



EDUCATION AND CULTURE

LEONARDO DA VINCI

Second phase:2000-2006

Project: «Title»

(www.nettskolen.com/in_english/megatrends)

Survey for case studies in the Megatrends project

Universidad de Las Palmas de Gran Canaria

Facts about the institution

Name of institution	Universidad de Las Palmas de Gran Canaria
URL of institution	www.ulpgc.es
Country	Spain
Levels in the education system	Higher education level
Interviewer	Pedro Fernández Michels
Interviewees	- José Juan Castro Sánchez Vicerrector de Planificación y Calidad (Vice-president for planification and quality) Universidad de Las Palmas de Gran Canaria Tel. +34 928 451019/458010 Fax. +34 928 457276 www.ulpgc.es - Santiago Melián González Vicerrector de Desarrollo Institucional y Nuevas Tecnologías (Vice-president for institucional development and ICT) Universidad de Las Palmas de Gran Canaria Tel. +34 928 458256 Fax. +34 928 451022 www.ulpgc.es

The Universidad de Las Palmas de Gran Canaria, one of Spain's 48 public universities, started up in 1989-1990 as a consequence of a big social movement that happened in Gran Canaria Island. This movement finished when the Canarian Parliament passed the "Ley de Reorganización Universitaria de Canarias" (University Reorganization Law of the Canary Islands) on April, 26th 1989.

The application of the mentioned law not only created the ULPGC, whose rectorate is located in Gran Canaria, but it also meant the integration of the Polytechnic University of the Canary Islands and the redistribution of the university centres existing at that moment in the archipelago.

Thus, this university institution was made up of 19 centres in the beginning. Some of those buildings were built in the middle of the last century or at the beginning of the present one.



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Contextual factors

Market size

The ULPGC is located in a geographically difficult area. Providing studies and training to a target group that is distributed over several islands is certainly a challenge due to the reduced mobility of the people. In the ULPGC, distance education is seen as a solution to this problem, apart from being a possibility of widening the caption area towards other regions like Africa, America and the rest of Spain and Europe. The total population of Spain is 40 million.

Spanish is the common language in all 17 autonomous regions of which three have an own language which has official status within the region.

There currently exist 70 universities in Spain, 48 of which are public. The total number of registered students in Spanish universities for the academic year 2004/05 was 1.535.626.

Market readiness to use online technologies

ICTs have not yet reached a satisfactory degree of diffusion in Spain, despite recent progress. Internet penetration among households is low compared to the other EU members. One important reason is the high price for Internet connections. Broadband diffusion, however, has been comparatively fast in the last three years, in particular in the more developed and urban parts of the country such as Catalonia.

The country has a low score on the Digital Divide Index, which means that disparities in access to and use of the Internet between sub-segments of the population (genders, age groups, socio-economic groups) are considerably bigger in Spain than in most of the EU25.

Target group acceptance of e-learning

The acceptance of e-learning within university students can be considered relatively high. In spite of the lack of diffusion of ICTs and the disparities mentioned in the paragraph above, the large number of e-learning initiatives in Spanish universities indicates a satisfactory level of acceptance of the use of ICT in teaching and learning among the academic community.

Digital literacy in population

It can be assumed that digital literacy in the target group is relatively high. Spanish university students and teachers use computers and the Internet on a regular basis. However the percentage of the total number of Spanish people



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aged 16 to 74 that do not use the computer or the Internet is slightly higher than the same figure for the UE-25.¹

National policy

Neither the central government nor the regional administrations are carrying out a specific policy in order to promoting e-learning. The projects that are being undertaken are more generic and only have an indirect effect on the development of e-learning.

“Following the e-learning initiative launched by the European Union in 2000, the Spanish government has developed a set of policies and initiatives to promote e-learning. The main points of this policy are:

- providing all schools with the equipment and facilities for accessing ICT;
- developing Internet courses and training;
- setting up an observatory and laboratory concerned with the educational applications of ICT, thereby supporting innovation and development in such applications;
- strengthening cooperation between Latin America and Europe in the area of ICT in education.

Moreover, several plans and projects are dedicated to e-learning for vocational purposes. These are supported by the Spanish Government through the European Social Fund, and through FORCEM (Continuing Training Foundation). It is indicative of the situation that 30% of all training plans presented in 2002 were related to e-learning. Moreover, the Ministry of Industry Tourism and Commerce has created FORINTEL, a program to promote the use of ICTs in enterprises, which offers e-learning courses. Currently, the Spanish government has launched the Plan España.es for the period 2004-05. One of the action points of the Plan is the promotion of accessibility to training and digital content.”²

¹ DEMUNTER, Christophe (2006): “How skilled are Europeans in using computers and the Internet?” [Online article]. In: *Statistics on focus. Industry, trade and services 17/2006*. (Data retrieved on 30/10/2006). URL: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-NP-06-017/EN/KS-NP-06-017-EN.PDF

² www.euser-eu.org



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Historical context

1. How would you describe the history of distance education in your institution?

Although our first full degree was launched in the academic year 2001-2002, our current situation is the result of a number of antecedents and of a context that have promoted this reality. Some examples are:

- The “Centro de Innovación para la Sociedad de la Información” (CICEI; *Centre of Innovation for the Information Society*) and the introduction and translation into Spanish of WebCT as a training platform when only very few universities in the world knew this system.
- The provision of some courses, master degrees and doctorates through this platform for years.
- The fact of being a university with a large number of studies related to ICT, which allowed us to be very up to date and have our own staff for tasks of development and maintenance.
- The computer/student ratio: 1 computer of free use per ten students.
- All the study programmes are available online and the teachers have the possibility to include documents like contents, tasks, links etc.
- Pre-inscription and automatic enrolment via the Internet.
- Management of teachers’ notes and minutes via the Internet.
- Access to the student’s academic profile over the Internet.
- Etc.

2. How has competence in e-learning developed in your institution and how has it contributed to your success?

Our distance education program is something we are very proud of. We offer all kinds of studies, from graduate studies up to postgraduate and doctorate programmes. There are very few Spanish universities that offer graduate studies in a context of distance education. At the same time there are only a few that address to students outside their geographical area, especially in a context like ours, where the university is located on an island thousands of kilometres away from mainland.



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3. Has this development been abrupt or would you describe it more as a gradual step-by-step process)?

It has been a gradual step-by-step process established previously in our “Plan Estratégico Institucional 2002-2006” (Strategic Institutional Plan).

The ULPGC’s Strategic Institutional Plan for the period 2002 to 2006 sets as objective nº 6 of the Strategic Axis I (Teaching) the following:

To enhance the use of the ULPGC’s Virtual Campus in order to develop the academic teaching processes fomenting an open and flexible pedagogical model that combines the intensive use of ICT with face to face assistance.

In order to develop it, this objective is transformed into concrete actions. The following table shows the strategies and the actions that are related to the *Estructura de Teleformación ULPGC (Distance Education Structure ULPGC)*.

Strategic Axis I. TEACHING	
Objective I.6.	To enhance the use of the ULPGC’s Virtual Campus in order to develop the academic teaching processes fomenting an open and flexible pedagogical model that combines the intensive use of ICT with face to face assistance.
Strategy 1	To enlarge the provision of official studies by distance education in order to ease the access to higher education studies to those that can not assist regularly to face to face courses in the university.
Actions	To offer the complete degree in psycho-pedagogical studies online, progressively incorporating both of its courses into the online context. (I.6.1.1)
	To constitute a unit responsible for the implantation and maintenance of the technical systems on which our distance education is based. (I.6.1.2)
	To establish common actions with national and foreign organisations in order to offer online or blended degrees and courses. (I.6.1.3)
	To update the university’s provision of distance education working on already existing f2f degrees as well as on new degrees and postgraduate degrees previously carrying out the necessary evaluation of feasibility. (I.6.1.4)
	To negotiate the contracts with the local public administration in order to create multimedia rooms that support distance teaching and learning. (I.6.1.5)



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Strategy 2	To use the ULPGC's virtual campus as a support platform for f2f teaching and learning that takes place in the university itself.
Actions	An impulse to the creation and the dissemination of pedagogical projects, courses and teaching plans of every centre and department via the university's Web in order to homogenize their presentation and facilitate the access to them. (I.6.2.1)
	Creation of a model for instructional design in order to coordinate and promote the creation and updating of contents on the course's Web pages and the teaching/learning process that is carried out in the classrooms and laboratories. (I.6.2.2)
	To open new online programmes for optional courses and courses of free configuration. There is a strong demand for this kind of courses. To offer them online makes it easier for students to complete their training without having to commute between different campuses. (I.6.2.3)

Apart from this, the Strategic Institutional Plan ULPGC mentions another important point within objective nº 2 of the strategic axis IV:

To promote the degree holders' entry into the working market contributing to their loyalty towards the university and to promote the continuing training of professionals developing strategies that meet the needs identifies in different contexts of society, economy and public administration.

This results in the strategy II that leads to the creation of the "Centro de Formación Continua ULPGC" (Centre for Continuing Training) and to an impulse of the training activities that cover the needs of different sectors and social groups. This continuing training is defined in the following way:

Programming, execution and monitoring of a set of institutional training programmes that are carried out either in a f2f context or via the Virtual Campus ULPGC. These programmes have a wide range and are structured in a coherent way around issues that meet particular needs of training in the most important market niches and activity sectors. (IV.2.2.2.)



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4. How has online education been followed up by evaluation and research and how has this contributed to your success?

Every year we hold workshops in which we debate and present our experiences, as well as meetings where we evaluate each course and the impact of the improvements that have been undertaken. At the same time we participate in national and international congresses where we analyze our model. The courses and the applied innovations are subject to evaluation through surveys carried out among teachers and students. The results of these surveys are published.

Technical issues

5. How would you describe competence in information and communication technology in your institution?

Competence is very high. We have a very strong team of technicians specialized on our own technical developments. At the same time we have created an own enterprise "ULPGC-TIC" (ULPGC-ICT) that has even started receiving contracts for external developments.

In addition there is the "Plan de Sistemas y Tecnologías de la Información y las Comunicaciones ULPGC 2003-2006" (ICT Systems and Technology Plan ULPGC 2003-2006). Although the strategic planning of systems and technology is not very extended in private enterprises and Spanish and European universities we are very conscious about the fact that the competitive position of each university in terms of quality and economic stability depends on the way it reacts towards technological revolution.

Due to that, the first operative plan derived from the Strategic Institutional Plan 2002-2006 is designed with the aim to define and implement a set of objectives that work as a platform on which the institution's activities on systems and technologies for the period 2003-2006 can be organized.

The actual task is to define the identity and the philosophy of the ULPGC's area of systems and technology, to determine what it is and what it wants to be, seeing it's "mission" in the provision of a stable, productive and efficient ICT environment that is able to facilitate teaching, research and services for the university community and the whole society while it supports the processes of knowledge management. ¿What is the future state that this area wants to reach?



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In our "vision" we want our institution to be among the best universities of the country regarding the area of Systems and Information and Communication Technologies, comparable to those universities of the context that are a reference. We want it to be innovative in its day to day activities, promoting the information and knowledge society within its environment.

We would like to mention some conclusions that have been reached in the analysis DAFO carried out by our institution through a context analysis (threats and opportunities) and the internal evaluation of the area (strengths and weaknesses) and that might be of interest for the present study:

- Within the field of systems and technology we would like to point out as a socio-cultural variable under "opportunities" *the implementation of the ULPGC in its geographical territory that guarantees the success of distance learning, blended learning and the support of traditional f2f scenarios (O.S.1)* keeping in mind that those universities that are well implemented in their area, like the ULPGC, can use ICT for the winning over the students offering them a combination of advantages inherent to f2f as well as distance education.
- In our own internal structure we keep in mind both teaching variables as "strengths" due to the *integration of the use of ICT in the teacher's and researcher's day to day activity (F.D.1.)* and the *existence of re-equipment plans (F.D.2.)* in order to equip the computer rooms with PCs of free use for every student, facilitating access to about 1000 computers of the last generation between 1999 and 2002. Moreover, another variable worth to mention can be found in the chapter about technology and available resources where the ULPGC is identified as an institution occupying a *competitive position in technology similar to the rest of the country's universities (F.T.1.)*. This means that the ULPGC holds a technological situation similar to the rest of the Spanish universities, especially the ones of similar dimensions in terms of number of students and personnel.
- And finally we would like to mention as a "weakness" in our internal structure the *lack of training and the low efficiency of the existing training system (D.T.1.)*, pointing out a poor training situation among teachers, students and the administrative staff.



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As a consequence to the reality identified through the DAFO analysis, the plan "STIC" defines the four strategic axis (teaching, research, management and services to the academic community, as well as technology and available resources) which determine the 12 objectives to be reached through 60 different action plans for concrete actions to be carried out during the process of implementation and following up of the strategic plan. Furthermore the priority of each of these plans is specified as "high" (1), "medium" (2) and "low" (3). In addition to that there is the definition of the foreseen deadlines and of a set of indicators that allow measuring the level of fulfilment of the actions.

Of special interest for the present study are the following three objectives that can be defined as institutional challenges within the strategic axis of "teaching":

Strategic Axis I. TEACHING	
Objective I.1.	To support the massive incorporation of ICT in the teaching activities offering alternatives to the learning processes.
Actions	1. To promote changes in the ULPGC's pedagogical model in order to enable the massive incorporation of ICT in the processes of teaching and learning.
	2. To improve the university's equipment progressively and in collaboration with the different centres in order to cover the needs in ICT and give priority to the classrooms for CBT.
	3. To progressively guarantee the technical assistance in the field of multimedia content creation and in the use of ICT in the classroom.
	4. To reach training contracts with prestigious brands in the field of ICT in order to carry out specific teaching in pre- and postgraduate studies.
Objective I.2.	To introduce the ULPGC into the market of distance teaching and learning with high quality products.
Actions	1. To guarantee that the ULPGC's public servers (Web, mail, online teaching platform etc.) offer permanent access from outside the institution.
	2. To create a special unit responsible for distance education management.
	3. To select the online learning platforms.
	4. To define online support to f2f courses.
	5. To define the degrees that are going to be offered as distance courses.
	6. To train teachers so that they are able to introduce contents, use the environment's tools and apply the necessary teaching methods.
	7. To promote the online version of the postgraduate programmes.



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Objective I.3.	To ease the student's access to the ICT
Actions	1. To administer entirely and homogeneously all computer equipped classrooms.
	2. To adequately equip the computer rooms dedicated to the students.
	3. To reach contracts with public organizations in order to facilitate financing of the student's access to ICT.
	4. To design a plan for courses of open configuration with ICT.
	5. To evaluate possibilities of using wireless technology in order to make access possible for students using their laptops.
	6. To create a hotline for students facilitating the solution of problems or incidents.

- 6. To which extent are e-learning courses in your institution based on widely used technologies that can be taken into use by students without requiring them to buy additional hardware or software? (in addition to what they have from before)**

Our distance learning platform is based on MOODLE, a free license platform that can be used without major equipment. The only tools needed are a basic computer and an Internet connexion.

- 7. How would you describe the integration between different IT-systems that are involved in e-learning in your institution? How has this contributed to your success?**

All aspects related to the information and communication systems are integrated under one single service. There is one single access code to e-administration, to e-mail and to the virtual campus. Actually the e-administration and the e-mail service were there before the implementation of e-learning. Therefore the latter was integrated into the earlier systems.



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8. What are the strengths and weaknesses of your e-learning administrative systems (from enrolment through delivery to certification)?

Our main weaknesses have to do with the fact that we are originally a face to face university and the administrative systems have to learn how to work without having the user in sight. At the same time the user has to learn to carry out all necessary actions without necessarily having verbal or direct contact with anybody.

Nevertheless it can be considered strength that there are strong computing systems that supported e-administration even before the institution started its distance learning program. These systems were created for on campus students which meant a real step forward regarding the requisites of distance education and administration.

Courses

9. Which types of subjects are covered by online education in your institution and what is the relative importance of different subjects?

All the subjects, from graduate studies to continuing training for our staff, all including courses for open study configuration, own degrees in the field of graduate, postgraduate and doctorate programmes, academic extension courses and lifelong learning. Over 50% of our postgraduate and continuing training programmes are online. Face to face graduate and doctorate programmes reach about 10% of our students.

10. How would you describe the “onlineability” of the subjects your institution has chosen for e-learning?

We know that all kinds of teaching can be done in a distance teaching and learning context. We chose for this purpose those studies and types of knowledge that are especially liable to being transmitted and acquired online. These are basically studies related to social sciences, business, law and education. To a lower extend we offer biomedical sciences and technical courses in the context of graduate programmes, but these reappear in the context of postgraduates.



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11. Do the online courses provided by your institution have flexible start-up and progression?

Very rarely. Our distance education offer follows the same patterns as the classical f2f education which is why start-up and finish are clearly defined in advance.

12. What is the role or importance of synchronous and asynchronous communication between students and teachers and among students themselves?

Most communication is asynchronous. Synchronous communication is optional and has more of a social function rather than an academic one. Only the language courses where teacher and students have to speak and see each other, synchronous communication is required at some moments.

Management, strategy and attitudes

13. How would you describe involvement from the institution leadership in terms of being supportive, and how has this been important for success?

The involvement is complete and is reflected as such in the different strategic plans. It is entirely conducted by the highest institution and is not an experimental situation created by a group of interested teachers.

14. How would you describe the attitudes of the different groups of staff towards online teaching? How has this affected your success?

Attitudes are very much in favour of distance education. Our success in the field is considered a personal success by every person implied. The majority of the teaching staff (800 out of 1500) actively uses the same platform in order to enhance their f2f lessons.



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15. Does your institution have a strategy for online education? If yes, what is (briefly) the content of the strategy and how is it followed up by employees in your organisation?

In the ULPGC's Strategic Institutional Plan 2002-2006, the university fixes as objective 6, Strategic axis I (teaching):

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16. How does your institution deal with quality issues related to online education and has quality contributed to success?

All courses offered through our distance education programmes include materials that have been produced previously following a special guideline to guarantee a recognizable layout. These course materials are the base of our offer and without them it is not possible to start the course. In the past years, counting only the graduate studies, we have designed and edited over 100 handbooks, one for each course. These handbooks are also used by students that are enrolled in f2f courses.

17. How would you describe the effectiveness of your administrative routines in online education?

E-administration is a consolidated part in our organization. More than 99% of our on campus students inscribe themselves over the Internet. The rest of routines, for example the applications for the homologation of credits in open configuration contexts are more and more done via Internet.

18. To which extent do teachers involved in online education have predictable and manageable workloads?

Teachers are not obliged to work in distance learning. If they do so, they get an economical compensation.

19. To which extent does your institution collaborate with other educational institutions and how has this affected success?

There are not many traditional universities with such a big distance education programme based on online teaching. Nevertheless we belong to the national association of universities that use MOODLE and we keep frequent contact.

In our autonomous community we have developed a similar learning platform to be used by the educational administration in secondary schools and the continuing training of the teaching (and non teaching) staff.



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- 20. How would you describe the credibility of your institution (both formal and informal) with the government and public administration and how has this been an important criterion for success?**

The Canarian university system has not yet taken a clear decision in favour of online education. Our university had to charge all the costs on the students and we did not receive any additional financial support for off campus education. The support by government and public administration has therefore not been essential for success.

- 21. How are you able to handle the large number of online courses and students?**

The teaching platform based on MOODLE, our own developments in e-administration and the powerful ICT service of our institution makes things relatively easy. All this and the strong demand for off campus education in an intermittent territory like ours and the strong institutional support given by management practically guarantee a successful result.

Economy

- 22. How would you describe the cost-effectiveness of online education in your institution? How has cost-effectiveness affected success?**

Although we are a public university, the price for distance education runs on a private basis. This means that the student pays 100% of the costs. It is essential to avoid losses and the prices cover or are slightly above the costs. This cost-effectiveness allowed us to accept new challenges every academic year.

- 23. To which extent is income from operation of online education stable and predictable?**

Income is stable and predictable because every year the number of students grows while the costs for material production, for example does not grow.



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24. To which extent does your institution experience pressure to be flexible to be able to adapt to a changing market?

It is true that we experience certain pressure to adapt to a market that is in constant development. We do all we can to fulfil these requirements and a prove for this is actually our effort in online education as a response to real needs, as for example the claims for better access to the university for the inhabitants of the peripheral islands that do not have an own campus, expressed by the representatives of the smaller islands of our archipelago who are members of our Social Council.

In the same way, our postgraduate studies, including the off campus branch, changes every year according to an evolving market. The postgraduate programmes have to be financed by external income and if that's not possible or cost-effective, the programmes do not take place. This means that the "market" decides which courses are going to be carried out at the end.

25. To which extent does your institution apply a strategy of flexible employment and use staff to adapt to changes in markets?

As a public entity we are not entitled to contract personnel. We rely on our teaching staff but only on those who is prepared to accept the requirements of distance education. At the same time we offer incentives for this kind of work.

Other Factors

26. What other factors have contributed to sustainability, robustness and the achievement of critical mass in your institution?

- Being a young university created on a strong social demand.
- The need to reach the level of the more veteran universities as quickly as possible.
- The opportunity of not having to make the same mistakes as the other ones.
- The fact of not being tied to a consolidated team.
- The fact of being located in an intermittent territory (islands) with the need of distance education.