

Institutional Environment Guideline Descriptions of National Environments

The Higher Education System in Spain

The Spanish university¹ system dates back to the Middle Ages. The present system, however, is actually descendant of the 19th century liberal university, inspired by the centralized French model. In the last years, it has experienced its greatest growth in history, while at the same time advancing towards a self-governing and decentralized system.

Higher education is provided by both public and private institutions. Universities are divided into departamentos, facultades universitarias, escuelas tecnicas superiores, escuelas universitarias, institutos universitarios, and other centres, notably the colegios universitarios.

The Ministry of Education with the departments of higher education in the universities coordinates the activities of state and private institutions and proposes the main lines of educational policy. The Consejo de Universidades sets up guidelines for the creation of universities, centres and institutes. It can also propose measures concerning advanced postgraduate studies, the defining of qualifications to be officially recognized throughout the country and standards governing the creation of university departments. The legislation on university autonomy provides for administrative, academic and financial autonomy.

The Ley de Reforma Universitaria (LRU) gave rise to a renewal of the existing plans of study, presently intermediate degrees (three years) and superior degrees (five years, six for medicine) which are being replaced by two different types of studies: those of the single cycle, which will run for three years and are directly professional; and those of three cycles in some cases, receiving diplomas which are professionally valid; the B.A.'s (always with various specialties) and the doctorate (two years and a final thesis).

E-learning in Higher Education in Spain

Higher Education, as an area directly linked to the use of modern technologies, must now face the challenge of adapting to this new reality. In the view of many, e-learning has served as a catalyst enabling Higher Education to respond to new demands². The Open University of Catalonia (UOC) has been to the forefront in the development of e-learning in Higher Education: <http://www.uoc.edu>

Many of the more traditional universities have also developed virtual support modules for their courses. This is true of MIT³ the University of Alicante (<http://www.ua.es/es/univirtual/>) and the Technical University of Catalonia, via its foundation (<http://www.fpc.upc.es/>). Distance learning universities have also adopted the Internet as a new channel of learning. Examples are the Open University and the National Distance Learning University, Spain (<http://www.uned.es>).

¹ http://wwwn.mec.es/univ/html/informes/EEES_2003/Documento_Marco.pdf

² See this article by Walter S. Baer: http://www.cisp.org/imp/june_99/06_99baer.htm

³ <http://www.mit.edu/>

It is still difficult to give a good definition of what is e-Learning and what is not. This is because, for many reasons, there are numerous higher education institutions trying a variety of teaching methods through electronic means and also because, often, the corporate sector would like to be identified with it but we can find different underlying approaches in most of them⁴

Actual situation of e-learning

They currently exist 70 universities in Spain, 48 are public and 22 are private ones. In the term 2004-05, a total number of 1,462,897 students were enrolled in graduated courses and 72,729 in postgraduate and doctorate ones, as table 1 shows:

Universities		Graduate students	Postgraduate students	Total students
Public	48	1.328.154	69.516	1.397.670
Private	22	134.743	3.213	137.956
Total	70	1.462.897	72.729	1.535.626

Table 1. Number of universities and students in Spain (2004-05)

(Source: Ministry of Education and Science⁵)

Talking specifically about e-learning, despite the fact at this moment there is an enormous amount of initiatives, as we will see, and considering the fact ten years ago no-one was talking about e-Learning as a concept of practice, the kick-off moment in which it landed in Spain was when the Universitat Oberta de Catalunya (UOC)⁶ was created.

However, all these initiatives have been the product of the willingness of the Universities' Government Board or their faculty. Political initiatives did not success probably because most of them were not specifically education-driven. That is, most of the National Plans, as InfoXXI7 or España.es (2003) to mention the most well-known ones, were oriented to reach the Information and Knowledge Society through economy and technology, but usually forgetting the particular characteristics of the educational environments.

Actions and Infrastructures

If at the late 90's there were undergraduate degrees at the UOC and the UNED, it is true that lately the other universities are starting to offer whole degrees through different models of e-Learning delivery, even when some of them said "we will never do that". Furthermore, a part of these particular experiences, most of the Spanish universities have developed and offered some course electronically belonging to a particular undergraduate accredited degree.

⁴ Sangrà, A. (2005) "E-Learning in Spain: The Consolidation of the Earliest Teake-off". In Dittler, U.; Kahler, H.; Kindt, M. & Schwarz, Ch. (Eds.) *E-Learning in Europe – Learning Europe. How have new media contributed to the development of higher education?*. Waxmann Verlag: Münster

⁵ *Statistical Data from the Ministry of Education and Science*. Available at: <http://www.mec.es/educa/jsp/plantilla.jsp?area=ccuniv&id=E123> [Retrieved 08/07/05]

⁶ Open University of Catalonia: www.uoc.edu

⁷ See www.infoxxi.es

From the results a conducted research on the whole Spanish universities⁸ in the term 2003-04, we can consider the 48% (33 over 69) of them have offered some course through electronic means. In total it means 1341 courses. These courses regard to Undergraduate accredited degrees. Forty-two full official degrees are also offered in an e-learning way, distributed by universities as follows:

University	Degrees
Mondragon Unibersitatea	1
Universidad de La Rioja	2
Universidad de Las Palmas de Gran Canaria	1
Universidad de Zaragoza	2
Universidad Nacional de Educación a Distancia (UNED)	16
Universitat Oberta de Catalunya (UOC)	18
Universitat Ramon Llull	2

Table 2. Universities offering fully e-Learning degrees (2003-04)
(Source: Sangrà, 2004)

E-learning postgraduate courses and degrees are even more generalised. In fact, it is in this particular field where real competition between universities seems to have been developed. However, to do that universities have taken different organisational models. Most of them do it through parallel institutions which usually belong to the same university (Non-profit foundations, For-profit spin-offs and companies, External divisions, corporate joint ventures ...)

An interesting experience has been developed by the universities Autònoma de Barcelona, Alicante and Carlos III de Madrid, jointly with the publishing company Santillana Formación. They built the Instituto Universitario de Formación de Posgrado (IUFP)⁹, a joint venture to deliver postgraduate courses and degrees through e-Learning. At this moment they offer 8 programs, mainly based on the business field, electronic editing and publishing and ICT and education.

Another highlighting initiative has been the UB Virtual project. In fact, Universitat de Barcelona is one of the big universities in Spain and the largest one in Catalonia. They decided to manage e-learning outside of the university, creating a company which could manage the courses by their own. After a failed first attempt (UB Media), they succeed in re-inventing the company as UB Virtual¹⁰. At the moment, they are offering a wide range of online courses in different disciplines as Business, Health, Education, Pharmacy, Tourism and others. If we look at the 2001-2004 period, we can see the increase of this teaching and learning modality is quite important in Higher Education, so it is three times that developed during the 2001-2002 period.

On the other hand, the same study points out universities having a "Virtual Campus" have considerably increased. While in term 2001-02 there was not a half of Spanish universities using an electronic platform (48%), last year pointed on the 74% (Valverde et al., 2004). Although some of them have developed their own electronic platform (UOC, Vigo, UPM), use of commercial ones (WebCT, LearningSpace, Blackboard) is quite extended. Open Source software like Moodle is also having an important growth the very last years.

⁸ Sangrà, A.; González-Sanmamed, M. (2004) *La transformación de las universidades a través de las TIC: Discursos y prácticas*. Barcelona: Eduuoc

⁹ www.iufp.es

¹⁰ www.ubvirtual.es

Support resources for teaching purposes:

Some institutions have started by pushing a strategy based on developing and facilitating resources to the faculty to use them in their classrooms. This means it is supposed they will have a number of possibilities to improve the quality of their teaching without a supplementary effort to learn to develop digital solutions.

These resources are sometimes organized as units or centres, to be easily recognised by the faculty. Some of the services they offer are:

- Multimedia materials, audiovisual equipment, digitisation services, publications
- Digital documents supply and transformation
- Computer infrastructure services
- Virtual Learning Environments
- ...

This kind of strategy is trying to give the faculty more freedom degrees when deciding how to manage ICT in their classrooms and what to use to improve their teaching quality.

Nevertheless, strategic planning uses to be a top-down mechanism basically technology and economy-driven, in which faculty can not really feel sharing to have a decision, but to learn things should be done in a different way that doesn't take into account it is an educational matter. In fact, what it is underlying this idea is the need for universities to change. And e-Learning is being used as one of the most important drivers.

But in reality, changes in Higher Education organisational structures have not been a lot. A part from UOC, which was built with a different organisation basis from the other Spanish public universities, most have only developed minor changes.

The most important ones are the creation of a Vicerectorate or Vicepresidency for Technological Issues which encompasses all aspects related to the integration and development of ICT at the university (infrastructure, equipment, communications, e-learning solutions ...) and the promotion of specialized units to support e-learning activities.

Using data from the last academic period, 48 Spanish universities (84%) have some kind of unit or team devoted to give support to the e-learning processes at the university (Sangrà, 2004). These units have very different names depending on the university in which they are but, in general, the main commitments they have are:

- To assess faculty on the process for moving from a fully face-to-face teaching model to a blended one, complemented by the use of ICT at the classroom and, even, outside the classroom, from a perspective both methodological and technological.
- To teach faculty in several issues (not only on e-learning)
- To manage and optimize resources and devices (Technological equipment, rooms, etc.)
- To design and produce learning content or teaching materials or to help faculty to produce them

e-Learning in Public Higher Education in Catalonia

Catalonia is one of the autonomous communities in Spain having its own language recognised by the Statute of Autonomy, which establishes the right to know and use the Catalan language and its status as an official language in the territory together with Castilian. The Statute makes the public authority responsible for normalising the use of the Catalan language in all spheres of life, particularly in administration, education and the media.

Catalan Higher Education system

Catalonia has prestigious, high-quality universities, at which one can follow studies corresponding to all areas of knowledge. There are 12 universities in all, 7 of which are public or state ones, 4 of which are private and 1 of which is for distance learning.

University studies are grouped into degree teaching (university degrees) and postgraduate teaching (masters, postgraduates, doctorates, etc.).

The **qualifications** that are given can be:

- Official homologated qualifications, valid officially throughout the whole of Spain.
- The universities own qualifications, only recognised by the universities that teach them.

In 1985, the Generalitat of Catalonia defined the current Catalan university system, which started to spread throughout the land. Apart from public or state universities, other institutions have created other private universities, recognised by the Catalan Parliament.

E-learning situation in Catalonia

The first full experience with e-learning in Spain starts in 1995, when the Universitat Oberta de Catalunya is created. UOC developed a new brand educational model in which the concept –and the tool– of *Campus Virtual* was the main element.

In the last few years, society has become aware of the need to base education not only on face-to-face interaction between the teacher and the student but on the requirement of different models. In the entire world a new paradigm is being consolidated, adapted to a new society: changeable and diversified in terms of age, activity, economic level, place of residence and personal situation.

The UOC was created to give a real response to the new situation and fulfill these new needs. This response is based on a flexible and open educational model, which takes advantage of the possibilities of the information society technologies as support tools. From the very beginning, and according to the educational offer of the conventional universities in Catalonia, UOC was created as an efficient alternative of distance higher education for a target of adult students.

At this stage, UOC is offering 17 fully accredited degrees in which more than 32.000 students are currently enrolled. Around 150 full-time faculty staff is in charge of coordination of 1.900 part-time professors. The educational model is based on an innovative teaching and learning system, which encourage students to feel part of the university community as a way to communicate with others and learn. Therefore, they acquire knowledge, not only through what it is taught to them, but also by means of the interaction and co-operative work between the members of the community. The particular characteristics and the success of this university and its model has been the reason for developing several case studies about it and for being awarded with different prizes.

Structures/organizations supporting e-learning and plans for e-learning development

- **Campus Project:** The CAMPUS project, promoted by the Secretaria de Telecomunicacions i Societat de la Informació (STSI) of the Generalitat de Catalunya, is born from the will of eight Catalan universities¹¹ of having a virtual campus in free software and under the license of GPL (General Public License). This campus should allow offering higher education both in a completely online fashion and combining online and offline. This initiative wants to become an international reference in the field of e-learning because – among other issues – it will support up to 10,000 users connected at the same time and its user interface will be designed following user-centered designed methodologies; taking into account issues such as usability, accessibility and content personalization.

The CAMPUS was born within the Catalan universities system and will be open to the world. The **Universitat Oberta de Catalunya** is responsible of the coordination and the technological leadership of the project and will be developed taking advantage of the knowledge and experience that each partner can bring to it. This project is part of the Digital University program promoted by STSI. The goal of the program is to facilitate the transmission and sharing of knowledge via the information and communication technologies.

- **Digital University** is a programme to promote inter-university collaboration in Information and Communication Technology. It is configured as a sectorial activity within the Director Plan for Services and Contents within the framework of the Knowledge Research Strategy promoted by the Ministry of Universities, Research and the Information Society.

The main objective of this programme is to facilitate cooperation, communication and collaboration between universities by means of the installation of and development of ICT. Similarly, another aim is to promote contact between scientific communities and universities in order to increase the production of knowledge in Catalonia and to make this knowledge accessible for society.

All the public and private universities in Catalonia participate in the programme. The activities within the Digital University programme are:

- Free software actions.
- Promotion of the use of free software

¹¹ [Universitat Oberta de Catalunya](#), [Autónoma de Barcelona](#); [Politécnica de Catalunya](#); [Universitat de Lleida](#); [Universitat de Girona](#); [Universitat Ramon Llull](#); [Universitat Internacional de Catalunya](#), [Centro de Supercomputación de Catalunya](#), [Universitat Pompeu Fabra](#), [Rovira i Virgili](#), [Universidad de Barcelona](#), [Instituto Joan Lluís Vives](#), [I2CAT](#), [Departament d'Ensenyament](#)

- Activities to promote the use of Catalan and linguistic research
 - Promote digital certification in universities and research centres
 - Infrastructure
 - Studies
 - Dissemination and promotion of science, technology, publications, current affairs and information regarding university activity
 - Support for seminars, courses and congresses related to ICT
 - Promote e-learning education
- **Intercampus** a set of Catalan universities, supported by the Catalan Ministry for Universities, Research and Information Society¹² also develop a collaborative project which main aim is to exchange and share elective and non-core Internet-based courses between their students. The Intercampus¹³ initiative is the name of this project which started in February 2000 and has served around 4500 students all over Catalonia.

In summary, Spain is in a good position in the European e-Learning scenario, probably because it has the first fully e-Learning university, but there is a lot of work to be done to maintain this status in the very next years.

¹² Departament d'Universitats, Recerca i Societat de la Informació (DURSI): <http://www.dursi.gencat.net>

¹³ www.catcampus.org