NEW LEARNING ENVIRONMENTS
in SPAIN

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1. General introduction

New learning environments are increasingly emerging in Spain due to several factors among which the progressive developments and the on-going integration of information and communications technologies no doubt play a prominent role. Other interrelated factors that have influenced the emergence of new learning environments at national level are:

a) the country's economic welfare, which has its effects on
b) the stability of the Local Government's budgetary system to fund universities, which in turn implies that
c) more funding is available for universities to invest in the necessary infrastructure, etc.
d) and more funding is available for lecturers to apply for new teaching and research projects

At an international level, the factors that have had an influence on the creation of new learning environments are:

a) Collaboration among higher education institutions primarily through European funded programmes which have allowed universities to exchange views and build upon each other's experience in order to set up joint projects, thus reducing pressure on a sole institution having to provide all the factors involved.
b) An increasing involvement of teaching/research staff and students in these collaboration projects leading to a wider knowledge of each other's strengths and weaknesses.
c) An investment, at European level, in technology and technology-related innovation projects.

2. The role of New Learning Environments in language teaching and learning

Second language acquisition has traditionally been one of the areas of study which has more readily adapted to the changes brought along with the continuous developments in technology, adopted these changes and exploited them to improve and enhance the quality of foreign language learning and teaching. In addition, it has naturally benefited from the cultural awareness resulting from the innumerable amount of collaboration projects in which both teachers and students are involved. As in any other field, all of those involved in language teaching have to further explore all the possibilities at hand to ensure that the efforts are not isolated but become a part of our everyday practice and extended to other learning environments.

2.1 The integration of New Learning Environments in language teaching and learning

For language teachers

The integration of new learning environments very much depends on the factors pointed out in the introduction, i.e. substantial funding programmes, appropriate infrastructure, availability of human resources, etc. Language teachers must be motivated in order to invest a considerable amount of time and effort in setting up innovation schemes that will lead to different types of learning environments. Since one of the key components is technology itself, every effort must be made on behalf of governments and institutions to provide teachers with all the means that will allow them to explore and experiment within their discipline.

- Institutions must provide the appropriate infrastructure to accommodate ICT.
- Institutions should encourage teachers to increase their knowledge on the use and the different applications of ICT or they should provide the appropriate expertise to support these initiatives.
- Language teachers should be aware of the possibilities ICT can offer (e.g. knowing what software/courseware is commercially available, either on CD-ROM or on the internet, etc.), as well as its limitations.
- Teachers should learn to evaluate existing teaching options (e.g. evaluating software/courseware) and be aware of the benefits and drawbacks of integrating it into the language curriculum.

- And most importantly, language teachers must be willing to put a great deal of imagination and courage into finding the most appropriate way to exploit new learning environments, whether or not ICT-related, in their own particular teaching environment.

Imaginafion, in our opinion, is one of the most important ingredients towards success, and we refer to success in terms of achieving six goals:

a) Maximising the use of what is readily available as regards infrastructure and hardware. If it is available, educators must learn to use it.
b) Adjusting to a rapidly evolving field and keeping up-to-date in ICT developments.
c) Matching students' needs to the most appropriate selection of materials.
d) Increasing students' motivation by involving them in their own learning process.
e) Having the courage to experiment and make mistakes the first, perhaps even the second or third time round.
9 Being creative, innovative and combining different means towards acquiring a foreign language.

for **language** students

Language students, whether studying philology or translation and interpretation degrees, are no doubt the ones who have benefited most from the increasing amount of student exchange programmes available today. These programmes have enabled them to visit a country where the language they are studying is spoken, complete and further their studies there, broaden their knowledge of the culture in which that language is embedded, and generally live an experience which will no doubt personally enrich them.

Practically every language student in Spain has the opportunity of spending a whole year abroad at an institution of higher education with which their home institution has signed a student exchange agreement.

To this end, in order to facilitate the validating process, Spanish universities are using the European Credit Transfer System (ECTS) which is recognised by most European institutions of higher education. This has enabled some universities to award students with a "dual degree", that of their home university as well as that of the host university. This requires the students to take the whole of the final year at the host institution.!

The integration of ICT as a tool towards gaining content/subject related knowledge has also enabled language students to access a world of sources and resources on the internet, via the WWW, which was never before possible. If not every language teacher, certainly every language department in a Spanish university has its own web site offering students learning materials, forums, useful links and information guided towards facilitating and enriching their learning process.

for students of other disciplines

Students of other disciplines have also undoubtedly benefited from student exchange programmes, thus improving their communication skills in a given language and being able to broaden their knowledge on a specific subject matter.

Collaboration between language teachers and students of other disciplines has become increasingly popular in Spain giving rise to new ways of conceiving the learning process. In this sense, teachers have sought a student's expertise in a specific field –e.g. computer programming– and have closely worked together on projects such as creating new teaching materials either on CD-ROM or via the internet, setting up video-conferencing sessions with partner institutions, etc.

To quote a couple of examples of good practice:

- Last year a colleague at the Universidad Politecnica de Valencia managed to involve a group of twenty students learning French for engineering purposes in creating a CD-ROM on the topic of wafer –its chemical treatment, industrial pollution, literary extracts, etc.– and sent it to an international competition in France organised by the Louvre Museum. In teams, her students carried out the research into the topic

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[1] Many efforts have been made in Europe to improve the quality of student exchange programmes (creating specialised international relations offices, providing language tuition free of charge, translating information into EU languages, organising orientation sessions, etc.) See the European Conference on the Cultural and Linguistic preparation of Exchange Students (ECCLiPS), held in Antwerp in 1996, for further information.

using every means at hand (encyclopaedias, internet, specialised books, etc.), and together, worked through the materials in class. This implied putting task-based, goal-oriented activities into practice. These students had a clearly defined objective underlying their work and were thus motivated. They searched for the pictures to illustrate the text, put these raw materials together and wrote the contents of the CD-ROM that was, in turn, programmed by a fellow student. The teacher herself designed the language exercises to accompany the text. The following are two sample screens:
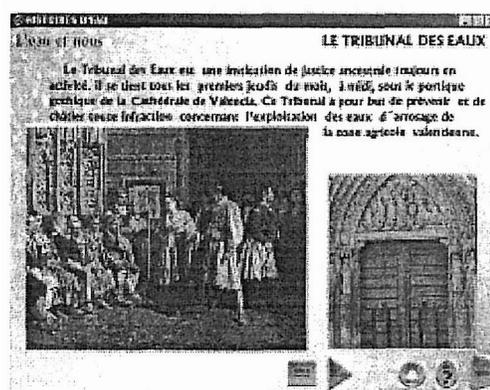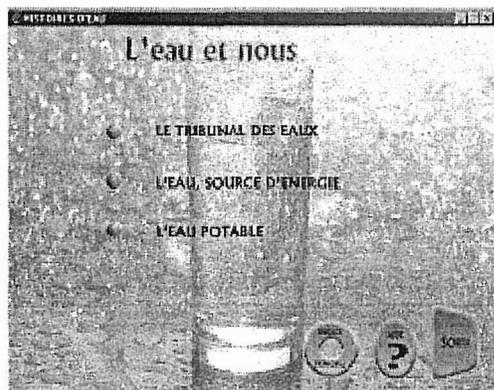
L'eau et nous

- The use the web to exploit subject-specific authentic materials to create tailor made language learning activities. This formula is useful if staff intend their teaching practice to be narrowly related to other subjects included in the syllabus. Colleagues in other departments are a very useful source of information. They are no doubt acquainted with innumerable web sites devoted to specialist topics that can serve as a starting point, although this method requires a certain amount of understanding, on behalf of the language teacher, of the subject under study. Two colleagues at UPV embarked a group of engineering students enrolled in an English course to participate in a project that consisted of searching for, retrieving and didactically exploiting authentic documents that were readily available on the web. The aims were:
  - To aid students in making the most effective use of the internet as a source for retrieving a wide range of subject-specific written and graphical information in the target language.
  - To expose students to up-to-date technical and scientific data to complement other subjects in their core syllabus.
  - To expose students to technical vocabulary and recurrent grammatical structures in context.
  - To gather the retrieved data and make it available for future reference and build upon the existing data base.
  - To encourage autonomous learning by providing suitable learning strategies, as well as encouraging the acquisition of linguistic and content knowledge through co-operative study.

The project was carried out in four stages, which can be summarised thus:
- *(1)* Search and selecfion: Working in teams, and clearly stating the scope of the associated thematic fields beforehand, each group of students chose a topic of their interest and then used the WWW to retrieve one or more related texts. Within this scope, the students were free to agree among themselves what text(s) and topic they wished to work on.
- (2) *Text* sfudy: Each group then analysed their chosen text(s) taking into account its lexical, semantic and grammatical features in order to ensure a thorough understanding.
- (3) Linguistic exploifafion: Each group, assisted by their tutor, then created a set of exercises to exploit the text linguistically. Prior to this linguistic task-based approach, the teacher distributed two parallel lists, one including some theoretical guidelines about the grammatical points that were to be practised in the activities, and the other dealing with model exercises-types. Students chose the grammatical contents that were best represented in their texts and thus, the learner shifted from theory to the practical issue of creating activities and providing answer keys.

- (4) Completion: Each group then exchanged exercises and proceeded to complete them. The time spent to solve the exercises was limited by the tutor. Once the exercises had been completed, each group proceeded to compare their answers with the answer key provided by the authoring group, thus carrying out self-assessment, monitored by the tutor.

Although this was the first time to implement such a method, the results of the pilot study were positive and the idea is being extended.

as a preparation for professional life

As a preparation for professional life, 60% of the students in Spain are able to carry out practice work/internships in foreign companies via EU programmes such as Alpha, Leonardo da Vinci, etc. Likewise, a great majority of the foreign students who choose a Spanish university as their host institution benefit from either a six-month or a ten-month placement at a Spanish private or public enterprise. The project work resulting from this placement is validated by the home institution.

On the other hand, all three technical universities in Spain –Madrid, Barcelona and Valencia[2]– integrate subjects that focus on languages for specific purposes designed to bridge the gap between languages for academic purposes and language learning for professional or vocational purposes. In addition, every science-related faculty in Spain also includes languages as an optional subject.

2.2   Policies underlying the integration of New Learning Environments

Acknowledging the importance of language learning and cultural awareness within the European Union is the first step towards creating policies that support the development of new learning environments. In accordance with this, Spanish universities offer students a wide range of language courses, both integrated within the academic syllabus and as an extension in the form of extracurricular activities. Many Spanish universities are building independent language centres[3] and self-access centres/facilities to cater for the increasing demand of language courses in all disciplines.

It was a policy-maker's decision –the Vice-rector[4] for Research and Development– to support the proposal submitted by the Language Department at the Universidad Politecnica de Valencia to organise the EUROCALL[5] Conference in 1995, focused that year on integrating technology-enhanced language learning into the language curriculum.

This year, coinciding with the European Year of Languages, the Universidad Politecnica de Valencia is organising the XII International Conference of the Association for Spanish as a Foreign Language, which will take place from 5th to 8th September 2001. The theme of the conference is "Tecnologias de la informacion y de las comunicaciones en la enseñanza de EILE" (ICT in teaching Spanish as a foreign language).

2.3   New learning strategies: the introduction and promotion of independent learning

Independent learning in Spain is normally promoted through the introduction of self-access facilities and autonomous learning programmes. Virtual universities are steadily arising attached to traditional campus universities.

The most experienced university in distance education in Spain is the Universidad Nacional de Educación a Distancia (UNED), which is based in Madrid. In Catalonia, the Universitat Oberta de Catalunya (UOC), was the first institution of higher education in Europe to create an entirely Virtual University. The age group of the students enrolled at UOC ranges from 25 to 45. Students can take degree, postgraduate and PhD courses in a variety of academic fields. The Universidad Politecnica de Valencia (UPV) is also immersed in the process of creating its own virtual university under the name of Universidad Politecnica Abierta (UPA), which will have a radio and television broadcasting centre, as well as complete on-line degree, postgraduate, masters' and PhD

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[2] Universidad Politecnica de Madrid, Universidad Politecnica de Barcelona y Universidad Politecnica de Valencia.
[3] E.g. Universitat de Valencia, Universidad de Salamanca, etc.
[4] Equivalent to the R+D Pro Vice-chancellor in British universities.
[5] European Association for Computer Assisted Language Learning.

courses that students anywhere in the world will be able to enrol in. A specific Vice-Rectorate has been recently created in order to manage this Virtual Open University.

A group of seven Spanish universities, known as G7[6], have set up a scheme (approved in March 2001) whereby undergraduate students can take a number of optional subjects at any one of the integrating universities via the internet. This includes downloading materials, attending tutorials, taking exams, etc. This will shortly be extended to PhD level courses.

2.4 Facilities for independent learning

Facilities to promote independent learning in Spain include networked multimedia language labs, equipped with:
- internet access
- language courseware and reference materials -e.g. encyclopaedias and sound-enhanced dictionaries– on CD-ROM
- on-line courses and reference materials
- digitised audio with .pdf format text books
- digitised video with exploitable scripts
- Microsoft net-meeting/chat/ICR sessions with webcam connections
- computer DVD players
- video-conferencing facilities
- traditional TV + VHS/DVD players

2.5 Development of learning materials

The Universidad Politecnica de Valencia has been a pioneer in Spain in developing and commercialising multimedia CALL packages. This has been an on-going R+D activity since it embarked in the LINGUA funded *Computer* Assisted Multimedia *Interactive* Language Learning Environment (CAMILLE) Project back in 1992. Two products were commercialised as a result of the project:
- Espafiol *Interactivo* (Difusion, 1998), for beginners of Spanish, on 2 CD-ROMs
- *Español* en marcha (Difusion, 1998), for intermediate learners of Spanish, on 1 CD-ROM

The CAMILLE[7] R+D team at UPV, led by Dr Ana Gimeno, has expanded their work in multimedia development projects and has published the first beginners course for learners of Valencian/Catalan, a less widely taught and less widely used language within the EU. The course is called Valencia *Interactiu* (Bromera, 2000).

Simultaneously, the CAMILLE team have been involved in two major three-year (1997-1999) EU funded projects under the Leonardo da Vinci and Socrates Programmes, respectively:
- "Airline Talk, which responded to a specific need of international airlines to help those employees who come directly into contact with the travelling public to offer assistance in the passenger's own language. The goals of the project were to supply materials which would promote continuing learning amongst airline staff in three target languages: on the one hand, English for advanced learners, and on the other, Spanish and German for beginners. These last two with L1 support in English, Danish, German and Spanish. The duration of the project has been three years excluding the commercialisation stage.

As a result of this project, the CAMILLE team designed the beginners' course for learners of Spanish commercially known as ¡*Bienvenido* a bordo!
- "City Talk, co-ordinated by a British commercial enterprise, Libra Multimedia Ltd., was set forth to develop monolingual CALL packages for advanced learners of English, Spanish, Dutch and Portuguese. The Project partners were led to design advanced learning materials due to the lack of commercially available software for advanced language learners. The target group in this case consisted of young people ranging between sixteen and twenty-five planning to visit or live in a country where the target language is spoken for purposes of study, work or cultural exchange. The two main aims of "City Talk were therefore to enable learners to a) develop their language skills to encourage them to function effectively within a community in

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6 Universities integrating G7: Cantabria, Islas Baleares, La Rioja, Oviedo, Pais Vasco, Publica de Navarra and Zaragoza.
7 http://www.upv.es/camille

which the target language is spoken. And b) find out more about the culture of the community within which they are studying, working or staying (with an emphasis on contemporary city life and the social and cultural pursuits of young people).

As a result of this project, the CAMILLE team designed the advanced level course for learners of Spanish commercially known as *Vida Urbana*. An innovative web site was designed as a complement to the CD-ROM materials to allow learners:

- to communicate with fellow learners in real time via internet phone
- to communicate with a specialised language tutor via e-mail andlor via a WebCam connection
- to access a "Reference Library" that includes a guide to vocabulary, grammar and use of language, as well as a sound-enhanced slang dictionary
- to access an "Information Centre" containing a guide to health, entertainment, rights, travel, accommodation, work and study opportunities
- to access an "Exercise Centre" consisting of regularly updated on-line exercises and an archive of existing ones
- to contribute to an on-line student magazine with texts, photos and audio files
- to see a large selection of panoramic views of typical city life
- to receive technical support
- etc.
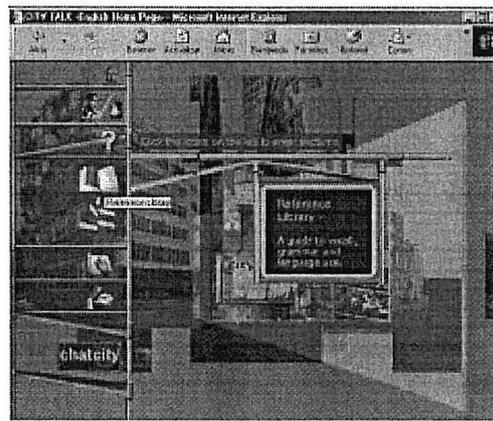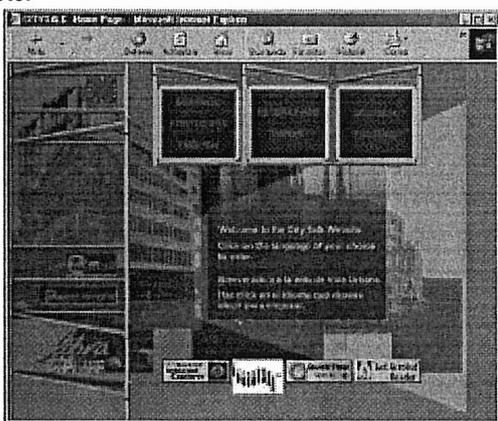
City Talk web site

The Universitat Pompeu Fabra in Catalonia, through its Servei de Normalitzacio Lingüística, is a good example of an institution having designed and implemented a complete on-line course for learners of Catalan with pre- and post assessment tests and examination papers. The courses can be taken as preparatory work for the official language examinations awarded by the Catalonian Local Government[8].

The Universidad Politecnica de Valencia, in its pursuit to improve the quality of language teaching, invested a large amount in 1999 to digitise all the traditional audio tapes[9] used in its Language Lab. and make it available through the University intranet, via the web, from any of the 2000 networked computers. This naturally means having done away with cassette tapes and recorders since the audio is heard either through headsets or the classroom PA system, guaranteeing high quality surround sound. Being able to access innumerable sound files via the web comprises a tool towards creating a new learning environment.

In addition to this, project work carried out by a UPV student resulted in the development of an on-line course based on a textbook but, unlike the book, providing immediate feedback, interactivity, links to audio files,
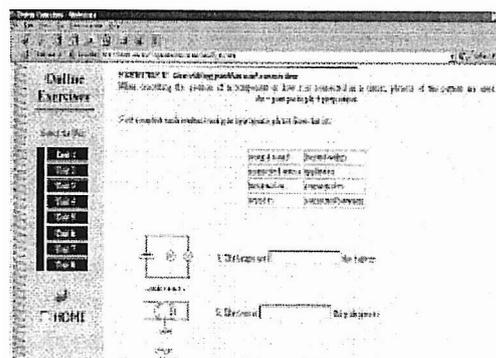
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[8] Generalitat de Catalunya.
[9] Having sough the appropriate copyright clearance.

hyperlinks, etc. A survey carried-out at the Language Department showed that student motivation had increased 80% using the "electronic book in comparison to the printed book.
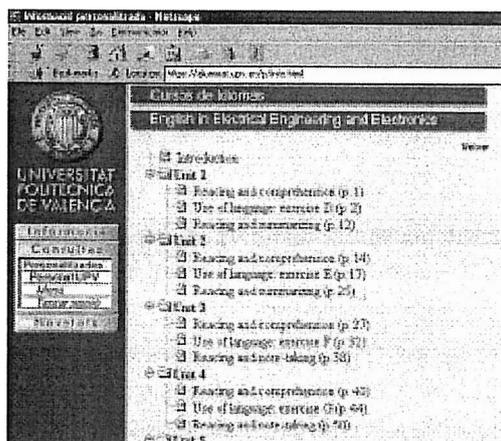
Digitised audio   *Interactive* English course

2.6 Redefining the profile of the actors involved

Students are becoming increasingly involved in their own learning process. Collaborative learning is encouraged throughout Spanish universities. Co-operation with teachers to create CALL materials, didactic resources, etc. has become normal practice. To some respect, this has changed students' attitudes towards learning since awareness of what is involved in teaching a discipline has made them more self-conscious of the process itself.

Students who participate in "buddy programmes" to help in-coming students has been in practice for the past three or four years at Spanish universities. In Spain this programme is known as "Programa Lazarillo" (Lazarillo meaning "guide"). Fellow students therefore take on the responsibility of guiding foreign exchange students and, in some cases, exchanging1reciprocating language tuition.

The role of a language teacher has also changed to a certain extent. Since practice work in networked multimedia labs. has been included in the official curricula, this has enabled the teacher to become a tutor and facilitator, encouraging a learner-centred approach to language learning. The traditional role of the teacher as the centre of the class and sole active component is disappearing. The teacher now provides all the means available in order to enable students to find their own particular learning style and work at their own pace. Traditional exam papers are also giving way to project work and continuous assessment.

2.7 Training programmes and courses for language teachers: in-service programmes, staff development

Every Spanish university has an "Institute for Education Sciences" (Instituto de Ciencias de la Educación) in charge of organising training courses for lecturers and devoted to staff development programmes. The in-service training programmes normally take the form of intensive courses and are run throughout the school calendar. Although these courses are rarely subject specific they are designed to cover the needs of the largest possible number of teaching staff. Among the courses that language teachers frequently enrol in we can find:
- how to increase student motivation
- developing learning technology skills
- learning to use authoring tools such as Toolbook, etc.
- innovation and current approaches to learning
- learner-centred teaching techniques
- improving student assessment
- etc.

2.8   Measuring proficiency: assessment and self-assessment

New learning environments have also influenced student assessment. There are an increasing number of CALL programmes designed specifically to help teachers create assessment papers which can include video, sound, graphics and text. That is, allowing the teacher to use all the media normally used during language classes to measure their student's progress. Traditional paper-based exams are being discouraged in favour of project work carried out by an individual student or a small group of them.

2.9   Action research on the implementation of New Learning Environments

Action research on the implementation of new learning environments is currently taking place in Spain at university directorate level. Policy-makers are setting up schemes and action programmes in order to improve the quality of teaching and to introduce innovation programmes aimed at satisfying the new demands of society.

To give an example, the UPV has created –in addition to its existing Language Department with over 50 teachers– a new office co-ordinated at directorate level called "Foreign Language Development Unit"[10] whose objectives are to improve the standards of language learning among students and teaching staff. This is currently being carried out by organising:
- A 30-hour supplementary intensive language course in the month of July for students who have been awarded a student exchange grant starting the following September. Languages currently offered are: English, French, German and Italian.
- A 60-hour theatre workshop carried out in English, open to anybody integrating the university community.
- Tailor made courses for UPV non-language teachers who are participating in a special programme[11] whereby they deliver their classes in English.
- Translation into any language of research papers for publication in international scientific journals or to deliver at international conferences.
- Translating the university web site into a number of EU languages.
- Etc.

All these activities are funded by the University and are therefore completely free of charge for students and teachers.

Another action plan to improve quality and innovative teaching set up at UPV is the "Educational Innovation Programme"[12], whereby lecturers submit proposals and are granted funding to purchase equipment, materials, etc. as well as funding student grants. These projects normally involve ICT-based initiatives.

3.   Promoting multilingualism and cultural diversity

3.1   Promoting the learning of the less widely used and less taught languages

Many regions in Spain are bilingual.[13] These languages are considered to be LWULTL under EU standards. However local governments and Spanish universities promote the use of these languages in their regions. For example students are awarded a grant in Valencian universities to write their PhDs or final year projects in catalan.

The afore mentioned CAMILLE R+D team at UPV were granted funding by the Valencian Local Education Authorities and by the University itself to develop the first multimedia course on CD-ROM for learners of Valencian/Catalan. It is a completely monolingual course intended for young adult learners. The course was published in December 2000 by Editorial Bromera and is called Valencia Interacfiu. The CAMILLE team is now developing the intermediate level course, which in addition includes preparatory materials for the official Local Government language exams.

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[10] Area de Coordinación de Lenguas Extranjeras (ACLE), Universidad Politecnica de Valencia.
[11] "Programa Europa"
[12] Prograrna de Innovacibn Educativa (PIE), Universidad Politecnica de Valencia.
[13] País Vasco (Euskera); Cataluña/Comunidad Valenciana (Catalan); Galicia (Gallego)

The Universitat Pompeu Fabra in Catalonia has designed a fully on-line course for learners of Catalan. (See section 2.5)

The Basque Local Government funded and published in 1997 an interactive course on CD-ROM for learners of Basque.

Every effort is made at Spanish universities to integrate foreign students and respect the cultural diversity brought about by the growing number of international student exchange programmes.

3.2   Promoting cultural understanding and intercultural awareness

The best way to promote cultural understanding and intercultural awareness is precisely by encouraging both student and staff exchanges. It is therefore crucial for institutions of higher education to co-fund these exchange programmes together with the EU, as do most Spanish universities.

Collaboration projects and joint initiatives among teaching staff must also be encouraged in order to gain a better understanding of each other's strengths and weaknesses. We can, no doubt, all learn from one another and build upon existing achievements.

Initiatives such as the WELCOME Project[14] and the HELLO NET Project[15], both of which have a Spanish partner, are good examples of collaboration proposals to promote LWULTL and cultural awareness:

- WELCOME! - linguistic and cultural introduction module for incoming exchange students aims to provide linguistic and cultural preparation for future exchange students planning to go to countries where one of the LWULT languages is the official medium of instruction. It plans to provide this in a fully web based format so that students will be able to start studying the language and culture of the host institution before leaving, giving them the chance to study in their own time, in their own surroundings and yet in a collaborative way. In a first phase a general format will be created for a language independent ICT-based language and culture course based on the principles of autonomous and distance learning. In a second phase this shell will be elaborated into concrete learning materials for the languages of the partners of the project: Dutch, Finnish, Estonian, Portuguese and Spanish. Learner support will be provided by means of a common workspace (forum) for synchronous and asynchronous communication and collaboration among the students and with the tutors; a learner's log; self-assessment tools and other more general tools such as hyperrgrammars and hyperdictionaries. Even though there will be centralised learner support from each of the partners for their own language, local teachers will also assist the students in situ. Links to socio-cultural and practical information about the region will complete the on-line package. For future developers an authoring module to update materials and to develop new materials will be part of WELCOME. The product will be transferable to other languages.

- HELLO NET-Hellenic Enjoyable Language Learning on the Net: Working on student mobility programs for some years has led us to realise that the number of foreign students who want to attend part of their courses in a Greek institution is very small, one of the drawbacks being language barriers. Another problem is the lack of information about the Greek academic life and culture. Information about the courses offered, the conditions of studies, accommodation, transportation, facilities and amenities in host cities, etc. The aim of the proposed project is to cover the above-mentioned needs in a systematic way. The project will build the HELLO Net (Hellenic Enjoyable Language Learning on the Net) web site in order to provide:
  - on-line distance learning educational material for the teaching of elementary Greek to university students; a multimedia intensive course, video conferencing and other materials supported by web-based services in a user-friendly environment.
  - web-based extensive services with information about Greek institutions and various useful links.

  The project's outputs will facilitate incoming students to smoothly integrate in the Greek academic and social life and raise awareness of the Greek culture. It will also help staff involved in monitoring mobility programs. The project's outputs will represent a Linguistic model whose potential will be able to be adapted

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[14] Co-ordinated by the University of Gent, Belgium.
[15] Co-ordinated by the Technical university of Thessaloniki, Greece.

to all languages and serve as a pattern for the production of on-line teaching materials as well as the building of educational web sites.

3.3 Accessing authentic resources and materials

The internet is no doubt one of the most popular means of accessing authentic resources and materials. Dissemination of examples of well-designed and useful materials is a task to be undertaken by all involved in language teaching. Many resources are available but the lack of awareness sometimes prevents them from being used to their full potential.

Many EU-funded language-related materials' development projects remain in a drawer due to the lack of a publisher to commercialise the materials. Spanish publishers are still reticent towards publishing multimedia learning resources, either on CD-ROM or via the internet.

3.4 Student and staff exchanges

See section 3.2 above.

4. The role of New Learning Environments in training programmes for language and language related professions

4.1 New Learning Environments and the training of language teachers

Teacher training courses should include specific modules/subjects to train to-be teachers in the use and integration of ICT in the language curriculum. This should be carried out from a critical point of view giving teachers a basis on which to perform a sound evaluation of the resources available. An in-depth knowledge of the various tools available is crucial since teachers will be unable to motivate their students unless they themselves are fully acquainted with the range of learning environments that can co-exist with a more traditional learning environment. These modules/subjects should contemplate the existence of new learning environments with and without the support if ICT.

In Spain there are a number of centres known as "CEFIRE"[16], which depend on the local education authorities, whose mission it is to organise intensive courses for language teachers throughout the school year. Teachers are strongly encouraged to attend these courses on a voluntary basis, although accreditation is given and a certificate is awarded. The activities carried out by the CEFIREs range, for example, from "new approaches to language teaching", "methodological issues", "integrating CALL in the language classroom", "self-directed language learning", "improving student assessment", "increasing student motivation", etc. These centres run courses in close collaboration with university language departments and invite experts from all over the country.

4.2 New Learning Environments and the training of translators and interpreters

New learning environments have also made their way into the training programmes of translators and interpreters in Spain. The faculties of Translation and Interpretation integrate ICT-based activities such as becoming acquainted with different automatic translators; using electronic spell checkers, thesaurus and dictionaries, grammar correctors, etc. Students are also made aware of all the resources available on the internet such as multilingual dictionaries and specialised glossaries. ICT has become an integral part of their training programmes.

Specific software has been designed such as *MicroConcord*[17] and Multiconcord Parallel *Concordencer*[18] to aid translators in their every day practice and also to help teachers to create classroom activities. A concordancer is designed to search large blocks of text, such as the whole of a newspaper for one year, for examples of how words or phrases have been used in those texts. For instance, the word should has many different uses in English. Entering this word at the search point will produce a long list of examples of the use of should in

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[16] Centro de Formacion, Innovacion y Recursos Educativos (Training centres for primary and secondary school teachers).
[17] Tim Johns, Cambridge University Press.
[18] Available from David Woolls, CFL Software Development.

context. These instances can then be sorted to see what words appear to the left or right of the search item. This allows the identification of recurring patterns, and can help to illustrate particular meanings or functions of the word under examination. The results can be edited, saved or printed and used as the basis of classroom instruction material. The strength of this approach for language is that the learner can investigate the use of words in context in authentic texts. The Cobuild dictionaries and teaching materials are entirely built around such principles using a very large corpus of text. Concordancers like this can work in a range of languages, but only in one language at a time.

A number of teachers in the EU have in recent years been using monolingual concordancers such as *MicroConcord,* both as a basis for classroom activities, and to prepare teaching material. To illustrate the differences in use of words across languages they had to find examples that would be translated in different ways in the target language, then translate them themselves. Given the time and effort involved the thought naturally followed that it would helpful to be able to investigate differences between language and to produce bilingual teaching materials based on professional translations. So the idea of *MultiConcord* was born. A program was specified which could handle texts in two different languages at the same time, whilst keeping all the capabilities of a monolingual concordancer. Since producing language teaching and testing material was sought, the program was designed to help teachers automate this process. The program was developed as a project funded under the Lingua/Socrates development office of the EU. The languages included in the project were Danish, Greek, Italian, English, French, German, Portuguese, Spanish[19] and Swedish.

5. The role of New Learning Environments in continuing education programmes or courses

Continuing Education increasingly relies on On-line Distance Learning where the means to develop interaction between expert and learner is carried out via e-mail, the WWW, digitised video delivered through the internet, or newsgroups and bulletin boards, etc. Several steps must be taken in order to ensure the success of an ODL course[20]:

- needs analysis: the potential end-users are identified and an offer should be made that responds to their specific needs
- design of the educational product: bearing in mind two factors, the academic and the commercial needs, in order to achieve end-user expectations
- marketing and sales: to ensure that the identified end-user is aware of the existence of the "tailor-made" product
- information, enrolment and administration: appropriate infrastructure to manage delivery of information, student enrolment and general administration tasks
- delivery: seen as the meeting point between the tutor and the end-user; successful delivery will depend on the tutor's communicative skills, the teaching/learning methodology used, appropriate infrastructure, etc.
- assessment: student/end-user assessment carried out by tutor and issuing of appropriate award by the institution
- evaluation: of the course contents, means of delivery, general organisation, etc. carried out by the end-user

The Universidad Politécnica de Valencia, through its Postgraduate Training Centre, offers a number of ODL courses following the above criteria. Two language courses, one for learners of Spanish as a Foreign Language, and the other for learners of English for Specific Purposes, are currently being designed and will be ready for exploitation during 2002. The University awards students appropriate achievement diplomas/certificates. These courses are being developed with an authoring tool designed and implemented at UPV.

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[19] The Universidad Politecnica de Valencia was the Spanish partner in the project.
[20] See Koskinen, T. et al. (1999) The Great Paella Cookbook for *Online* Learning, Valencia, SP-UPV.

6. How to use Information and Communication Technology (ICT) to promote European co-operation?

6.1 Using ICT for co-operation in the development of programmes

European co-operation using ICT as a means of communication is not something that is new to us. We could say that most co-operation programmes make use of ICT in one form or another. Every university staff member in Spain has a personal computer and access to the internet via the Spanish higher education State-managed Internet Delivery Network called "Redlris". It is common practice for university staff to use e-mail to communicate with fellow EU colleagues, the web as a means of accessing and delivering information, video-conferencing sessions for specific synchronous communication needs, etc.

EUROCALL, which also serves as a European network to promote co-operation among language teachers in ICT-related projects and joint ventures, has a National Representative in Spain[21] who disseminates information relating to the Association's activities, recruits members and, more importantly, brings potential Spanish project members into contact with other EU colleagues seeking partners.

6.2 Using ICT for co-operation in the delivery of programmes

The UPV is the Spanish partner in the 2nd phase of the successful ICT4LT[22] (ICT for Language Teachers) Project, co-ordinated by Thames Valley University (UK) and funded by the Socrates Programme - Comenius. The project, which finalised in December 2000, designed and implemented a complete course on ICT specifically for language teachers delivered via the web in four EU languages: English, Italian, Finnish and Swedish. In phase 2 the materials will be translated and adapted into French and Spanish. The course, which is divided into three learning levels –beginners, intermediate and advanced– and presented in modules, is supplemented with printed materials and a CD-ROM.

See also information on the WELCOME! and the HELLO NET projects described in section 3.2.

7. Needs in the area of New Learning Environments

7.1 Seen in relation to language teaching and learning

Firstly, we must ensure that the concept of "new learning environment" conveys the same meaning to all involved in language teaching.

Secondly, since ICT is a core element in creating new learning environments, one of the key issues is to agree on a number of European-wide technology standards in order to facilitate co-operation among teachers and learners of the member States.

Thirdly, national education authorities must guarantee that funding is available to set up co-operation projects at local and at European level to promote language learning.

7.2 Seen in relation to the promotion of multilingualism and cultural diversity

Mutual respect is the key concept towards multilingualism and cultural diversity. Respect is achieved through understanding; understanding through knowledge, and knowledge can only be acquired through learning (i.e. education). Therefore all efforts directed towards raising cultural and linguistic awareness must be supported. New learning environments therefore play a key role in achieving this goal.

Since Spain is a culturally diverse country in itself and there are several bilingual regions, it is a country where many cultures have traditionally mixed and have been made welcome.

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[21] The EUROCALL National Representative in Spain is Dr. Ana Gimeno of Universidad Politecnica de Valencia. For further information see http:llwww.upv.esleurocall

[22] See http://www.ict4lt.org

7.3   Seen in relation to the promotion of European co-operation

The development of new learning environments is necessary in order to apply modern approaches to language learning. EU member States must co-operate in order to ensure that the weaker economies have the same opportunities as the stronger ones. The appropriate infrastructures must be provided and a balance sought in all funding programmes.

7.4   Seen in relation to the provision of language learning to students with special educational needs

In Spain, the national organisation for the visually impaired –ONCE– is an example to follow. It guarantees that the visually impaired have exactly the same opportunities as anybody else. This, of course, includes language learning.

More investments should be made, however, to set up laboratories to cater for these special needs. More specialised training programmes should exist and more staff should be hired to cover those needs.

8.   Measures to be taken to meet the needs identified

8.1   At institutional level

8.2   At regional level

8.3   At national level

8.4   At European level

These include, regardless of the geographical level:
- creating the appropriate channels to disseminate information
- sharing know-how and building upon each other's experience
- guaranteeing appropriate funding
- stimulating educational innovation
- establishing quality standards
- carrying out research in areas such as SLA, CALLITELL, etc.
- promoting co-operation schemes
- promoting student mobility

9.   Examples of good practice

These have been described in each section accordingly.