

¿Is a Latin American Common Area of Knowledge Possible? An academic innovation model based on the experience of the Private Technical University of Loja, Ecuador (UTPL)

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Abstract

Today's universities are directly responsible for the production, distribution and transmission of knowledge. For this reason, they are often considered to be vital instruments in trans-national systems. Moreover, the new social, economic and political structures in society demand significant changes in university management. These changes can be summarized as follows: innovation; new mechanisms in knowledge production; improved interaction among universities, enterprises, governments, and society; finance agreements; accreditation systems; training programs adapted to the needs of society; skilled professors and researchers; the usage of Web 2.0; university applied research; accountability strategies, etc. Further, it includes the implementation of a Common Area of Higher Education. Subsequently, Latin America and the Caribbean (LAC) and the European Union (EU) made a joint commitment to participate in the construction of this common area, which is expected to be ready in 2015. The creation of a common area is, indeed, an audacious task. Moreover, if completed, it would signify both a qualitative and quantitative leap in the development of Latin American and Caribbean countries. Therefore, Latin American should be prepared for this change. One way of preparing for this change is to create university models that include a variety of elements, namely those which reflect a quality university in the 21st Century.

Key words

ALCUE, ECTS, UTPL, university credits, training professionals/trainees, university prospective.

Introduction

“The entire object of true education is to make people not merely to do the right things, but to enjoy them; not merely industrious, but to love industry; not merely learned, but to love knowledge; not merely pure, but to love purity; not merely just, but to hunger and thirst after justice”

(John Ruskin/ British Sociologist)

Today we question everything, including the role of universities. We therefore require a true ‘Alma Mater’ that keeps the quest for knowledge alive. Above all, though, the

university should harness its strengths to form pure hearts and minds and establish a commitment with nations, society, and the future. It is a complex task considering the limitations that exist within the sphere of Latin American universities. However, at the same time it is a task that the university has to fulfil on all levels. For this reason, we have taken up the challenge of being part of the development of a Latin American Common Area of Knowledge (ELC) by adopting and adapting a model based on the European credit transfer experience (ECTS). Elements from our own university experience have also been incorporated into this model.

What do we hope to achieve with this model?

- a. Achieve academic mobility of students
- b. Add value to learning – both inside and outside the classroom
- c. Improve reading indexes
- d. Empower students in the learning process
- e. Change the teacher paradigm: from knowledge source to facilitator
- f. Provide training based on professional skills
- g. Link students to research incubators and professional practice areas.

1. The ALCUE Common Area of Higher Education (Latin America – The Caribbean- the European Union)

1.1 The European Integration Experience and ECTS

The European Union (EU), which initially had a strong economic focus, fostered the creation of a ‘Knowledge Society’ by promoting a movement that was geared toward the development of the European Area of Higher Education (EEES). Furthermore, it aimed to achieve the highest level of student training and facilitate their integration into the labour force. At the same time, however, it also enabled the recognition of academic titles. Some of the key action lines that can be mentioned are the student mobility programs (SOCRATES/ERASMUS)¹ and the Declarations of Sorbonne (1998), Bologna (1999) and Prague (2001)².

One of the main problems of European Education has been the lack of effective procedures concerning the recognition of academic studies. This situation has also impeded the development of a real cultural exchange. As a result, there arose a need to find an adequate system for providing academic titles that had their equivalents in other systems. In addition, there was a lack of recognition in terms of academic studies. Consequently, the European System for Credit Accumulation and Credit Transfer was established (ECTS)³.

¹ Taken from http://ec.europa.eu/education/programmes/socrates/erasmus/what_es.html

² Taken from <Http://www.mec.es/universidades/eees/index.html>

³ Taken from Http://ec.europa.eu/education/programmes/socrates/ects/index_es.html,
http://www.aneca.es/modal_eval/docs/doc_conv_aneca2.pdf.

Raffaella Pagani in a Technical Report: European Credit and the Spanish Education System, states that “This system is comprised of a practical code that provides mechanisms to guarantee transparency and facilitate academic recognition via the usage of credits. It also includes the organization of suitable programs; it is based on the volume of work done during the study period”. It consists of a system that is centred on the student, which measures the amount of time that is necessary to fulfil the objectives of the study program. These are specified in terms of learning results and the skills that have been acquired.

The workload required to complete one year of studies at a university under the ECTS system includes professional presentations; lectures; seminars; practicum (both on and off campus); fieldwork; personal study (library work, work done at home); an end of term project, as well as exams and other means of assessment. ECTS is based on the total volume of a student’s work, but it is not exclusively limited to the number of contact hours taught

1.2 An Overview of Ibero-American Integration

The UNESCO World Conference on Higher Education (1998) and the Summits of the Americas (1998, 2001) are events that repeatedly refer to education as the spinal cord of development for our countries. With this in mind, it has been observed that the quality of teaching and research in developed countries has been growing in relation to the least developed countries. During the 1999 Rio de Janeiro Heads of State Conference that was assisted by representatives from Latin America, the Caribbean and the European Union, an initiative was set up for the creation of the ALCUE Common Area of Higher Education. This project sought to create a platform for interaction and to facilitate bilateral and multilateral collaboration among various Higher Education systems. Within the context of ALCUE, Higher Education is seen as a public good that is essential for human, social and technological development. In addition, it is considered essential for overcoming inequality among peoples, educational institutions and national societies. It also facilitates the process of interdependence.⁴ It is therefore considered important for university governors to cooperate and participate in the construction of this common area. Moreover, it will foster social exchange between countries and contribute towards a more equitable development within society, especially on a global level.

Another important consideration is the creation of the Ibero-American Common Area of Knowledge (EIC in Spanish). The EIC has been mentioned in several recommendations and mandates of various Ibero-American collaboration documents over the years. In fact, it has existed since 1990. The collaboration documents in which it has been referred to include declarations from the Summits of Heads of State and Government that were held in Bariloche (1995), Panama (2000) and Lima (2001). Moreover, in 2005 a commitment was made towards the creation of the Ibero-American Common Area of Knowledge (EIC) in Salamanca, Spain. During the Ibero-American Summit of Heads of State and Government, which was held on November 5, 2006, the Declaration of Montevideo was signed. This document, which highlights the development of the EIC, states that the Ibero-American Area of Common Knowledge is “geared towards the required transformation of Higher Education and is centred

⁴ Taken from <http://www.alcuc.net/uealc/portal/main/>

on research, development and innovation”⁵.The signing of this document subsequently motivated Ibero-American leaders to create an academic mobility system for professors and university students. Moreover, it was to be based on the European experience, namely the European Common Area of Higher Education (EEES).

Within this context, we have developed an academic management model that responds to the expectations of the Ibero-American Summit of Leaders. Above all, though, it is a straight-forward, uncomplicated and real response to society’s needs in general. Moreover, it can facilitate the creation of university models in Latin America, namely where teaching translates into learning for students (those who are planning to join the workforce), and where countries with a skilled labour force have full time professors with doctoral training experience. In addition, the model includes research of basic problems in society, thus providing solutions to real-life problems. Finally, university extension is reflected in job offers, which is a direct result of the various types of business incubators that have been created.

2. Ecuador’s Contribution to the construction of the Alcuve Common Area of Higher Education

2.1 The Current Situation of Higher Education in Ecuador

As we have mentioned in our previous work, Higher Education processes in Ecuador are traditionally known for being more centred on teaching than on learning, where the student takes on a passive role in his or her training. In the traditional model, the student is a spectator in the learning process and does not always grasp new concepts easily. As a result, the student has very little interaction with science outside the classroom.

One of the main characteristics of the national and Latin American university reality has been the difficulty in recognizing academic studies and academic titles (Romero Luis, 2011). Universities design their academic programs in such a way that that their international recognition is impossible not only on an international level, but also on a national level too. The lack of confidence in the quality of Higher Education, the arrival of new universities, new academic offers and new titles have led to a situation where academic immobility has been stifled. Indeed, there are very few Ecuadorian and Latin American universities whose students can continue their training at an international university without going through arduous and long processes of academic convalidation. In light of this reality, we should, according to the Declaration of Montevideo, “view” experiences such as that of Europe.

The creation of the Euro-Latin American Common Area of Higher Education is directly related with the commitment of Higher Education institutions in the region, that is, in adopting and adapting the ECTS European experience using a common system for the

⁵ Taken from XVI Cumbre Iberoamericana, Montevideo, 2006. www.xvicumbre.org.uy

accumulation and transfer of academic credits, i.e. for Higher Education Institutes from Latin America and the Caribbean (SICA_ALC)⁶.

Each country will develop the relevant legislation via its institutions. In the case of Ecuador, it is CES (National Board of Higher Education). This higher education body is responsible for developing a proposal for regulations in accordance with the signed agreements in the Ibero-American Summit of Leaders. However, one should always keep in mind that the recognition of academic studies and titles is a first step in achieving the Ibero-American Common Area of Knowledge.

The success of this initiative will depend on the way in which we develop university management models, i.e. by demonstrating that it can be done within the time frame and within the set conditions and budgets of the universities.

2.2 UTPL's Academic Model

As a Catholic University, the Private Technical University of Loja bases its educational philosophy on the principles of Christian Humanism and the rights of man. Its academic model is centred on training not only professionals, but also individuals – so that they may have a well-rounded education in core values, give back to society, and live happy, fulfilled lives.

Based on this model, we aim to contribute to a more just society, by providing equal opportunities for everyone. We earnestly seek to train students who are capable of developing a vision for the future, who have both an excellent team spirit and an aptitude for leadership and management. Their flexibility and Socratic humility will thus enable them to succeed as professionals.

We therefore wish to support the construction of the Common Area of Ibero-American Knowledge and also form part of the ALCUE Common Area, by presenting our institutional proposal. This proposal is fundamentally based on three key strategic aims:

The consolidation of our academic and research models, thus adding value to the activities that we carry out as a university. We aim to prepare students for autonomous learning, i.e. where the professor manages a student's development by forming skilled, critical and creative students who are responsible for their self-development.

The management of flexible curricula that are based on key skills. These skills integrate knowledge, abilities and aptitudes that the student has acquired in and outside the classroom.

⁶ Taken from 6x4 UEALC project, www.6x4uealc.org

Strategic positioning in a globalized context - thus maximizing the potential of: an inter-disciplinary ethos, usage of foreign languages; teacher and student mobility; and the management of shared accreditation systems.

UTPL offers training that is centred on skills, i.e. using the Tuning project as a reference⁷. The training programs include generalized contents, i.e. where the teachers' efforts contribute to an improved and multidisciplinary HE, thereby leaving open the possibility of postgraduate training. This last stage is where the students' academic and research activity becomes more specialized.

To add value to the activities done by students, namely acquiring and developing the necessary skills for their professional development, it was decided that we should base our model on the ECTS credit system. We coined the term UTPL-ECTS credit to define the unit of measurement of a student's work in and outside the classroom, which is equivalent to 30 hours. Included in this figure are the hours worked outside class, such as attendance at off-site seminars, personal study, exam preparation, exam sittings, productive management activities, academic stays, extra practicum, laboratory practice, research work, and the usage of virtual learning tools and so on. Our training programs provide 300 credits, which include an average of 30 credits per semester, and approximately 45 hours of study time per week.

Teaching Innovation Tools

Our model includes:

Teaching Plan for the Course: This is like a map for the course; it reflects the general guidelines that will be used to teach the course. It is designed according to the student's needs. In other words, the student is the protagonist of his/her learning. In the teacher's guide, you can find specific themes such as the objectives, skills, contents, activities, as well as the methodology that is to be used. With this plan, the teacher is able to structure the contents of the course and plan the estimated time of the activities in and outside the classroom. In addition, it sets out the indicators and the continuous evaluation percentages for the course. For this reason, it is considered an indispensable work tool both for students and professors.

The Virtual Learning Environment: This is where the student-professor-knowledge-technology link is established. Ever since UTPL implemented the Virtual Learning Environment (EVA in Spanish) as technological support, it has been able to compete in quality education. Its results are directly related to the usage of various tools from this technological platform. EVA is used as a virtual platform that is linked to real teaching; it is a tool that enables professors and students to recreate the learning experience.

⁷ Taken from http://ec.europa.eu/education/policies/educ/tuning/tuning_es.html

[Http://tuning.unideusto.org/tuningal/](http://tuning.unideusto.org/tuningal/),

Each subject has its own virtual classroom: This enables professors to provide students with academic assistance, extra tuition, and also send assignments electronically and share information. All our students have access to this electronic tool. They can use the EVA to obtain information about their course and also view their grades. In addition, they can keep in regular contact with their professors.

Free Study Period: These are specific periods during the week that have been set aside for activities such as seminars, conferences, fieldwork, etc. During the course of the academic cycle, academic directors, professors and students may exchange information and resolve queries, i.e. with the aim of maintaining ongoing contact.

Basic Text Book: This is considered an indispensable tool in that the student can become the protagonist of his/her learning. Since the September 07- February 08 academic cycle, UTPL has taken on the responsibility of providing all students with the bibliographical material that is required for their course.

Personalized Tutoring System: Considered a support element in the learning process. In this way, the professors may provide students with direct help in developing skills, and also help improve their academic performance. Furthermore, with the tutoring system, personalized guidance is provided, which helps with their integral training. All UTPL professors are responsible for holding weekly tutorials. This depends, however, on the number of credits they have to teach. By establishing direct communication, students can improve their skills, work on their weaknesses and receive assistance in taking important decisions that affect their professional development.

Web 2.0 Academic Use: The importance of this new philosophy is rooted in the belief that we have everything we need to share our information, experience, knowledge with others (1.100 million users connected to the Internet). The aim is to achieve combined creativity, collective intelligence, and form more established robust and solid participation architecture with respect to our chosen field of science.

By maximizing the usage of ICTs, we are able to enrich our experiences of the teaching and learning process. Knowledge Management was created at UTPL with the aim of developing and supporting a university environment, namely to share and create knowledge for the benefit of our society. All our professors receive permanent training concerning the usage of the tools available on the Web such as blogs, wikis, slideshare, YouTube, del.icio.us etc. In sum, the entire teaching community is beginning to use these tools and is able to interact with each other, and enjoy the benefits of Web 2.0.

Linking students with research incubators and professional practice areas this implies linking professors and students within contexts other than the traditional classroom. In practical terms, it means establishing closer ties with applied research and developing relationships with the student's professional environment.

Leadership Issues for the University Professor

The UTPL-ECTS academic module implies a conceptual change that affects both professors and students. As a Catholic university, our aim is to establish real university professor leadership. This is the reason why we work with professionals that have the difficult challenge of being facilitators of knowledge. These are the people whose commitment, honesty, responsibility, team work and other values contribute to the “training and development of man through science, so that he may serve society”. A professor who manages the learning process acts as a kind of student assistant. In addition, he or she guides the student trainee in improving skills that aid their professional self-development.

The professor does not repeat course contents; he or she is responsible for developing a professional student’s aptitudes, skills and abilities. One should remember that university students should learn how to learn, and that professors should guide the student’s learning process.

At present, there are approximately 180 UTPL students who are taking doctoral courses at foreign universities. Below are some examples of the universities with which we have formed collaborative linkages:

The Polytechnic of Madrid: Alcalá de Henares University; Antonio de Lebrija University; the University of Cordova; The National Distance Education University of Spain; Granada University; the Open University of Catalonia; the University of Tubingen; the University of Dresden, and so on. Having a critical mass of researchers not only facilitates the development of science, but also increases relationships with internationally recognized research teams. Moreover, it helps to develop a teaching role that is based on the actual training experience of the professors as opposed to simply providing a bibliography of references. It is also an opportunity to elaborate a research culture that involves professors, students and society.

Production Management: Linking theory with practice

The UTPL model, which is based on Production Management, is a transversal aim of the university curriculum that revolves around three basic functions of the university: teaching, research and extension. A major part of these activities is carried out at research incubators which we call CITTES (Research, Technology Transfer, Extension and Service Centres). This is where students and professors work on real-life projects. We are convinced that our students will be able to integrate into the workforce as a result of doing these projects. For this reason, teaching the business world with only a whiteboard will not suffice in the long-run. Learning goes hand in hand with hands-on practice. For example, our engineering systems students do not obtain the necessary skills to develop software in the classroom. Our students carry out their practicum, which are known as Production Management, at the Information System and Project Units (CITTES-UPSI). It is here that various professors form

a team of professionals and develop software for external organizations. In addition, there is a rota of activities in departments such as software development, technical support, networks and telecommunications etc.

FIGURA 1: Modelo Académico UTPL



The CITTES are equivalent to what in many universities are called departments, laboratories and institutes. In general, these are inter-faculty departments and are defined by topic or field of knowledge. However, in the case of CITTES, the relationship with the environment/ society is a major consideration. Furthermore, applied research is also an important factor in this process. As a result, the transfer of science and technology via extension and service activities is made more viable. In the same way, students can participate in real projects by means of applied research and also help solve real problems in society. When the student has completed his or her academic studies, he or she graduates with having gained direct and practical experience in his/her chosen field.⁸

3. Conclusions

We cannot be a university tomorrow, if we are not a university today. For this reason, we are faced with a major challenge (Delors, 1996). The challenge is to maximize our knowledge of science and solve its key problems. This can be achieved by stimulating the intellectual curiosity of our students and professors, namely those whom we should impart critical thinking skills. This should enable them to discover different options when solving problems. Furthermore, by developing an individual sense of judgement, they are able to fulfil the ultimate aims of higher education, namely those which gave rise to the origin of the university: to seek truth and form man by means of science, so that he may serve society. In our particular case, this vision comes from Christian Humanism.

⁸ For further information about research incubators and collaborative doctoral programs, please visit the following website: www.oui-iohe.org/encuentroincubadoras2008

The joint responsibility of the entire university community in this process enables us to reflect on the contribution that each subject has made to global profile of degree titles. What's more, it encourages us to analyze a student's work in relation with the actual time that is available. Further, it is an incentive to work with a common vision that is centred on the convergence of Euro-Latin American Higher Education. Our model is a major challenge as an institution.

We believe that Latin America, Ecuador and the Private Technical University of Loja are currently facing a social and cultural change. Universities should be aware of the challenge, and carry out their teaching and research duties within a new framework- i.e. where the harmonious development of a Common Area of Euro-Latin American Education is a possibility for the future, and where each student is responsible for building his/her future.

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