.

Crec que existeix un prejudici cultural que no ens deixa entendre que les TIC no només són eines, sino també formes de percebre les relacions conceptuals i culturals. En cert sentit, diria que una part molt significativa del professorat fa servir alguns elements de les TIC amb la mentalitat del segle XIX. És cert que hi ha una dificultat pràctica, immediata davant l'accés a les TIC, però en tot cas el que resulta simptomàtic és la resistència.D'altra banda encara hi ha una prioritat dels continguts sobre els procediments a les programacions i les pràctiques docents. Sembla importantíssim saber conceptes, dades i fets i, molt sovint, els nostres alumnes no senten cap motivació ni connexió entre aquest "conjunt de continguts" i la seva realitat ordinària.Per acabar diria que la disponibilitat material dels centres és molt desigual. Per exemple, al centre on estic aquest curs és gairebé impossible trobar espais per treballar. En canvi, el curs passat era molt senzill. I no només depèn dels espais sino de la voluntat explícita dels equips directius d'afavorir aquests usos.HI ha diversos factors que dificulten, o poden dificultar, la utilització de les TIC a les classes de llengua (n'apunto -crec- els fonamentals):Que el/la professor/a no domini les TIC o bé que no se senti preparat per fer-ne ús amb els alumnes. En aquest cas, els professors que ja tenen el domini haurien de rebre formació per fer-la servir a la classe.2.- Que el/la professor/a no vulgui fer ús de les TIC per la dificultat afegida que comporta fer una classe a la sala d'ordinadors. Moltes vegades la impossibilitat que els alumnes se centrin en allò que es vol que treballin. 3.- Que el centre no disposi de suficients espais amb ordinadors per treballar a les classes de llengua. 4.- Que els grups d'alumnes siguin massa nombrosos i impossibiliti que se'n facin classes a les sales d'ordinadors

Estic d'acord amb totes les dificultats que han estat presentades pels altres participants en aquest debat. Tanmateix, personalmet i per experiència pròpia,l'obstacle que considero més gran per tal d'utilitzar les TIC dins l'aula és la desconeixença informàtica de gran part del professorat. D'altra banda, hem de tenir en compte també les poques ganes que es tenen de fer les hores extres que es necessiten per preparar aquest tipus de classes (bàsicament durant el cap de setmana).Pel que fa a mi mateixa, d'un any ençà, i veient que m' era necessari,m'he proposat de posar-me al dia en aquesta matèria i ho estic aconseguint; de tal manera que m'hi he enganxat i

cada cop estic més fascinada per aquest món de possibilitats tan immenses.Així és que, en acabar aquest darrer curs, em vaig proposar que treballaria les TIC amb els meus alumnes, cosa que vaig exposar en el darrer claustre del meu institut, sobretot pensant en com ho faria per realitzar-ho amb un grup molt bo que tinc de trenta alumnes. No perdo l'esperança i crec que ho aconseguiré; de fet, amb l'altre professor amb qui comparteixo nivell, més o ménys ja tenim clar el que farem. Penso que els alumnes es mereixen sortir de la rutina de l'aula ordinària per adonar-se que les noves tecnologies t'ofereixen un ampli ventall de possibilitats a l'hora d'aprendre.A més, amb aquest tipus de classes, no tan sols aprèn l'alumne, sinó que moltes vegades també pot aprendre el professor.

Des del meu punt de vista, hi ha les següents dificultats:1) Tècniques. L'aula és massa potent o massa justa, hi ha altaveus en lloc d'auriculars, no tothom té projector per mostrar com es fan les coses, els alumnes són delinqüents informàtics en potència ...2) Curriculars. No es pot anar a l'aula a fer qualsevol cosa. Penso que cal passar un temps mirant quins recursos són adients per a quines unitats didàctiques. Ha de ser com posar un vídeo o un "listening", que tingui una lògica, crec3) Percepció de l'alumnat. Costa molt que els alumnes no creguin que s'està fent un extra, que allò no és classe de debó. Cal "normalitzar" les TIC i prestigiar-les.

El principal problema que trobo és la manca d'ajuda per part de tots. En primer lloc si tinguessim l'oportunitat de tindre un portatil i de poder portarlo al aula, a voltes podriem ferlo servir per a vore pel·licules, com a màquina de reproducció de CDs de música o fins i tot com a eina de explicació de elements gramaticals a traves de powerpoint. D'aquesta manera tothom aniria a classe amb l'ordinador i el faria servir o no servir segons les necessitats del dia. També amb el suport d'una pantalla se podria connectar l'ordinador i fer mes visuals e interactives les classes

No tinc encara experiència com a professora,pero crec que en primer lloc la dificultat és per als professors a l'hora d'assabentar-se de les noves tècniques que van sortint, i anar-se posant al dia. Després el problema que veig és la "tolerància" dels alumnes. És a dir,ells tampoc es fan massa la idea de que "l'internet" serveix per treballar, i potser no estan acostumats a veure-ho a classe;per tant,crec que al principi s'ho prendrien una mica com a esbarjo, o aprofitarien per connectar-se als seus propis xats o buscar coses del seu interès, si no hi ha algun tipus de control de l'accès a la xarxa per part del professor.

Bé, jo d'experiència com a professora d'institut, no en tinc gaire, però com a alumna...en tinc. A veure, quan a mi em tocava anar a l'aula d'informàtica, era com una festa per als alumnes, ho associavem a "no fer res" i la idea, ens encantava. . Penso que l'activitat amb les TIC han d'estar molt ben planificades i ben preparades ja que si no, els alumnes ho veuen com a un joc.

Com s'hauria de fer? -suposo que "fent hores extra" a casa. Per això crec que també hi ha dificultats a l'hora de plantejar activitats amb TIC a la classe.

La principal dificultat en que ens trobem els professors és el fet de disposar de l'aula d'informàtica.No sempre l'aula està lliure, ni sempre hi ha prou ordinadors per tots els alumnes.   Una altra dificultat de l'aula és que no puguem accedir a Internet quan tenim hora a l'aula de informàtica. Tenint en compte això, sempre hem de tenir algun altre recurs a mà.Que els alumnes consideren les activitats a l'aula com un joc, crec que no és negatiu, ja que tot el serveixi per aprendre és útil.

EDUCATION IN THE XXI CENTURY

La major part del que s'ha dit aquí hi estic d'acord, no podem nadar a contracorrent, les activitats encara les posem els professors i guiem el seu camí, (potser no les escrivim, però el que hi ha en un llibre de text tampoc), moltes hores de feina , també. Que no aprofitem res d'abans, crec que sí, ho presentem en diferent format, més motivador, engrescador, adequat... Usar un power point per a presentar els comparatius , present perfect, una descripció... se'n pot treure molt de suc, tots els alumnes queden bocabadats, participen activament. Qualsevol activitat preparada a l'aula dinformatica, el suc que se n'hi treu és més elevat, pots treballar i atendre a la diversitat. Crec que el nostre futur va cap aquí. No heu pensat la quantitat d'arbres que no caldria talar si els llibres de text estiguessin en format multimedia.

Estareu d'acord que sorprèn molt la peculiaritat de l'Edat Mitjana: una època en què es va treure ben poc profit del llegat clàssic (Grècia i Roma). Bé, potser sí que hi havia grans biblioteques als monestirs, però i les estàtues i pintures gregues? i la democràcia? i tants altres aspectes que al Renaixement es van redescobrir? És que no sabien dibuixar, els medievals? O que no VOLIEN dibuixar bé? Tenien altres objectius, era diferent...

Darrerament jugo imaginant-me la teoria que retornem a una edat mitjana en què no es valoren els coneixements acumul·lats en el passat i que es viu el dia a dia amb objectius diferents que el de l'enriquiment intel·lectual. El que en Bartolomé comenta sobre l'esforç... a vegades penso que és l'últim reducte d'una època classica que s'està acabant. Al cap i a la fi, la història és cíclica, no?Segons la meva experiència, el que els alumnes aprofiten de les noves tecnologies és la seva immediatesa, però no els ajuda a aprofundir. Aquesta és una habilitat que va en decadència: a la pantalla, els textos no es llegeixen, quan veus molta lletra fas un click i vas a la següent pàgina. Això, un llibre no t'ho permet. T'obliga a endinsar-te en l'argumentació.

La meva conclusió és que l'educació al segle XXI no serà ni millor ni pitjor que al segle XX, però sí que serà molt diferent del que hem estat acostumats.

Totes les aportacions que heu fet a aquest debat m'han fet pensar en com ha canviat el meu rol dins la classe quan fem una sessió de TIC: faig un pas enrera i quedo darrere els alumnes, físicament perquè tenim els equips informàtics disposats en forma d'U, però també pel que fa la didàctica. L'activitat l'he preparada jo, però són els alumnes els qui la posen en pràctica, i jo passo a un segon, o tercer, plànol.Suposo que aquest és un pas cap a la figura del professor com a mediador d'accés al coneixement; això es veu fàcilment en les sessions de TIC, perquè són les eines que hem incorporat més recentment a la nostra pràctica docent, i no tenim referències anteriors.

No tinc una visió ni catastrofista ni cofoia de l'educació al segle XXI: tenim més recursos i mitjans, però també tenim més reptes. No penso que sigui perquè abans no en tinguéssim, de reptes, sinó perquè cada cop en tenim més d'identificats.Jo, sóc persona amb més qualitats i gust per la lectura tocant i olorant els full i el llibre que per un fons de color d'una pantalla d'ordinador. També m'agrada el contacte amb l'alumnat o el públic; de fet crec que el necessito per poder expressar-me. M'he resistit a l'ús de les noves tecnologies a l'aula però he de reconèixer que la forma com jo vaig crèixer i aprendre són d'altres temps i a mi encara em queden un anys per haver de posar-me al dia si continuo amb la tasca educativa. Sé que negar-m'hi és nadar contra corrent. Malgrat que la frase de la Mar respecte a la tasca del professorat en el futur "mediadors d'accés al coneixement" em va deixar bastant glaçada, crec que amb matissos és certa. A més, les noves generacions ja no estan interessades, en general, en profunditzar en els temes sinó en tenir informació superficial però indispensable per saber una mica de tot allò que estigui de moda.

També hem de pensar que cada dia hi ha més informació de tot i és difícil emmagatzemar-la en la ment.Bé, és un temps de canvis molt ràpids i la nostra generació s'hi troba al bell mig.Renovar-se o morir, dirien alguns/es
Estem molt desorientats. No sabem el que la societat espera dels docents durant el segle que només hem començat i encara estem molt preocupats pel rol que hem perdut.Jo crec que ens hem de preocupar pels forats que la nova societat està creant, malgrat això no ens agradi massa.
El problema és l'acceleració de la informació, de les necessitats de la nova trasmessa de valors, de coneixements, d'empaties entre els docents i els discents i la desacceleracció de l'energia del professorat, mogut per valors equívocs, contradictoris, classistes i de necessitats de justificació de no se sap molt bé què.No sé si estic una mica massa abstracte avui, però el que tracto d'expressar són idees bastant pensades i que em porten a una contradicció, també, personal.Què era jo quan vaig començar a fer classes, amb quins mitjans vaig començar a impartir-les, de quina informació partia i quins resultats obtenia? Res a veure amb el que faig avui. Res a veure, o així l'espero, amb el que obtindré en els anys que em queden de professor.
Tenim una societat distinta a la que, almenys jo, esperàvem.
El trobar-se amb la diatriba de descobrir nous camins d'avenç o quedar-se parats en el que ja saben, seguirà estant el meu repte.
Proporcionar-los estadis d'esforç, que els portaran a gaudir de les dificultats superades, serà una de les meves fites.Això no és segle XXI. Podria ser segle I, XII, XV o XIX, això sí, amb Internet.El procés d'aprenentatge ens ha de preocupar i hem de saber llegir les claus de la història dels nostres dies, per ajudar al creixement. El podrem fer amb la nostra experiència del passat, amb una radical reflexió sobre el nostre temps i amb un curset que altre de tecnicismes sobre les TICs, que són molt més fàcils de dominar que la reflexió, el pensament, l'anàlisi, l'entusiasme, la comunicació i l'empatia amb les noves generacions, que sí tenen una cosa que nosaltres no tenim amb tants quilats: futur.
Cada vegada veig més important deixar de llençar i recuperar, reciclar, adaptar idees velles casant-les amb les noves. Pensar i parlar a través de l'ordinador és tan noble com fer-ho cara a cara. Tant sols varia la mirada.
L'impacte de les TIC a l'educació és, ha de ser o serà, senzillament, bestial.
El potencial -en progressió geomètrica- que han anat desenvolupant al llarg dels anys les Tecnologies de la Informació i la Comunicació obre unes perspectives de canvis en l'educació que són impensables i inabastables: des de l'MSDOS (ordres, comandes,...) al Windows, des dels primers processadors de textos als actuals -amb gràfics, inserció d'imatges,...), des de la posada en marxa de la comunicació xat, correu, etc...
Ara bé, això repercutirà en la millora de la qualitat de l'educació -formació i instrucció- tal com la coneixem avui? No ho sé. La instrucció pot ser serà molt més enriquidora, però, i la formació com a persones? Aquí és on és, i serà sempre, IMPRESCINDIBLE la mà humana del profesor

EDUCATIONAL USE OF COMMUNICATION TOOLS

Jo faig ús d'un editor de pàgines web perquè els alumnes puguin buscar a Internet, triar i convertir a coneixement la informació que hi troben.

Han de fer lectura comprensiva i escriure en anglès, a part de les destreses informàtiques. L'escrit falla una mica perquè tenen tendència a posar l'esforç sobre els imatges i el só i simplement copiar la part escrit, amb la conseqüent baixada de qualitat.

Exemples http://www.xtec.es/~jmaguire/websites/examples.htm

M'agafo a això de "l'activitat facileta" (gràcies Mar). Als meus alumnes els ha encantat una pàgina de postals: http://www.postcards.org/postcards/

Els demano que m'envïin una postal (els dono la meva adreça de "alumnes") amb un contingut determinat (opinió d'alguna cosa de la classe, suggeriments, queixes i, fins i tot admeto "piropos"). Ja els costa prou triar la postal que m'han d'enviar, però després els deixo una estoneta per què envïin postals a qualsevol persona que els vulguin i... és clar, estan encantats. Us animo aprovar-ho.

Una altra activitat molt facileta però que els agrada força:
Els hi dono una biograpfia molt senzilla d'un cantant o actor/actriu famós però amb algunes errades d'informació. Coses fàcils com el nombre de fills o la ciutat on va néixer, etc. A partir de la pàgina web biography.com els hi faig buscar totes les errades que JO he fet.

Continuant amb això de les biografies: jo els dono una graella on posa: name, birthday, childhood, family, youth, beginnings, maturity, famous for, future, i els dic que l'han d'omplir amb les dades del seu actor o actriu preferits. L'adreça és: http:// www.mavicanet.ru/irectory/eng/17763.html

Una altra activitat lligada amb el món del cinema (que vaig treballar l'any passsat amb els 4rt.ESO) és la d'escollir "The best film of all times". Quan l'han escollit han d'escriure el "genre", "plot outline" i MOLT IMPORTANT el "why" han escollit aquesta pel.lícula i no una altra. Després ho han de defensar en una petita exposició oral. L'adreça és:http://www.imdb.com/Top Finalment, m'agradaria compartir amb vosaltres la web que han dissenyat els meus alumnes a partir del "Projecte Orator en Noves Tecnologies": http://hollywoodcp.com Hi podeu trobar les "pel.licules" escrites, filmades i editades per ells, i tot el referent al viatge a Hollywood que vam realitzar aquest passat setembre. Si els vostres alumnes poden visitar la web i deixar algun missatge i/o opinió us ho agrairia molt.

Al nostre Centre intentem treballar les eines informàtiques tot el que podem, amb cada grup d'alumnes anem una hora a la setmana a l'aula d'informàtica. Treballem recursos i eines que tenim a l'abast; e-mails, cercadors, forums, xats, webquests..també les pagines de grmàtica on-line.

Els alumnes s'ho passen bé i el treball es més actiu i veuen la necessitat de saber anglès per a entendre-ho tot. per això crec que hem d'incorporar les tecnologies a l'educació sino cada vegada ens allunyem més de la realitat que viuen els nostres alumnes

hola, jo faig una mica de tot (bé o de diferents coses, encara me'n queden un munt per fer!) Depen del nivell, del grup, del temari. A vegades els faig cercar informació i escriure'n el resum o anàlisis mitjançant un editor de pagines web, altres vegades completen pagines webs interactives (quizes gramaticals, listenings, readings,etc), altres vegades escriuen missatges a socis estrangers, etc. També està molt bé seguir les webs que han estat preparades amb l'objectiu de practicar l'anglès i pensant específicament en els nostres alumnes (webs tipus webquests, o les de la netlanguages, "What a statue!", etc)

Normalment, tot els agrada. Sobretot els primers dies.

Vaig començar a treballar amb les TIC des de la meva incorporació a la secundària (curs 1997-1998), quan el buscador dominant era Altavista i arribaven les primeres dotacions de CD-ROMS. Ara tot ha anat molt lligat al meu afany perquè em reconeguessin l'aula d'idiomes amb la seva dotació estàndard (encara no tinc la connexió a Internet, però vindrà). Per això, el concepte TIC sempre l'he desenvolupat com un conjunt d'instruments integrats: miro de treballar cada element de l'input programat almenys amb una activitat amb DVD, amb una aplicació audiovisual en CD-ROM, amb el laboratori portàtil, i és clar, amb una visita a l'aula d'informàtica, de moment, per a connectar-nos a Internet.Un exemple concret de tot això ha estat el treball del Phantom of the Opera: hem connectat el llibre de lectura amb el treball de les cançons amb el CD original, el treball conjunt amb l'àrea de música (grans teatres lírics), una visita al Liceu, la visió de la pel•lícula en versió original i el 'treasure hunt' que he penjat.

He anat incorporant activitats TIC d'una manera molt gradual. A les jornades culturals que fem al finals de gener sempre proposem tallers de TIC en anglès: tenim dues hores i pocs alumnes per taller de manera que les condicions són les idònies per pilotar activitats que després podem posem en pràctica de manera més regular.Els Treasure Hunts ens serveixen per ampliar temes que han sortit al llibre de text o per donar més informació sobre els llibres de lectura graduada.

Una activitat que va tenir èxit va ser el Habbo Hotel: els alumnes composen un ninot que es mou per diferents estances i que ha de dialogar amb altres ninots.

També hem fet exercicis online autocorrectius.Com a feina d'estiu donem als alumnes un llistat de pàgines web on poden trobar activitats per millorar i ampliar el seu anglès.

Lesley, jo vaig treballar un dia amb aquesta web dels "ninots HABBO" però després vaig perdre l'adreça, podries penjar-la, si-us-plau. Als nanos els va agradar molt, tot i que costava que no se'n anèssin a d'altres llocs de la mateixa pàgina!

3.Les pàgines Web on han de buscar la informació se les dono sempre jo i sempre han d'omplir algunes preguntes, o fer alguna cosa amb la informació que hagin trobat. Es a dir, els faig cercar i llegir per trobar alguna cosa concreta.

Alguns exemples de tasques que he fet amb alumnes de 2n, 3r i 4t d'ESO els he posat en un racó d'una pàgina web molt senzilla que vaig fer per als alumnes. El link per si voleu veure alguns exemples és: http://personal.telefonica.terra.es/web/matms/profs.htm

PROBLEMES: Una de les dificultats que tinc és que com que sóc professora de francès , matèria que al centre on treballo només s'ofereix com a Crèdit Variable i SEMPRE comparteix la franja horària amb altres CV d'informàtica, tecnologia, dibuix per ordinador etc.etc. tinc molt poques possibilitats de tenir l'aula ni tan sols una hora fixa a la setmana. M'ho organitzo com puc: demanant a un col•lega l'aula quan crec que la necessito, programant tasques amb Internet quan sé que l'aula està una mica disponible....ai!

ROLS I COMPETÈNCIES

Entenc per 'necessitats de formació' els tipus de formació que seran necessaris per afrontar els reptes de futur a l'ensenyament.Em sembla que necessitarem recursos interpersonals, com coneixement de dinàmica de grups, saber facilitar l'aprendre a aprendre i saber tenir cura de la nostre propi salut. En resum, necessitem més eines humanístiques que tecnològiques.

Estic d'acord que cada vegada pesa més la vessant relacional i humanística que de continguts en general. La tecnologia no deixa de ser una eina per interrelacionar-se amb els alumnes i els alumnes entre ells. Crec, però, que les noves tecnologies són el el llenguatge més immediat i una manera fàcil, eficaç i directa de començar a comunicar-nos amb ells... després queda tota la tasca d'educar amb i sense tecnologies i aprendre a aprendre. Els continguts, ara, estan a l'abast d'un click per quan facin falta.

Jo vaig a entendre les "necessitats de formació" centrant-me en les TIC. Fa ben just un any que les he descobertes i em semblen un neverending field, que ens ajuda a què els alumnes s'apropin a l'anglès (en el nostre cas)

Allò que va dir la Mar de "formació al llarg de tota la vida" sona una mica heavy, però ens n'hem de fer a l'idea. No veig el moment de dir "ja en tinc prou" i crec que no hi ha gaire formació disponible en aquest aspecte. està clar que ens hem de formar, però de vegades, almenys des de les Terres de l'Ebre, la pregunta és ...com?

Sense ànim de fer pressió sobre ningú, i menys sobre la Mar, que sí porta a terme en la pràctica el que va exposar, em sembla que ens hauríem de preguntar en veu alta a tot@s els/les ponents que ens presenten idees : "Continguts val, però "Cóm els posas tu en pràctica?".

Aquest és el gran repte al que ens enfrontem, però no patiu que "todo se andará". Un dels principals objectius d' aquestes sessions llengua & TIC és precisament aquest: aprendre entre tots a integrar les TIC des de la vessant pedagògica i sobretot compartir casos i experiències que ens hagin funcionat amb els nostres alumnes. (I no em poses pressió Tom ;-))

Us avanço una propera sessió eminentment pràctica sobre com incorporar les eines de comunicació a l' aula. Si algú té micros, porteu-los el dia 8.

A mi també em va frapar la Mar amb allò de "formació per TOTA la vida", no perquè no hi cregui. Fa anys que ho veig clar. Però potser ningú ho havia dir tant curt i clar. Tant de bo ho escoltéssim més sovint, sobretot uns quants profes que conec i que es pensen que estan de tornada de totes aquestes "xorradetes".
Per cert, estic molt d'acord amb tots tres: la pregunta és "com?"

La formació hauria d'estar vinculada a les necessitats educatives concretes de cada centre, inclosa dins del Projecte Educatiu de centre, supervisada per alguna forma de control de l'administració i avaluada segons variables externes i internes.

La formació en "abstracte" no és res més que una condició per a cobrar els sexennis i, com a molt, pot ajudar a millorar algun aspecte concret, o estimular, o conéixer materials.

D'altra banda, penso que la formació hauria de ser transversal als centres i segons projectes concrets

És evident que la situació actual de l'educació requereix que els professionals desenvolupin la seva tasca de diferent manera. No té sentit seguir repetint els mateixos rols que els professors que nosaltres vam tenir.

Els professors actuals han de fer, agradi o no, un rol diferent, i han de tenir, a banda de les que poden considerar-se vàlides sempre, unes altres competències per poder desenvolupar, actualment, la seva tasca formativoinstructiva.

En aquest sentit, fa uns dies vaig llegir un llibre força interessant. Us passo la referència: PERRENOUD, Philippe: "Diez nuevas commpetencias para enseñar". Barcelona, Editorial Graó, 2004. Tracta sobre les 10 competències considerades prioritàries en la formació continua del professorat de primària, però considero que són vàlides per a tot el professorat.

Però, tot això ho podrem abordar amb formació? Crec, sincerament, que no. Hi ha molts factors a considerar, tot i que, evidentment, la formació ha de ser un eix fonamental per als canvis. Però, no ens equivoquem, hi ha moltes altres qüestions ha solucionar.

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Conec el llibre del Perrenoud i també estic d'acord que dóna moltes pistes d'un nou perfil de professor/a i coincideix amb una mena de nova filosofia de la nostra funció.El mal de tot és que quan les idees arriben als centres i al comú dels mortals arriben tard o arriben contaminades per una mena de pessimisme o de burocratisme i tot són pegues per posar en pràctica noves maneres de fer.Crec que els qui estem convençuts d'algunes coses les hauríem de posar en pràctica ja i de vegades tirar pel dret sense fer mal a ningú, és clar.Avui per avui és difícil que tot un claustre o una major part d'un claustre decideixi innovar en bloc.Som conservadors i l'edat mitjana del col.lectiu tampoc acompanya.

Per mi una de les línies d'actuació pedagògica que hauríem d'impulsar dins les aules i als departaments és el treball compartit.Crec que hauríem de superar l'individualisme que impregna el nostre treball sobretot a secundària i que projectem en el treball a l'aula amb els alumnes.Ens hem de convèncer que el saber l'hem de compartir i ens hem de treure de sobre molts complexos i pors.

D'entrada, haig de dir que em resulta molt agradable assistir a aquestes sessions de formació. Trobo que són molt interessants per a nosaltres tant com a professors com a persones, però... (si no hi hagués un "però" no tindria gràcia):
1) Actualment s'em demana que sigui a l'hora professora-tutora-psicopedagoga-assistenta social-mare dels meus alumnes. Sembla que importi més la teva capacitat d'"aguante" a l'aula que les teves competències lingüístiques que, a vegades passen desapercebudes.2) Estem assistint a un canvi social tan brutal que, encara que es faci evident l'entrada de noves metodologies a l'ensenyament, no sé si ara mateix són prioritàries.
3) A més a més, hi ha la necessitat d'un canvi en la conciènciació de tot el professorat, conjuntament amb la dels alumnes i pares.
4) conclussió: per on hauríem de començar? entenc que aquest projecte que s'està portant a terme és molt possitiu, doncs ja denota una disposició a plantejar-se el tema seriosament. Molt bé, necessitat de nova formació i benvinguda sigui, però potser (és només una teoria a l'atzar) caldria alguna novetat paral.lela en l'àmbit de la disciplina, la valoració de l'esforç i el compromís de l'alumne. Només nosaltres hem de canviar? Què hi penseu?

POSITIVE ATTITUDES

L'experiència va ser positiva (tant per ells com per a mi) i crec que ho tornaré a intentar amb els alumnes de quart més endavant.

131. Jo crec que els Treasure Hunts és una activitat molt distreta tant per als alumnes com per als professors.És una activitat engrescadora, sempre i quan sigui un tema que interesse als alumnes.
...
133. Em sembla una eina molt interessant, sobre tot per Secundària,
...
137. Fer una tresaure hunt és una activitat força motivadora per als alumnes, inclosos els de Primària, si saps trobar el tema que a ells els interessa. M´ha agradat molt veure les que han fet les meves companyes de curs i són un model per quan jo tingui més domini de l'eina informàtica i capacitat i temps per fer-ne una. Encara la tinc pendent!

138. Als alumnes, en general, els encanta; això sí... s'ha de tenir cura en triar un tema que els resulte atractiu. Crec que un dia d'aquests els animaré a que en crein una ells.

40. I haven't tried it with pupils but, anyway, I think it is a really interesting activity,since it is different from what we and the students are used to. I think using this new kind of resources for teaching English is really useful and attractive

141. They love it! However, you have to be careful and choose an attractive topic. I still haven't tried making students create treasure hunts, but I think I will.

143. I have alreary tried TReasure Hunts with my students. It was amusing and they enjoyed a lot. I think it's an interesting activity to do with them, as they learn three skills: reading, comprehension and writing. A pretty complete activity!

144. I haven't used treasure hunts with my students yet although I'm willing to do it, since I find this activity a different and intersting one which can delight students

145. I think that Treasure Hunt is a very amusing activity for students and teachers. It's a delighting activity if the theme attracts students' interest. The fact that students have got the webs where they can find the informationneeded to do it motivates them

152. M'agradat molt aquest recurs de les weblogs. I amb la pràctica a la sessió 3, he vist que és molt fàcil d'utilitzar.

El penso incorporar a les meves pràctiques docents, i crec que els alumnes s'hi engrescaran perquè els encanta comunicar-se en aquest mitjâ d'internet.

I haven't tried it with students, but I think it is a quite interesting activity and motivating since it is "a new thing" for students.

162. Ara que començo a familiaritzar-me amb aquest nou entorn, la veritat és que el trobo molt més àgil i amb més possibilitats que els anteriors. M'agrada, vaja. De tota manera, tinc que clar que sense les pràctiques que vam fer amb els dos anteriors, ara no seria fàcil moure's per aquest. I encara queda camí per explorar i fer nous descobriments....

172. I find I really look forward to opening up this huge live mail box!There is always something interesting going on, someone has just added another mind-opening comment or asked some curious question which gets the old brain churning for a few days.At first i thought I would miss BSCW as I had got really used to it in the end.However, I think this captures much more and you can see in an instant the new items. I have found the articles very interesting and helpful and am learning a lot about our "formació" and TIC.

173. In the words of Sonia "you do see the end result of hours and hours in front of your screen in the end "..even if that end seems a long way away for some of us some days!

76. Suposo que és com tot cal posar-hi. Al principi sembla molt complicat però a mesura que el vas fent servir te'n adones que no n'hi ha per tant i que té un munt de possibilitats.

159. El fet que més engresca és veure una resposta positiva per part dels alumnes.

192. gràcies. malgrat les dificultats em sento molt i molt atesa. Remanaré. I tant que remanaré...

193. Això, Mar, is every teacher's dream. Tenir un suport tècnic ALTAMENT i sobradament provat competent, al nostre costat, per a oferir un servei de qualitat als usuaris. Per fi! Encara no m'hi havia trobat mai en tots aquests temps, que la cosa no fos a base de demanar favors a amics, coneguts, forums i newsgroups a internet, i una mica campi qui pugui per a fer la nostra feina dignament, al cap i a la fi. Les meves sinceres felicitacions i gràcies. Sou el meu DOCTOR PC!!!

194. he entrat a la meva auleta i m'ha fet molta il.lusió. A veure com anirà.. De moment m'he llegit una mica per sobre el manual. Me l'imprimeixo i me l'aniré mirant. A part d'això, entenc que de moment no hi hem de fer res més, no?

199. Crec que aquest curs de TIC que esteu impartint ha enganxat molta gent, incloent-m'hi jo mateixa.

tinc la sort perquè entre altres coses, l'ús que se'n pot fer de les tecnologies és molt més enriquidor i integrador que l´'ús que en feia quan programava anades a l'aula d'informàtica un dimarts de 12 a 1, per exemple...ara els aparells són dins la classe habitual i en un moment determinat, l'alumne/a en pot fer ús si el que està fent ho requereix així; de la mateixa manera que un diccionari, un llibre de consulta,etc haurien de ser a l'abast dels alumnes, un ordinador o dos o tres haurien d'estar presents...Crec que ja és una idea bastant compartida i potser
...
poden plantejar. L' important és estar motivat i no desanimar-te. A mi em fa molta il.lusió el fet d'estar amb els meus alumnes en un espai alternatiu on ensenyar-los que la llengua i la literatura es pot treballar amb un mitjà diferent al de sempre. A més, penso que d'ells també puc aprendre molt. Davant de tot això, val la pena esgotar-se en aquest intent, de vegades tan feixuc, de fer un altre tipus de classe.210. Em sento completament identificada amb el que dius, Assumpta. Jo també he descobert recentment l'ús de les TIC a l'aula i, malgrat els problemes que sempre ens podem trobar i que ja s'han comentat en aquest fòrum, l'experiència ha estat del tot positiva. És un camí nou, que implica reptes nous. El descobriment de les webquest o les caceres del tresor, per posar-ne només un exemple, m'ha suposat canviar la manera de planificar les classes. Fins i tot activitats tan tradicionals com fer una redacció són molt més fàcils de treballar a l'aula d'informàtica.
...

PESSIMISTIC ATTITUDES

Hi ha un petit problema; em temo que molts alumnes no podran participar-hi des de casa perquè no tenen Internet. Suposo que hauré de fixar un dia per poder entrar-hi des del Centre.

154. How can one create a weblog? I haven't got the slightest idea!!! Thanks.

179. La sensació de sempre. Aquest sabor agridolç de les tantes posibilitats que s'obren davant teu i la imposibilitat de deixar d'anar d'un nou espai cap a un altre diferent sense haver aprofitat suficientment el que havies començat a entendre. És sempre una sensació contradictòria, tant excitant i tant esgotadora. Potser només és la meva experiència personal. Algú s'identifica amb mi?

Qué difícl que encuentro transitar estas aguas en que la tecnofilia y la tecnofobia no encuentran un lugar equilibrado donde reposar y pensar con calma.

208. Malhauradament encara en són bastants els companys i companyes que no en volen saber res de la qüestió, però no ens hem de desanimar, en aquest aspecte la generació de profes joves puja bastant hàbil : potser ...en l'alumne una predisposició, perquè són recursos engrescadors. L'únic problema que em vaig trobar els primers dies va ser que els alumnes, per algunes males pràctiques, associaven anar a informàtica a passar l'estona. Però de seguida s'adonen que moltes vegades han de treballar més que a l'aula ordinària. Tot i això, crec que hi ha poca recerca sobre el tema, i crec que és important començar a avaluar resultats, més enllà de la intuició que ens guia.

215. I darrerament he tingut alguna experiència negativa pel fet de trobar-me amb alumnat que, la majoria del grup, partia de l'associació abans esmentada. I com tothom sap, reconduir la situació i exposar les bases i les regles del joc, comporta pèrdua de temps i desgast.

218. Bé, tot això està molt bé. Però crec que ens estem deixant enlluernar per les TIC que encara estan a les basseroles del seu desenvolupament. Com tot a la vida, hi ha un punt mig i com de costum als humans ens costa molt trobar-lo -si és que l'arribem a trobar.

219. Les noves tecnologies no es poden negar ni els podem donar l'esquena però no podem posar la nostra vida -o el nostre/llur aprenentatge- en les seves mans per molts motius:

- no tenen totes les respostes
- fallen moltes vegades -l'ordinador es penja, l'ordinador s'espatlla,
les webs que volem consultar ja no existeixen, etc. etc.
- a vegades per aconseguir algun resultat hem de fer una sèrie de circumvalacions que si ho pensem bé resulten ridícules per un medi que se suposa ha d'estalviar temps.
- Els canvis constants als programes ens sotmet ,cada cop més, a la tirania de la tecnologia.
- A més, us adoneu de la quantitat de temps que passem en fòrums, discussions etc. que ens fan tan depenents de les xafarderies professionals com de les xafarderies de barri a la típica perruqueria?

232. Quan es va plantejar en el meu centre la necessitat de comprar un videoprojector (per portar a la pràctica la "pissarra digital") se ens va denegar, argumentant taxativament

que "les bombetes eren molt cares"...sense comentaris.

alumnes. Al meu centre no em van facilitar la gestió de l'espai/horari de l'aula d'informàtica i de les 3 hores que demanava per fer un crèdit variable (treballavem la webquest Webtour pels Països Catalans, amb els alumnes de 4t d'ESO), solament me'n van facilitar dues. És curiós, solament utilitzaven l'aula d'informàtica els professors de tecnologia! Bé..., va ser un primer any difícil, però quan els alumnes van explicar Que la novetat no ens enterboleixi!!! La novetat sempre té èxit, però... també es converteix en "passat".

Finalment, no puc evitar fer una demanda en aquest sentit i lamentar que el Departament d'Educació no hagi aprofitat, fins al moment, una base de dades sobre literatura juvenil, elaborada per Teresa Verdaguer amb una llicència d'estudis, molt més completa i útil que l'última que us he recomanat; aquesta base de dades s'hauria de facilitar a totes les biblioteques escolars amb PUNTEDU, d'entrada, i ser penjada a Internet de manera operativa per tal que pogués ser consultada pels departaments de Llengua dels IES.

291. Houston, we've got a problem...! Have YOU got a problem ? Well I have... a problem page !!

l'egocentrisme en virtut. És un discurs ja clàssic (des de la TV als anys 70)que les noves tendències tecnològiques ens fan individus més esquerps, més solitaris, més autosuficients. Es podrà argumentar que els joves ara es comuniquen més, escriuen més, xerren més... a través del mòbil, l'ordinador, però és una comunicació cibernètica que pot deixar seqüeles en les manifestacions psicoevolutives, físiques i conductuals de les noves generacions: seria interessant aprofundir en l'estudi del que està passant amb el jovent japonès, per exemple. Tampoc no hem d'oblidar el editorials per la pèrdua d'aquest negoci lucratiu.La realitat que jo conec no estimula impartir classes d'anglès o altres matèries en aules d'informàtica: els espais i el nombre d'ordinadors són sempre insuficients, i la situació dels centres que no imparteixen cicles formatius és de penúria total. Entre l'ensenyament a base de classe magistral + llibre de text i les TIC hi ha etapes intermitges. En aquests moments em sembla una frivolitat apostar inequívocament per l'educació digital quan hi ha tants de dèficits d'alfabetització formal, tant d'analfabetisme funcional... És un pensament propi compartit per altres col·legues (fins i tot especialistes informàtics): sembla que hom vulgui cerar un salt entre l'analfabetisme en el sentit clàssic de la paraula i l'alfabetització audiovisual i tecnològica. Es pot estar d'acord amb en cap i a la fi, la història és cíclica, no?Segons la meva experiència, el que els alumnes aprofiten de les noves tecnologies és la seva immediatesa, però no els ajuda a aprofundir. Aquesta és una habilitat que va en decadència: a la pantalla, els textos no es llegeixen, quan veus molta lletra fas un click i vas a la següent pàgina. Això, un llibre no t'ho permet. T'obliga a endinsar-te en l'argumentació.

públic; de fet crec que el necessito per poder expressar-me. M'he resistit a l'ús de les noves tecnologies a l'aula però he de reconèixer que la forma com jo vaig créixer i aprendre són d'altres temps i a mi encara em queden un anys per haver de posar-me al dia si continuo amb la tasca educativa. Sé que negar-m'hi és nadar contra corrent. Malgrat que seves avantatges. Les Tic no són ni seran la "panacea" ni la salvació de la manca d'atenció "d'aquests nens que no tenen gana"; tampoc crec que tota la feina que fem s'hagi de reduir a l'ús de les TIC. Se'm fa difícil TASCA.Angoixes? només dues: la sensació de què hi ha massa cosa i que no puc arribar a tot i la manca de temps per poder-les utilitzar molt més i molt més adequadament!!!
...
46. Estem molt desorientats. No sabem el que la societat espera dels

docents durant el segle que només hem començat i encara estem molt preocupats pel rol que hem perdut.Jo crec que ens hem de preocupar pels forats que la nova societat està creant, malgrat això no ens agradi massa.un espai d'autoaprenentatge.Tenint tot això, la llàstima és que no tot el professorat del departament de llengües estrangeres en fa ús.
...

14. Accés a l'aula d'informàtica:Jo vaig començar a treballar en projectes fa més de deu anys i haig de dir que al principi era molt difícil pelsd'idiomes accedir a l'aula d'informàtica. Entraven abansles matèries de ciències que nosaltres. I jo ho trobavamolt injust.O sigui que vam decidir recuperar aquells dos ordinadors ordinadors. Per exemple, premis, projectes d'innovació etc. D'aquesta manera avui tenim la nostra pròpia aula d'informàtica. Això si, és una aula d'informàtica molt poc uniforme, hi pots trobar ordinadors nous i d'aquells tant vells, que hi farem!!...però ara ja tenim una tercera aula nova a l'institut i ja no tenim problemes. Per sort peralguns/nes, encara al meu centre no s'anima massa gent a provar amb les TIC.

16. Nosaltres tenim l'aula d'idiomes, on hi ha 7 ordinadors (els més vells del centre) que van treure de l'aula d'informàtica i ens els van endosar a nosaltres, mentre q ells tenen 2 aules noves, una d'acollida amb 7 nous, una altra pels de mates.... en fí, i sort que teníem un pla estratègic sobre les llengües estrangeres i les noves tecnologies i un munt de peles destinades!!!!

17. Nos estamos renovando!!Estamos en pleno cambio de ordenadores en el aula de idiomas (ahora tendremos 8 SOLO para el departamento de lenguas extranjeras) y tambien hay dos aulas de informatica. Hay un horario colgado en la sala de profes para apuntarse, pero no hay mucha disponibilidad.

A mi me resulta complicadillo. Espero ansiosa nuestra nueva aula de idiomas.

18. A l'escola on treballo aquest curs hi ha un horari d'ús de l'aula d'Informàtica. A la meva classe li toca una hora a la setmana i està dintre de l'hora de català. Fora d'aquest horari no s'hi pot anar perquè està ocupada per altres nens.A l'aula ordinària tenim un ordenador vell amb el qual podem accedir a Internet (Xtec)però que té un ús molt limitat. La dotació d'ordinadors a les escoles és insuficient; cal millorar-la.

19. L'accés a les aules d'informàtica és bastant complicat. Hi ha dues aules, una d'ordinadors vells i l'altra de nous, que gairebé estan sempre plenes pels companys de tecnologia i els de matemàtiques. Per anar-hi t'has d'apuntar a una graella que està en l'ordinador del departament de tecnologia (al qual hi accedeixes per xarxa) i només pots apuntar-te en els buits que no ocupen ells (en l'aula més vella, s'entèn). Si és molt
important la tasca que has de fer, pots negociar el canvi d'aula, cosa que no agrada gaire.
La veritat és que el departament de llengües estrangeres no utilitza gairebé mai l'aula d'informàtica; només en ocasions excepcionals, per a un taller, o una activitat específica.

Nosaltres no tenim una aula d'idiomes. Tenim una aula normal a la que li hem afegit un aparell de televisió i un aparell de video-dvd combinat. No tenim ordinadors per a la classe d'idiomes. Sembla ser que anys enrera la dotació per a l'aula d'idiomes va ser traspassada a l'aula d'informàtica. Serà qüestió de reivindicar-ne l'ús per part nostra.A més, hi ha un portàtil i un projector a disposició de tot el professorat que portem a l'aula i que utilitzem puntualment quan tenim alguna presentació powerpoint per ensenyar als alumnes.

20. A bonavista l'acces el tenim una mica difícil, ja que la majoria de les hores estan ocupades pels grups de cicles formatius que necessiten de la informàtica. De totes maneres quan hi ha grups petits ens podem ficar amb un aula ja ocupada on queden ordinadors

lliures i aixóés més soviet

53. Well, I expect more or less the same as you all. I think I feel a little unsure when working with the computer in the classroom and that's why I don't do it very often. I also like this way of posting our tasks in a shared space (I had already used it in a postgraduate course) and I'd love to use it with my students. Anything I learn will be more to be

75. PROBLEMES: Una de les dificultats que tinc és que com que sóc professora de francès , matèria que al centre on treballo només s'ofereix com a Crèdit Variable i SEMPRE comparteix la franja horària amb altres CV d'informàtica, tecnologia, dibuix per ordinador etc.etc. tinc molt poques possibilitats de tenir l'aula ni tan sols una hora fixa a la setmana. M'ho organitzo com puc: demanant a un col•lega l'aula quan crec que la necessito, programant tasques amb Internet quan sé que l'aula està una mica disponible....ai!

6. Buuf! Hi ha gent que fa molta cosa amb les TIC, jo sempre em sento inútil veient quant en sabenAquest curs amb els del 3r especial o amb els va agradar molt. De totes maneres, al meu centre tenim un accés a l´aula d´informàtica relativament limitat, i no tenim aula d´idiomes, per tant fem el que podem.

79. No he tingut opcó de fer cap activitat amb els alumnes aquesta setmana. Ho provaré la que ve. Demà però, en una hora bé, farem una recerca del tresor sobre un llibre de lectura. A veure què surt.

80. Finalment no he tingut gaire temps de ficar-ho en marxa però ho he pogut iniciar en un grup de reforç (5 alumnes), els hi ha agradat força però no ho podiem penjar per qüestions de xarxa i el tallafocs que tenim instalat.La formació en "abstracte" no és res més que una condició per a cobrar els sexennis i, com a molt, pot ajudar a millorar algun aspecte concret, o estimular, o conéixer materials. Conec el llibre del Perrenoud i també estic d'acord que dóna moltes pistes d'un nou perfil de professor/a i coincideix amb una mena de nova filosofia de la nostra funció.El mal de tot és que quan les idees arriben als centres i al comú dels mortals arriben tard o arriben contaminades per una mena de pessimisme o de burocratisme i tot són pegues per posar en pràctica noves maneres de fer.Crec que els qui estem convençuts d'algunes coses les hauríem de posar en pràctica ja i de vegades tirar
pel dret sense fer mal a ningú, és clar.Avui per avui és difícil que tot

125. I must admit that I've just had a look at it, but it seems to be endless when you get to the other sections. The MY-WORLD section is good and varied to make them participate in communication activities

128. To be honest, I had never seen or heard about this kind of web pages, therefore I have never used them.But, I had a look at it and it seems really interesting to me.

COMMUNITY CREATION

154. How can one create a weblog? I haven't got the slightest idea!!! Thanks.

155. Neither do I. Do we have to do one for the next session??????Or are we going to do it in class?(I understood we had to do it at home, but I don't know how!)I remembered later that Mar gave us an adress where we can go to create a blog. I don't have it with me now, but as soon as I get it I'll write it down here.

L'adreça on anar per crear un blog és www.blogger.com/home

I don't know how to create a blog. I think that it's better to do it in class. What do you think?

Crear-ne, no n'he creat cap; i fer-los servir... tampoc. De fet, crec que no hi ha diferència entre un blog i un fòrum. Algú pot il·luminar-me una mica?

I think that creating a shared workspace and using it with students isgreat, as long as one, as a teacher, has got time to update it frequently and to foster real interaction with students.I can't see much difference between blogs and forums. The definition is, obviously different, but when I think about their uses, they become, more or less, the same. Maybe, blogs are too new for me and I miss a good part of their usefulnessI don't really see the difference between weblogs and forums. For me, both things are essentially supposed to be the same.

164. Com ho veieu?

166. Gràcies per "suggerir-me" el terme "wiki", que m'ha permès participar incloent-hi un nou terme al glossari..

167. (ja veus que vaig aprenent i vaig incorporant mica en mica el que m'ensenyes..)

174. Hola Pilar, és evidentíssim el que comentes.El Moodle ens està agradant a tots. Després del BSCW, que era força rudimentari, el trobem fantàstic. Quant a l'Educampus, crec que serveix més per a gestionar activitats que no pas perquè sigui un entorn dinàmic i creatiu.

175. estic d'acord amb tots vosaltres en que aquest entorn es força pràctic de manejar i se'n pot treure molt suc. A mi personalment, i com ja he dit en algun altre lloc, em tranquil.litza molt pensar que tots els materials que ens "cauen al damunt" d'un costat i de l'altre estan "quiets" i "ben edreçadets" en aquest gran "armari" Moodle (no se si és de roure, pi o faig... però te moltes i ben organizades estanteries i les frontises de les portes funcionen bé). I el que és millor de tot és que l'espai no és limitat: hi podrem veure tant exemples d'activitats (per cert, heu vist la del Miguel Angel?? una passada!!)com nosaltres formadors ens proposem de fer i de compartir... Gràcies una vegada més als que gestioneu tot això..., manteniu les estanteries proposades i no n'obriu moltes més.. tinc por de caure en el perill de no trobar la peça que busquem en el moment adequat....

180. Moi, je te comprends.

181. Si, t'entenc. Però crec que aquests dos entorns tenen moltes més possibilitats. Espero que els conservem i els hi poguem treure el màxim profit.

Podemos ir probando incluyendo diferentes tipografías, enlaces, imágenes o lo que queráis utilizando el menú superior. Probar, probar, probar...

ja he entès que quan tingui dubtes les puc formular en el fòrum, i també espero la sessió presencial del dia 20!! gràcies

En fin, Francesc, hoy estoy llena de desazón. El desencanto y la soledad -esos breves y dorados puñales, tan familiares- me llevan al cansancio.

Bea,t'escric aquestes paraules per dir-te que no et desanimis. No has de ser tan pessimista ni t'has de sentir tan sola en aquesta lluita tan esgotadora per a tu.

204. En continuarem parlant. Endavant i coratge!poden plantejar. L' important és estar motivat i no desanimar-te. A mi em fa molta il.lusió el fet d'estar amb els meus alumnes en un espai alternatiu on ensenyar-los que la llengua i la literatura es pot treballar amb un mitjà diferent al de sempre. A més, penso que d'ells també puc aprendre molt. Davant de tot això, val la pena esgotar-se en aquest intent, de vegades tan feixuc, de fer un altre tipus de classe.

210. Em sento completament identificada amb el que dius, Assumpta. Jo també he descobert recentment l'ús de les TIC a l'aula i, malgrat els problemes que sempre ens podem trobar i que ja s'han comentat en aquest fòrum, l'experiència ha estat del tot positiva. És un camí nou, que ...

216. Entenc i participo de les percepcions i, sovint interrogants que l'ús de les TIC desperten en molts dels professionals de l'ensenyament. - Parlem de la realitat i les TIC i n'opinem, per suposat, des de la perspectiva del seu ús a l' aula. Tanmateix, des que s'ha encetat aquest debat que ha enganxat tant, jo, des de casa meva i durant aquests dos darrers caps de setmana, mentre cuinava o feinejava per la casa, sovint he pensat que hi ha una altra realitat i les TIC: la nostra. Una realitat que ens permet de comunicar-nos des de la distància i de conèixer-nos una mica més. Sé que en aquesta formació hi ha gent força interessant amb qui quasibé no es pot parlar, per imperatius temporals, durant el desenvolupament de les sessions. Per això tenim molta sort de gaudir d'aquest espai virtual per parlar, per opinar, per animar, per contradir, per aprendre uns dels altres... I això em sembla FANTÀSTIC!!!

233. Pilar, comparteixo la teva experiència. Crec que qui més qui menys ha tingut dificultats a l'hora d'inciar-se en l'ús de l'ordinador amb els alumnes. Al meu centre no em van facilitar la gestió de l'espai/horari de útils per a l'objectiu didàctic que hem esmentat més amunt. En aquest sentit em semblen molt pràctiques les recomanacions que hem anat fent en un dels exercicis. Ara, però, ens tornem a trobar al davant de tantes ecomanacions que poden ser aclaparadores. Bé, potser caldrà anar "paint-les" a poc a poc.

ningú el tema encetat. En realitat des del dia 6 d'octubre fins avui, 2 de novembre, he observat que el nostre grup ha anat evolucionant en positiu en el sentit que cada vegada hi ha més participació i obertura però encara ens queda molt camí. Amb la intervenció del Jordi se m'obre un altre interrogant: el currículum ocult com a tema de discussió: no

254. Us recomano una cacera del tresor molt interessant sobrela diversitat lingüística, adreçada a segon cicle de l'ESO. Es diu Babel, ...

Us recomano aquests materials d'un curs TIC. Són interessantíssims!!!!passejat per tot el material que hi ha dins la xtec. He descobert que és ple d´activitats de tot tipus i moltes són sobre llengües estrangeres, només cal anar al mapa que hi ha dalt de tot! Potser algú més tampoc s´hi ha entretingut mai? Val la pena!

257. De totes les activitats que he pogut mirar, us recomano una Webquest Ja em direu què us sembla.

261. Gràcies. M'anirà molt bé per la meva pràctica docent.

262. Per fer debats m'ha anat bé aquesta adreça.

263. Us recomano una web molt "didàctica" per l'aula d'anglès o francès. Canviant de tema vull dir que trobo aquest nou debat superencertat, útil, actual, pràctic, dinàmic i productiu, tant per la nostra pràctica diària de teachers (reflexiva o no) com de formadors, i penso que s'hauria de repetir amb els professors que assiteixin al curs.gràcies, Imma. És molt interesant (i pràctica).

270. No em puc estar de fer dues recomanacions alhora, dues eines per seleccionar lectures per a l'ESO:

271. Contestant a la Tresina Miralles volia dir-vos a tots que la BBC

275. It is fantastic to see how much material we have at our fingertips.All your suggestions will be made good use of, I promise you

279. Gràcies, Yolanda. És una troballa molt interessant i útil.

295. Per als que treballeu l'optativa de literatura catalana us pot ajudar la web dedicada a Narcís Oller:

300. La veritat és que tots les webs que heu recomanat són molt bones.Gràcies a tot i totes. La única que puc afegir a hores d'ara (n'heu dit tantes!!!) és la de l'APAC que també està força bé www.apac.es

294. Després de llegir amb molt interès les vostres intervencions, voldria compartir amb vosaltres algunes idees.

296. Lo comparto totalmente. Pienso que toda esta discusión (entendida como un intercambio de opiniones variadas) es propia del tiempo de cambios en el que estamos inmersos. Necesitamos tiempo para ver hacia

56. M'agafo a això de "l'activitat facileta" (gràcies Mar). Als meus alumnes els ha encantat una pàgina de postals: http://www.postcards.org/postcards/
...
66. Lesley, jo vaig treballar un dia amb aquesta web dels "ninots HABBO" però després vaig perdre l'adreça, podries penjar-la, si-us-plau. Als nanos els va agradar molt, tot i que costava que no se'n anèssin a d'altres llocs de la mateixa pàgina!

67. Tens la pàgina americana www.habbohotel.com i ara he vist que també hi ha una pàgina britànica www.habbohotel.co.uk

91. Hola. Gràcies per la graella. He estat jugant una mica amb alguns dels recursos i he

trobat el de   http://esl.fis.edu/grammar/index.htm molt interessant per practicar amb 1 eso i NEE. Demà ho probaré.Per mi una de les línies d'actuació pedagògica que hauríem d'impulsar dins les aules i als departaments és el treball compartit.Crec que hauríem de superar l'individualisme que impregna el nostre treball sobretot a secundària i que projectem en el treball a l'aula amb els alumnes.Ens hem de convèncer que el saber l'hem de compartir i ens hem de treure de sobre molts complexos i pors.

. En el terreny de les formes: la introducció dels nous instruments informàtics, per exemple. Anant més al fons: el fet de sortir de l'aïllament tan comú a tots i totes nosaltres, el treball en equip i compartit que cada vegada pren més volada, primer vàrem parlar dels equips de nivell, van estar un primer pas, després vàrem parlar de compartir aula.... ara parlem de globalitzar coneixement, d'àrees globalitzades, ara ja diem que si volem aconseguir la competència lingüística del nostre alumnat, hem de compartir aquesta responsabilitat amb la resta del professorat: cal que la llengua i les àrees comunes

Chapter 7

Conclusions

VII. CONCLUSIONS

VII.I. Some previous considerations.

Technology has backed up in many different ways the teaching and learning of foreign languages. The technological and pedagogical advances that have been taking place in the Society of Information first, and the Society of Knowledge later, have reshaped in a progressive and constant way the current panorama in which research in English Language Teaching is confined. Many authors have underlined important changes in the   methodological approaches of teaching foreign languages in Europe during the last twenty years, basically due to the integration of ICT into teaching and learning processes and as a consequence of the changes and advances in teaching and learning theories.

The assertion of the importance of the integration of ICT in the renewal of traditional teaching and learning systems, the use of WBT as an innovative method of distributing knowledge and instruction via web together with the use of telematic tools and resources based upon collaboration and co-operation for training teachers of English as a foreign language in the Catalan educational system (Secondary and Primary Education) constituted the departing point of this project. The need to include Primary Education teachers revealed important due to the interest that this collective has shown in the acquisition of both pedagogical and technical skill regarding the use of ICT in teaching and learning practices, and the direct implementations that teachers make of the training received in the classroom. The fact of transferring the ICT training received to the teaching action provides, in our opinion, one of the basic goals that any instructional action has to accomplish.

The possibilities and applications of ICT-based tools and resources are widespread: ICT offer the possibility to access native speakers of the language and their culture, multimedia resources enable teachers to use a variety of audio-visual materials in the target language, providing the richness and multidisciplinarity of the language of the Internet. As it was mentioned previously, in the case of the

273

utility of ICT in modern foreign languages teaching and learning processes, there is the need of long-term academic studies in order to account for a clear picture of which are the uses and benefits of using ICT in the teaching and learning of languages. Existing studies usually tend to reflect case studies or shorter experiences carried out and developed under very limited and restricted situations.

The present research, as it has been previously stated has provided us with really valuable and reliable information and knowledge about the real training situation in which Catalan English as a foreign language teachers find themselves. Due to the reach and scope of the research, which was carried out partly with teachers belonging to the whole part of the territory, the reliability and the obtention of significant results all along the study have helped us to approximate to reality and the real situations of the afore mentioned teachers. The lack of similar studies carried out in this field contributes to the fact that this research reveals and brings with relevant and useful data which educational administrations can use and examine when considering training actions for the future.

Otherwise, the high level of response by teachers and the information gathered out of the analysis of both qualitative (forums) and quantitative data (questionnaires) provides this study with reliable and authentic material out of which conclusions can be drawn. The geographical origin of the interviewed teachers for this research helps us to determine the objectivity of the study, in which the whole of the Catalan territory, and therefore, its teachers, is represented.

Considering the present training offer addressed to teachers of English as a foreign language belonging to both Primary and Seconsary School Education, we would like to point out that sometimes, the training offer exceeds the teachers expectatives and that in many instances there is a very low participation of teachers in training programs. Otherwise, teachers manifest that they do not find courses which suit their needs, considering this great paradox, there appears the need to find

274

alternative solutions together with adequate and specific programs, whose contents really provide effective response to the teacher's needs. The necessity to take the teachers training needs into consideration is urgent and it has to be done prior to the design and creation and implementation of teacher training programs.

The necessity of including the needs of the different educational centers with their particularities and the necessities of teachers working there constitutes another consideration that we would like to suggest. In this sense, several authors have tried to the training of the teaching staff as ICT users: Cabero and others (1994, 1996); Villar (1997); Camacho (1995); Gallego and Alonso (1995; 1997); Romero (2000) among others. All of them coincide in the urgent need to develop formative actions regarding the teaching staff as a necessary condition to facilitate the generalization of the use of ICT in schools. They also suggest that the training plans have to combine the technological knowledge of the means with a didactic knowledge for their use, such as the creation and organization of activities, interaction of the means in the teaching and learning process, the evaluation of students and their learning process...

It is also indispensable and almost urgent that the educational administrations propitiate the means and necessary resources to start off solid training actions to both train, but also update teachers in the didactic use of ICT. In accordance to Cabero and others (2003) we would like to state that the integration of ICT can not be analyzed as if they were a resource more; contrarily to this, the integration of these new means makes necessary that from the area of teacher training the conception of the teacher and his or her new social profile is faced. At the same time there emerges the need to deeply think on the acquisition on the teacher's part of a literacy on the use of the media so as to achieve a good integration of these tools into the educational context.

The task of providing the teaching staff with this training requires clear strategies and at the same time flexiblility which will allow to develop on the one hand the contents related to technology and to the handling of these means, and on the

other the methodological aspects and concrete proposals for an integrated didactic utilization in the different stages and areas of the knowledge. Finally, the process would end up with the introduction of these tools and resources within the programs, understanding them as didactic means for the achievement of established educational goals. For this reason the teaching staff needs to be also prepared to evaluate the different materials and select them in order to adapt them into their context and to the determined goals to achieve; if it is the case, teachers can also create new material.

The formative lagoon that teachers evidence regarding didactic and pedagogical training related to the subject area they teach is something that worries competent educational authorities. On the other hand, it has to be considered that the teaching staff has a long professional life, in the course of which many changes can take place, especially when talking about changes related to technology. The Society of Knowledge is evolving constantly and this fact evidences the need to create and maintain life-long training processes which are absolutely necessary to keep teachers prepared and eager to face the harnesses of change. This type of life-long learning will ensure the teacher the possibility to incorporate to his/her teaching process that professional knowledge which is continuously being generated.

Currently in Catalonia training is carried out primarily from the Educational Administration, which is using, as it has been stated previously, several modalities: short courses, conference, in-center training, workshops... However, the deployment of teachers to use and attend training courses which do not suit their needs is made recurrent. The training addressed to English as a foreign language teachers provides no specific training for this collective, instead, it is part of a generic plan of the in-service training programs of the teaching staff.

VII.II. General Conclusions of the research.

In order to conclude we will try to proceed to synthesize from a general viewpoint the results obtained, taking into consideration the relevant aspects of the research. In order to begin we will draw several conclusions that will have to do

with the different instruments used along this research for data collection. The results provided by both the quantitative and qualitative analysis of the data obtained will be exposed especially regarding those aspects which are related to ICT competences for English Language Teachers and the training needs they demand before taking part in the training courses. The reports by teachers have helped us to configurate a more exact and detailed perception of the factors that can help them implement successfully ICT into their teaching practices, but also of the barriers that prevent them from using ICT in a normal way. All this information, together with the experience acquired after having implemented different instructional tools, virtual environments and course materials and having tested them has encouraged us to continue investigating and to propose a definite action Plan proposal.

Of a total number of 71 teachers who answered the questionnaire and 102 teachers who, at some time, participated in one of the courses aimed at training English as a foreign language teachers in the use of ICT and posted their comments in the forums the following conclusions can be drawn. It has to be reminded that the questionnaire was passed on to the teachers prior to receiving any specific training, whereas the interventions and posts in the forums were obtained prior, during and after the courses were finished. This means that the data obtained have to be considered taking into account these facts. The interventions of the forums reflect a radical **shift** especially regarding the attitudes of teachers towards the acquisition of training and the posterior use of technology into teaching and learning practices.

The following conclusions, as it has been said before, include the results obtained after the analysis of both quantitative and qualitative data.

As far as the personal identification data of the teachers who answered the questionnaires are concerned, it is relevant to point out in order to depict an accurate **teacher's profile**, that the average teacher participating in the investigation is that of 36 to 45 years, middle-aged, with certain teaching

experience and showing their eagerness towards training. It should also be mentioned that 65% of the teachers were women. 83,1% of the teachers were Secondary school teachers. It also has to be said that the training programs of the Department of Education were only addressed to Secondary school teachers, and that the rest of the courses out of which relevant information was gathered were not specifically meant to Primary school teachers, but Secondary. The average teaching experience of these teachers ranges from 7 to 12 years and, as it has been already stated, with a diverse geographical origin which covers the whole of the Catalan territory. Regarding age, the primary education teachers age osciles between 25 and-45 and are younger than the Secondary Education ones, whose average age stands between 36-to 55 years old.

VII.II.i. Methodological aspects. Barriers for a successful integration of ICT.

The technical conditions to which teachers are exposed in terms of connectivity and **access to technological resources** are presented as satisfactory–according to the data obtained from the questionnaire. Regarding connectivity, almost the totality of teachers do have good connections from both home and schools, although this information contrasts with the qualitative data from the forums. Then, teachers –when asked about the different barriers that prevent them from a good and satisfactory use of ICT in their teaching procedures- affirm that the lack of adequate equipment and the difficulties of accessing the different technological resources condition the good implementation of technology in their classes.

As it has been previously stated, English as a foreign language teachers have scarce and **very limited knowledge** of the numberless possibilities that ICT can offer to them in order to provide good instances to implement satisfactorily technological tools and resources. When asked to consider the factors that can determine that English as a foreign language teachers do not use ICT tools and resources in their teaching and learning practices, they attribute their reasons to:

1.- the lack of both pedagogical and technical skill to implement the tools satisfactorily.

2.- the lack of specialized training courses addressed to their collective, that is English as a foreign language teachers.

3.- the insufficient equipments to which they have access.

4.- difficulties to access resources.

5.- difficulties in the teaching centers regarding access to computer rooms, lack of technical support…

In this sense, the results obtained after the qualitative data have been analised show complete and total coincidence with these statements. Among the barriers which impede teachers fro a successful integration of technology into their classes, they mention the lack of specific training addressed to them and the bad conditions they have to face in relation to equipments and infrastructures as two of the most relevant causes.

Regarding methodological patterns such as the teacher's role, the pluralisation of learning spaces and the emergence of new training modalities, teachers see the need to change educational patterns in order to succeed with the implementation of technology into teaching and learning practices, however the initial attitudes towards technology were of fear and reluctance in general. The difficulties related to the inclusion of ICT into teaching and learning procedures are set in the reluctance that many teachers manifest and their fear regarding change and the questioning of old and traditional teaching practices.

To conclude, the need of an **integrated curriculum is** also claimed by teachers, since it allows to learn the procedures of what to do and think in order to have access to a life-long type of learning and thus experience the formative and educational component of ICT as a basic tool to treat information and access knowledge. This, of course, requires that teachers have competence in the use of collaborative tools and skill to cope with the emergence of different and new teaching and learning scenarios. The change of mentality on the teacher's part is

also crucial at the time that teaching and learning methodologies need to be revisited. The role that the media will play in the processes will have to be reviewed, and the same will happen with the revision and evaluation of both the initial and the in-service teacher training plans.

VII.II.ii. Valoration of previous ICT training

Another important factor related to the acquisition of training regarding the use of ICT-based tools and resources, teachers see the need of using **ICT as a tool to support teaching and learning practices** rather as a central tool within the teaching and learning process. The use of ICT to search for information and to develop other utilities remain valued in very similar percentages. With respect to the teacher's appraisal of ICT results show evidence that the highest rated tasks to be developed with ICT in the English as a foreign language classroom are their usage as tool to work, to search for information again and their trait to manage administrative tasks. As teachers started receiving training it can be seen in the forum posts and results that these traits are completely forgotten about in the sense that teachers soon see the other enormous potentialities that ICT can offer to them, and therefore, they manifest their change of mind and attitude.

When asked about the **previous ICT training** they had received – if that was the case- teachers rated it as being good in a 40.8%, whereas the 49,3% stated that they considered that the ICT training they had received was "not bad". It is needless to say that these answers did not coincide with the general tone of the first survey which asked teachers about their knowledge of the different tools and resources. Teachers declare their lack of training and that they do not know many of the tools they are being asked about, and then rate their previous ICT training as being quite good (90.1%). During the time they had to answer to the different questions, it was frequent to see that they asked the trainer about the particularities and meaning of the tools and resources they were being asked about.

Teachers recognized having limitations, both methodological and technical, but after they overcame them, started demanding homogeneous criteria regarding the delivery of teaching under ICT-based settings, the involvement of institutions and the teaching centers authorities and the inclusion of certain regulation standards in the curriculum of the area.

VII.II.iii. Mastery and Competence in the usage of ICT in the English as a foreign language classroom.

Considering the **ICT competencies**, the need to use ICT as a communication tool and its potentiality as educational tool is seen by a 75% of teachers as very relevant to teaching processes, whereas the relevance of ICT as a tool which enhances and promotes collaborative learning is neither evidenced nor accounted for. The perception of teachers regarding the use of ICT as collaborative tool will change as it will be seen in the qualitative information, and from the most outstanding disdain, teachers move onto a good appreciation of the collaborative and communicative potentiality of ICT. Regarding their **mastery and competence in the usage of determined telematic functions** teachers recognize having more skill in the use of e-mail and distribution lists, whereas they evidence the lack of instruction and knowledge in the usage of forums and chats, since in many instances it is a tool which they have never used. Surprisingly, 33% of them state that possess certain competence in the usage of electronic messengery. The use of collaborative tools, in accordance to previous analysis is another of the skills to which teachers agree that do not possess great competence and that they not use it in their teaching and learning practices. Finally, teachers manifest having good competence in the use of word processors and in the use of e-mail and for the search of information.

Self-training and the use of ICT in order to acquire skill in the usage of telematic tools constitute two of the functions which interestingly teachers scarcely make use of. They know about the different technological tools to access training although they do not manifest having any competence at all. The development of administrative tasks seems to be a competence that teachers possess, whereas

they lack competence to develop personal management tasks, such as the use of schedulers, organizers...). Regarding the usage of ICT to carry out different telematic tools that teachers do carry out, it is perceived that they use computers to chat and communicate, to work and carry out activities related to the jobs although they signifficantly they do not use these tools to participate in collaborative projects or to self-train.

VII.II.iv. ICT in English Language Teaching

When asked about the usage of **ICT in ELT**, it was seen that the different usage that teachers made of ICT was really scarce and low, as the most relevant aspect to be highlighted. According to the different categories about which they were asked, teachers state that they use e-mail, collaborative environments and electronic messengery in order to develop communicative activities. It is surprising to see that teachers had previously manifested having scarce competence on the use of collaborative environments, but it is true that English Language teachers are frequently involved in the creation and development of projects in which they have to be in constant contact and work collaboratively with other teachers and partners from other countries (ORATOR, COMENIUS...). Several teachers participating in the research had some experience on the use of these tools for this reason. Regarding the use of the telematic resources in the English as a foreign language classroom, teachers had certain knowledge on their existence and in fact they made frequent use of the different reference tools such as the on-line dictionaries, encyclopedias, Virtual resource centers, educational portals, cyberlistening labs... Although they made use of the different resources, their knowledge was not really wide and they mostly used those available from the educational portal of the Department of Education, which gathers and integrates many resources altogether.

Finally, regarding the usage of the different e- activities, teachers manifest having really no sense or previous knowledge of most of them, as they were introduced. Thus, activities which have usually a component of very direct introduction in

class, that is, those activities which are ready to be exploited in class and already prepared for teachers, were the activities they did not anything about: e- lessons, webworksheets, self-study quizzes provide the unique activities that teachers had previous knowledge of. Nevertheless, the existence of many other activities set in the Net which can be directed exploited in class such as the reading and comprehension worksheets, treasure hunts, Scrapbooks, Hotlists, proofreading exercises, newspapers and magazines reading materials, fairy tales and short stories, songs and poems, audio Tests, vocabulary sheets, action mazes, brainbuilders, crosswords, puzzles, flashcards, story box, chants and songs, tongue twisters, fingerplays & action rhymes, educational cartoons ... constituted a number of activities which they had never heard of before taking part in the training courses.

Finally, it can be concluded that the usage of ICT in ELT by English language teachers becomes mainly reduced to three aspects:

Usage of ICT in ELT	Percentage
to answer to communicative purposes	76%
to participate in telematic or collaborative projects	16%
to create electronic material	8%

VII.II.v. Training needs. Feedback after training

Considering the different **specific training needs**, teachers demand training basically on the use of collaborative environments and the use of blogs, mainly, always bearing in mind that the training was conceived from the pedagogical rather than from the technical viewpoint. The resources varied and primarily teachers demanded training on the use of cyberlistening labs, on-line writing labs, virtual resource centers and the exploitation of different mass media in order to enhance the communicative skill of students. Regarding e-activities teachers

manifest their intention to receive training on the use of webquests, self-study quizzes and webworksheets. Most of them also demanded training regarding the creation of electronic material.

The perception and training demands of teachers who had answered to the questionnaire, soon started to change when they started acquiring some training. The initial demands and conceptions that ICT were meant to be used mainly for communicative purposes transformed and were gradually changing. Little by little, as teachers were becoming more used to the tools and resources they were being trained on, started becoming more secure, more demanding and inquisitive regarding the use that could be retrieved in their classes with their own students.

With the training materials happened the same. At the beginning teachers felt unsecure and feared the materials, since they did not know anything about them, but gradually –and as they started being acquainted of the use and educational potentialities of the different tools and resources they started using them in their classes and became more critical and demanding.

Training is seen as key in order to overcome obstacles and make special emphasis on the acquisition of pedagogical skill by teachers, at the time that they demand from institutions specific training addressed to English as a foreign language teachers. The perspective of teaching the subject area from the perspective of technology is debated and carefully dealt with. The need of an integrated curriculum is acquainted for, the same as the necessity of reconsidering the specific demands of each educational center asking for autonomy when demanding training actions.

As teachers received training they became experts and started being critical towards the training materials and the materials they shared with other colleagues during the training process. Evaluation guidelines were submitted to them and at the same time teachers stated their demands on new training items. The shift in attitude towards the use of technology in English language teaching procedures

was maybe one of the most radical and overwhelming of the whole process. Teachers with really no knowledge nor skill on the use of ICT started acquiring ability (both pedagogical and technical) and in the end became experts on the use of the tools. Most of them demanded further training after the course was finished.

Teachers recognized their lack of knowledge and skill regarding the use of ICT into their specific subject area, in this case, English as a foreign language teachers. They explicitly demand pedagogical training rather than technical training. The need to face ICT training under the perspective of the subject area is made evident and necessary. Obviously, it has to constitute, according to our opinion, an important departing point when considering the design of future training initiatives. Regarding the training modality used, teachers valued the blended approach since it helps them optimize time and resources and highly appraise being instructed in the use of collaborative environments. After receiving instruction teachers get accustomed to its use rapidly and efficiently. Above all, teachers were thankful for the delivery of training based upon very specific items of immediate application into teaching practices.

VII.II.vi. Usage of the on-line environment. The creation of a virtual learning community.

Regarding the usage of the different virtual environments all throughout this research, the potentialities offered by Moodle undoubtedly make it more suitable and offer more possibilities than BSCW did. However, during the time that this environment was used it proved really helpful in order to provide mechanisms which favoured collaboration and communication among the course participants. The fact that teachers could share their experiences with their mates by means of the forums of discussion, encouraged them to put into practice in their classes the tools and resources they had received training about and then reflected their experiences again in the forums, participating in them and posting the perceptions they had towards the tool they had tried. Thus, the transfer of knowledge from the

teachers participants in the training courses moved to classroom and definitely these teachers changed their habits and roles by means of the implementation of the different ICT-based tools and resources.

Another relevant feature regarding the use of the different environments throughout this research process helped the groups of teachers to come together and allowed later on the same groups members to continue with the contact and communication. The environments also served to maintain the community of teachers organized and tools such as the group scheduler, the bulletin board, the debates and the forums helped them to expose their ideas, to share knowledge and learn from others, altogether at the time that they were using technological tools and "learning by doing".

The numberless communication tools (wikis, forum, chat, electronic messengery, internal mail …) together with the resources that can be created and generated by the course participants, the possibilities of integrating multimedia and interactive resources and the multi-faceted possibilities of activity-creation … make of it a really useful tool to support a process of virtual teacher training. All these resources and possibilities give way to the creation and maintenance of a virtual community of practice, which, according to our opinion constitute the basis upon which teacher training processes in virtual environments are to be set. The generation of a virtual community of language teachers was, in part, made possible due to the excellence of the training environment. Once the courses have finished teachers still use the environment in order to communicate and share experiences, recommend new tools and resources they have tried or account for a good lecture, altogether in a process of constant revision of learnt contents which inevitably enlarges their training and generates new fluxes of knowledge.

Collaboration emerges as essential and key in order to ensure the creation of a virtual community of practice, which is trained at the time that generates new knowledge fluxes. Exchange of teaching experiences, interests and personal feelings accounted for the success of the community and teachers felt confident

and backed up by the rest of the community. The sense of loneliness was soon overcome and gave way to the sense of community and group. Teachers got soon engaged in the virtual community and shared experience and knowledge with other partners, at the time that they took benefit from the knowledge fluxes that are continuously generated. The sense of belonging to the community helps teachers feeling more comfortable and reliable towards the use of ICT into their teaching practices. After training, teachers continue using the training environments as training agents. The exchange and constant renewal of contents favours and sets the basis for new models of lifelong training processes. Other communities emerge and interrelate with existing ones.

It is important to reinforce both **initial teacher training** regarding the acquisition of certain ICT skill and competencies on the teachers part and to promote mechanisms and strategies that ensure processes of continuous **lifelong learning**, processes of quality which can ensure quality standards and the delivery of updated training contents, which can contribute to the development of teachers, especially in ICT-based settings and on those skills, tools and resources which have to do with the integration of ICT into teaching and learning procedures. Within this context, the creation of virtual communities becomes extremely relevant and helps to reshape a new vision of life-long training processes, which continuously generate and exchange knowledge.

VII.III. Guidelines for the design and implementation of a training action plan addressed to English as a foreign language teachers.

As it has previously been stated in this thesis, the situation of the English as a foreign language teachers regarding the integration of ICT into their teaching and learning contents is – despite all the efforts carried out by educational institutions – still far from being satisfactory.

This research has shown that prior to taking part in the courses teachers recognize their lack of knowledge regarding the use and implementation of ICT-based tools

and resources, especially in the sense that there are not enough courses which are specifically addressed to them as a collective, whereas the courses that already exist do not contemplate in many cases the pedagogic implications of using ICT-based tools and resources into their classrooms.

This situation leads us to think deeply on the necessary transformation of the training models which have to evolve to other models which contemplate the creation, spreading and implementation of pedagogical knowledge.

In this sense, the role of competent institutions as providers of innovating and effective proposals is to be key when considering those practices which excel attending to the quality and effectiveness criteria and at taking into account the training needs as they are directly by teachers. The following guidelines could be of help to institutions as far as decision taking regarding future proposals of teacher training in the use of ICT and the detected training needs by the collective of English as a foreign language teachers. Our proposal takes into consideration to main axes:

> a.- Initial teacher training: concerning the main guidelines on the aspects related to the initial teacher training regarding the use of ICT.
> b. In-service training and continuing education programs. Proposals for a training model which takes into consideration the educational potentialities of ICT and covers at the same time, the training needs of teachers in respect to this field.

VII.III.i. Orientations for the improvement of Initial and in-service teacher training regarding the integration of ICT.

Regarding initial teacher training and the integration of ICT content in the initial training processes that teachers have to undergo throughout their professional career, it has to be said that initial training plans which contemplate the introduction of methodology so as to integrate successfully technology into

288

teaching and learning processes, account for an increasement of quality of the training delivered and at the same time, convert their systems into a more compromised and efficient ones, helping teachers in the development of their skills of leadership, change and innovation. Universities and competent institutions are in charge of generating strategies which facilitate the integration of ICT into initial teacher training processes introducing into the curriculum subjects which can help these teachers to understand and develop didactic and methodological mechanisms for a pedagogical use of ICT into these subjects. The transversality of ICT has to be present into all core curricular areas of knowledge and institutional projects which encourage collaboration with the use of ICT-based tools and resources accounting for change in traditional paradigms and have to be promoted.

New teaching and learning spaces have to be created so as to give way to initial training process in which the pedagogical use of ICT is ensured. Otherwise, training modalities, such as on-line training and blended approaches have to be included and implemented in initial training processes, at the time that future-to-be teachers have to receive instruction in the acquisition of skill to work collaboratively, to participate in virtual learning communities and to make use of new strategies of work, such as group work. The design and development of enironments which support the initial training process of teachers would also help to generate resources to back up the use of quality resources in teaching practices. The existence of spaces of reference for cooperative practices among teachers and trainers, or teachers and students has also to be borne in mind, at the time that the whole of the training process would experiment an important improvement.

Educational institutions by means of the capacitation of teachers in the acquisition of ICT competencies have to reach quality training processes, in which there is continuous and constant revision of contents, in a type of training which will take place life-long. The capacitation of teachers as active training agents for the exchange, design and articulation of new actions and training processes would

become key to ensure the institutions the acquisition of leading roles in the management of knowledge within their training actions.

Regarding the second group, in-service training and continuing education programs, we would like to mention the proposals for a training model which takes into consideration the educational potentialilties of ICT and covers, at the same time, the training needs of teachers in respect to this field. Taking as departing point the training needs detected from our research and the evolution that English as a foreign language teachers have undergone after participating in the training courses, specifically conceived and designed for them, the results of this proposal with all its limitations, has intended to take into consideration the experiences and the opinions left by the teachers which have participated at any time in any of the training courses. The detection of determined needs has been done taking as departing point these opinions, at the time that we consider the teacher's direct participation in the design and development of any formative action especificaly addressed to them.

The Catalan educational administration has to deepen into the situation in which non-university teacher training is presently circumscribed, especially regarding the introduction of ICT into the diverse areas of the curriculum. Out of this analysis, there could be established projects of development and implementation of ICT into Primary and Secondary education centers, which would contemplate the process of training teachers in the acquisition of ICT for their use into their teaching practices.

Thus, after having reached the previous conclusions and taken into consideration the results obtained after the analysis of the data we believe that the proposal of a Training Action Plan specifically addressed to English as a foreign language teachers constitutes, according to our opinion, the main contribution of this thesis.

The possibility of having worked during the last year and a half in the Department of Education and the privilege of addressing to such a group of qualified teachers

and trainers who have provided a very high degree of quality, experiences and above all, who have shared their knowledge with the rest, together with the experience of six years as teacher trainer constitute a platform from which new horizons can be explored and deepened into.

Our proposal would be carried out according to the following streamlines:

a.- Setting up the main streamlines of the Action Plan as linked to the establishment of different **actions to be developed regarding teacher training and the access to technological equipment and resources**.

b.- Establishing some recommendations regarding **teacher training in terms of the professional development of teachers** and the inclusion of life-long training processes.

c. - Developing the basis of an specific **Action Plan addressed to English as a foreign language teachers** in order to capacitate them in the use of ICT tools and resources into their teaching practices.

VII.III.i.i. Actions to be developed regarding teacher training and the teacher's access to technological equipments ad resources.

The distribution of equipments and training materials in the educational centers should be done attending to the specificity of each center, the training demands and needs of the teachers working there and also taking to account the importance that the center attributes to ICT considering teaching and learning. Thus, periodic evaluation of the use and implementation of technological resources and tools would be carried out on the administration and educational authorities, attaining this way, a high degree of response and participation.

The need to change the traditional concept of both computer rooms and regular classrooms is another of the objectives to be attained, technology has to be present within the classrooms and all possible tools should have to be integrated in them. Multimedia resources (AV equipment such as PCs, Projector, and Internet …)

have to be at hand of teachers and students within the classroom and must appear as natural as books and reference do. In this sense, problems related to the access to traditional computer rooms and schedule and calendar limitations would be easily overcome, and an important step towards the normalization of the use of technology within teaching practices would be achieved.

Time and space flexibilization is one of the most significant traits to which the integration of technology into teaching and learning practices contributes. Therefore it is important to consider and revisit new systems and mechanisms to take benefit from the new possibilities that this flexibilization provides to the educational world.

VII.III.i.ii. Teacher Training in terms of the professional development of teachers.

Teacher training plans have to be addressed to teachers in order to motivate them and promote an effective usage of the training received. Thus according to authors such as Santandreu (2004), aspects such as the flexibilization of time and the acquisition of training during the working time, the contemplation of the hours that teachers require to prepare their classes attending to important methodological changes brought by technology… The time needed to create, organize or arrange electronic materials and the introduction in a more frequent and accessible way of different training modalities (on-line, blended, monographic workshops, on-site training in centers, training capsules…) would, according to our opinion, facilitate to teachers the access and the achievement of certain training competences, which, at present time, still is far to be accomplished.

The incentivation of research-action projects and the integration of both Primary and Secondary school teachers into research groups at Universities taking as departing point their training and professional needs could provide important advances, which could revert in the improvement of the teaching practice of those teachers. In this sense, institutions such as the ICEs (Institutes of Sciences of

Education) which depend both of Universities but also on the Department of Education are encouraging these new models and promoting, at the time, major teacher participation. Other methodological models such as the reflective teaching are given prevalence and recent training programs started by the Department of Education in the 2004-2005 academic year are already based upon this methodology.

The creation of a system of professional development addressed to teachers which would priorize and consider the acquisition of determined training contents and competences, such as training in ICT, the same as their active participation into research groups could also be borne in mind. Therefore, those teachers who are deeply concerned with change; renewal and a commitment to the teaching cause would also be rewarded.

VII.III.ii. Design and development of an Action PLan addressed to English as a foreign language teachers. The creation of virtual learning communities as training agents.

The establishment of mechanisms to control the access to and the use that teachers make of the training they have received in their teaching practice would become another point of interest to be taken into consideration. Evaluation of the effectiveness of the training received would give prove of the suitability of the training contents and would decide upon their continuity. We emphasize the obligatoriety of in-service teacher training would have to be tackled by competent institutions in order to reach high-quality results in the teaching practices.

Institutions closely linked to research and development actions, such as Universities, Schools of Education, ICEs and research centers should offer measures for narrow down the relationship with Primary and Secondary school teachers, taking into account the importance of the tasks they carry out with young children and adolescents. If teachers are integrated within multidisciplinar research groups and actions, then the vision of the collective, its needs, its weak points and

293

strengths can be better tackled and therefore changed, if this is the case. Regarding the latest research trends within teaching and learning practices and the use of ICT, these institutions have to ensure the collective of Primary and Secondary school teachers access first, and responsibility then towards decission-taking. The reachment of the new tools and research tendencies into the classroom, the ultimate addressee of the training processes through which teachers undergo, would have to constitute the objective of any training action.

After having set up these considerations, we would like to account for the proposal of a Training Action Plan addressed to English as a foreign language in order to capacitate them in the use of basic ICT-based tools, resources and e-activities which would allow them to successfully integrate technology into their teaching practices. Before attending to the objectives, both general and specific, we would like to develop certain general aspects related to the training process upon which our proposal would circumscribe:

- the training contents would be developed exclusively taking into account the collective of English as a foreign language teachers, regarding and considering in the first place the training needs and lack of knowledge they have demonstrated all throughout the research project. Since the main aim of this proposal is that of capacitating teachers in the use of ICT, the establishment of different levels and the development of concrete training contents for each level, could constitute the basis to carry out further research.

- the use of an open-source virtual training environment, in this case Moodle, due to the possibilities it offers to support virtual or blended training modalities, its effectiveness in the delivery of instructional materials, the user-friendly interface and both usability and interactivity traits it contains... Alltogether, it constitutes a tool of great help to teachers, who are not very acquainted with the use of technological tools. Its contribution to promote communication and interaction by means of its diverse possibilities: wikis, internal mail, forums of discussion, chats, calendars, group and individual organizer...

- the creation and consolidation of a virtual learning community constituted by English as a foreign language teachers, a growing community which is constantly evolving and generating knowledge in continuous processes. The maintenance of the community and its particular and outstanding potentiality as training agent makes of it -in our opinion- the basis upon which XXIst century training is to be built.

As it has been said previously, virtual learning communities constitute a potential training agent within the constantly evolving processes of teaching and learning regarding both the use and deployment of ICT. Virtual Learning communities concern innovating educational sectors and are supported by technological environments. They favour and encourage distance learning, which, of course, is a training modality which contributes to the time and space flexibilization, thus favouring an easier access. Virtual learning communities generate new content and take as departing point – a shared construction of knowledge - which evidently contribues to enhance quality into the professional development of teachers.

We strongly believe in the educational richness and potentialities of virtual learning communities within training processes, therefore, we have developed several guidelines which could be taken into account when trying to design and implementation of a Training Action Plan. Virtual learning communities embody the generation of collective spaces for the exchange and communication among its members, they are basically constituted from scientific, educational and social circles, which encourage change and innovation. They constitute non-hiearchical organizations and continuously engender networks of participants out of which other networks can be born.

When considering the basis for the creation of virtual communities of practice several aspecta have to be taken into account:

- The inclusion of determined training objectives.
- The recreation of social learning processes

- Virtual learning communities have to be designed attending to the professional development of teachers, in this case, of English as a foreign language teachers.

- The training objectives are usually mid or long-term designed the same as the planification of the training process.

Regarding the use of virtual environments which provide support to the existence of virtual learning communities, there are aspects related both to usability and to sociability (Gisbert, 2006) which will have to be accomplished:

Usability	Sociability
Interaction	Policy regarding members
Navigation	Code of conduct
Registration	Security
Representation of users	Privacy
Format of Messages	Author rights
Tools of support	Interventions
	Moderators (forums and debates)

The teacher training plan we propose contemplates the creation of a virtual learning community conformed by English as a foreign language teachers, both belonging to Primary and Secondary Education. In order to account for a proper configuration regarding its creation, we believe that the following requirements need to be accomplished:

- Well-defined training objectives: in this case the afore mentioned objectives so as to capacitate Primary and Secondary School teachers.

- Creation of a deeply-rooted sense of identity which can be achieved by means of tools, such as the creation of a teacher's profile, the participation in audio-video conferencing, the use of instant

messengery or the environment's interal mail, forums, chats… All these tools have to be –if possible- already provided and integrated within the virtual environment.

- A-priori design and definition of objectives. Development of the contents to be delivered.
- Specification of the training contents to be achieved.
- Shared and systematic construction of knowledge.

As it has been previously exposed, The Action Plan would be addressed to English as foreign language teachers with the main aim of capacitating them in the acquisition of technical and pedagogical abilities regarding the inclusion of technology into teaching and learning practices. Prior to the development of the proposal, we have taken into account the training contents, which have been tested and revised in the different versions of the courses given, the teachers' opinions and the feedback received after training.

General Objectives:
- Analyse the educational potentialities of ICT in the teaching of English as a foreign language. - Implement a virtual instructional model dedicated to teachers of English aimed at facilitating tools, resources and strategies to integrate ICT and to encourage collaboration and cooperation among them. - Capacitate teachers in the use of acquisition of skill and competence in the usage of ICT into their teaching practices. - Analyse the effectiveness of the instructional model through its contribution to improve the quality of teaching English through the use of new technologies.
Specific Objectives:
- Use of Web-based and on-site training as specific methodology to train English as a foreign language teachers. - Define and classify those telematic tools and resources useful for the

teaching of English as a foreign language and the inclusion of didactic strategies to contribute to its development.

- Use a dynamic platform with communication tools which facilitates the exchange and collaboration among participants, which contains elements of communication and cooperation to enhance experience and training materials exchanges among teachers.

- Facilitate to teachers an attractive means to familiarise with the implementation of technology into teaching and learning practices, which would enable future research in this context.

- Consolidate the training received and enlarge it by means of a life-long training process sustained by a virtual learning community of teachers of English as a foreign language.

The action plan would consist of one capacitation course addressed to both Secondary and primary school English as a foreign language teachers. It could follow both a blended approach or a complete on-live modality and it would be structured around the delivery of different training modules. The use of an instructional virtual platform such as Moodle would be needed and the whole design and development of this course appears detailed in the following chart:

COURSE STRUCTURE:
LENGTH: 64 HOURS- A WHOLE ACADEMIC YEAR
NUMBER OF TRAINING MODULES: 8
DURATION OF EACH TRAINING MODULE: 8 HOURS approximately. 2 hours per session.
DISTRIBUTION OF TRAINING MODULES: 4 ON-SITE / 4 ON-LINE

COURSE CONTENTS: MODULAR DISTRIBUTION

MODULE 1: ICT IN THE DIGITAL ERA
SESSIÓN # 1: CONTRIBUTION OF ICT IN TEACHING AND LEARNING PROCESSES.
SESSION # 2: TEACHERS IN THE XXIST CENTURY. TEACHER AND STUDENT ROLE CHANGES. ICT BASIC COMPETENCIES FOR ENGLISH LANGUAGE TEACHERS.
SESSION # 3: NEW TRAINING MODALITIES IN TECHNOLOGICAL ENVIRONMENTS. BLENDED LEARNING. VIRTUAL LEARNING ENVIRONMENTS: (EDUCAMPUS), DINAMIC PORTALS (MOODLE, MAMBO).INSTRUCTIONS FOR A GOOD USAGE OF THE TRAINING VIRTUAL ENVIRONMENT.
SESSION # 4: INTRODUCTION TO COLLABORATIVE AND COOPERATIVE LEARNING. VIRTUAL LEARNINING COMMUNITIES.
TOTAL 8 HOURS

MODULE 2: THE WWW AND THE MANAGEMENT OF KNOWLEDGE
SESSION # 1: THE WWW AND THE MANAGEMENT OF KNOWLEDGE. SEARCHERS AND META-SEARCHERS. INQUIRY-BASED ACTIVITIES.
SESSION # 2: WORKSHOP: CREATION OF A TREASURE HUNT
SESSION # 3: THE WWW AND THE REFERENCE TOOLS. ON-LINE TRANSLATORS, DICTIONARIES AND REFERENCE MATERIAL, ON-LINE ENCYCLOPEDIAS ON-LINE, MAGAZINES AND NEWSPAPERS, TVS AND RADIOS, VIRTUAL LIBRARIES
SESSION # 4: WORKSHOP: INTRODUCTION TO WEBQUESTS
TOTAL 8 HOURS

MODULE 3: INTERNET
SESSION # 1: SYNCHRONOUS COMMUNICATION TOOLS: EDUCATIONAL CHATS, ELECTRONIC MESSENGERY, DIDACTIC APLICATIONS FOR LANGUAGE TEACHERS
SESSION # 2: ASSYNCHRONOUS COMMUNICATION TOOLS: E-MAIL, DISCUSSION FORUMS, EDUCATIONAL POTENTIALITIES

SESSION # 3: BLOGS. INCLUSION OF SOUND AND VIDEO. PODCASTS AND VIDEOBLOGS. INTERACTIVITY AND SIMULATION TOOLS. DIDACTIC STRATEGIES.
SESSION # 4: EMERGING TECHNOLOGIES
TOTAL 8 HOURS

MODULE 4: ON-LINE RESOURCES FOR ENGLISH AS A FOREIGN LANGUAGE TEACHERS
SESSION # 1: VIRTUAL RESOURCE CENTERS, EDUCATIONAL PORTALS, LANGUAGE LEARNING CENTRES .
SESSION # 2: ON-LINE GRAMMARS. DIDACTIC EXPLOITATION. SELF-EVALUATION STRATEGIES.
SESSION # 3: WEB PAGES FOR LANGUAGE TEACHERS AND STUDENTS. AUTHORING TOOLS (BASIC LEVEL)
SESSION # 4: WORKSHOPS AND WRITING LABS. CYBERLISTENING LABS. ON-LINE LANGUAGE COURSES. CRITERIA FOR WEB PAGES EVALUATION.
TOTAL 8 HOURS

MODULE 5: CREATION OF ELECTRONIC MATERIAL
SESSION # 1: E-PRESENTATIONS: CREATION OF AN INTEGRATED MULTIMEDIA PRESENTATION
SESSION # 2: CREATION OF ACTIVITIES FOR THE LANGUAGE AREA. HOT POTATOES/QUIA AND OTHER AUTHORING TOOLS
SESSION # 3: ACTIVITY CREATION WORKSHOP
SESSION # 4: MANAGING VIRTUAL CLASSROOMS. WEB GENERATORS
TOTAL 8 HOURS

MODULE 6: INTRODUCTION TO FREE SOFTWARE
SESSION # 1: EDUCATIONAL FREE SOFTWARE: ON-LINE RESOURCES
SESSION # 2: WIKI TECHNOLOGY. WIKIPÈDIA AND OTHER EXAMPLES.
SESSION # 3: WIKI TOOL (MOODLE)
SESSION # 4: MOODLE (ADVANCED LEVEL)
TOTAL 8 HOURS

MODULE 7: THE E-PORTFOLIO
SESSION # 1: THEORETICAL FRAMEWORK: PARTS OF THE E-PORTFOLIO. TYPES.
SESSION # 2: E-PORTFOLIOS FOR TEACHERS AND TRAINERS
SESSION # 3: E-PORTFOLIOS FOR STUDENTS
SESSION # 4: WORKSHOP. CREATION OF A STUDENT E-PORTFOLIO
TOTAL 8 HOURS

MODULE 8: TAXONOMY OF INTERNET-BASED ACTIVITIES FOR ENGLISH LANGUAGE TEACHERS
SESSION # 1: READING ACTIVITIES: WEB-BASED READING EXERCISES, NEWSPAPERS AND MAGAZINE AUTHENTIC MATERIAL. VOCABULARY STRATEGIES: HANGMAN, PUZZLES, WORDSEARCH GAMES, WEBWORKSHEETS
SESSION # 2: WRITING ACTIVITIES: CREATIVE STORYTELLING, CHAIN STORIES, E-POSTCARDS, WEBLOGS …
SESSION # 3: ÀUDIO TESTS, AUDIO AND VIDEOBLOGS, SONGS, PODCASTS … MULTIMEDIA CREATIONS. VOCAL TESTS, GROANERS…
SESSION # 4: OTHER ACTIVITIES: BRAINBUILDERS, CROSSWORDS & PUZZLES, FLASHCARDS, STORY BOX, TONGUE TWISTERS ,FINGERPLAYS & ACTION RHYMES, CULTURAL AND LITERARY WORKSHEETS

<div style="border:1px solid #000; padding:10px;">TOTAL 8 HOURS</div>

The learning model employed in this programme would enhance the development of the ability to collaborate and co-operate among the teacher participants. By means of its recurrent use active learning is promoted and is key to enhance the quality of teacher training standards. During the process of implementation, instruction will be given in order that teachers acquire the necessary skills, competencies and tools to be able to manage at the same time pedagogical requirements. Training appears as vital to ensure the correct acquisition of such pedagogical competencies.The instructional programme is useful to train teachers with instructional needs related to the acquisition of ICT skills, fosters communication and collaboration among them and allows them to reach success in the acceptance and implementation of ICT into their everyday teaching practices. This training program/action plan intends to provide the necessary training and support to teachers but also tries to foster the communication among them. This communication is essential and needed to bring about changes in teacher education Community building and the exploitation of teachers' networks as training agents will become the basis upon which XXIst century quality training is to be built.

VII.IV. Proposal of future research streamlines

After the processes and conclusions of this research have been stated, we would like to establish possible research streamlines which can be derived from our study. Firstly, this study, which ends up with the proposal of creation of an Action PLan addressed to English as a foreign language teachers in order to capacitate them in the use and implementation of ICT into their teaching procedures, could be enlarged and developed into the creation of a new set of training modules which would deepen into the use of ICT but which would be addressed to those teachers who already possess or master the first level of skill and would like to proceed with their training and know about new tools and trends.

The second research line to be followed would be addressed to study in depth the real transfer that the training received into the classrooms on the teacher's part. Therefore, apart from the teachers' opinion, the results would shed light upon the model of training given and its trustfulness in order to carry out new actions. The successfulness in the implementation of the training received into the classroom, then, could give way to similar initiatives in other teacher training programs.

A third streamline to be followed could be devoted to the creation of another specific set of training modules based exclusively on the educational research and innovation, authentic pilars of recent training actions, which would be conceived attending to the latest research trends in educational technology. Technological advances appear often and give way to the so-called emergent technologies: mobile learning, portability, usage of mobile phones and other gadgets (PDAs, ipods), television... which open up this field to unexpected areas of research. It is our duty as teachers to take all these new technologies into account and include them into educational research. The need of teachers to be ready and prepared to face all these changes requires from educational competent authorities, responsible for fostering quality training, the effort to ensure its inclusion within their training offer. XXIst century citizens, our students now, will probably thank us for it.

To conclude, we would only like to say that the consolidation of virtual learning communitities as powerful training agents, the emergence of teachers networks to enlarge further training and knowledge generation, will constitute the basis of the training processes of the future. Teachers need to be ready and prepared to face such a challenge.

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334

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Appendix

Appendix 1: Guide for the useful exploitation of telematic tools and resources for the English as a foreign language teachers. HTML Document

Appendix 2: First version of the survey-based questionnaire PDF Document
Final version of the survey-based questionnaire PDF Document

Appendix 3: Quantitative Data Graphics

Appendix 4: Pilot test. Reliability and Validity of the questionnaire. PDF Document

Appendix 5: Qualitative text units. Contributions by teachers to the Forums of Discussion. PDF Documents