# CHALLENGES, EXPECTATIONS AND REALITY: THE ADAPTATION OF A GEOGRAPHY DEGREE TO THE EUROPEAN HIGHER EDUCATION AREA

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## **Abstract**

After the Sorbonne Declaration, the idea of a European Higher Education Area was launched, and universities have been pushed into a restructuring process with a strong emphasis on quality and excellence. In Spain, the focus on graduate employability impelled academics and professionals towards the formulation of a White Book on the state and the future of Geography in Higher Education (2004). This has been a useful tool concerning the general debate on the design of new university degrees within European regulations. This was the case at the department of Geography at the Autonomous University of Barcelona (UAB), where a three-year pilot program was undertaken, aiming to test the Bologna system before setting up and validating the new degrees. The outcomes of the White Book and of the pilot experience, proved to be very useful. The academic year 2009-10 began with a new Bachelors degree course in Geography and Regional Planning, a Spanish adaptation to European (Bologna) regulations. Although the short time that has elapsed since then makes it difficult to undertake a full evaluation of the process and reflect on its outcomes and impacts, the whole issue of reform is raising controversy leading to the reluctance to initiate further change, due mainly to the lack of internal debate about the process of change that apparently seems to be a response to global economic demands rather than academic ones. This paper analyzes the impact of the process in Spain, and specifically, in the Geography degree at UAB.

Keywords: Geography, European Higher Education Area, Bologna, Spain, Autonomous University of Barcelona

# 1. SPANISH GEOGRAPHY ON THE WAY TO CONVERGENCE: A COMPLEX PROCESS

The document *Towards an open European area for Higher Education*, or *Sorbonne Declaration*, launched the European Higher Education Area (EHEA) as a key element to promote citizens' mobility and employability, and the continent's overall development (Bologna Declaration, 1999). The initiative, followed by the joint declaration of the Ministers of Education in Bologna, is considered to be the starting point for the integration of all European graduates in a single labour market (European Commission, 1999). For universities, it meant a challenge to face new needs and demands. In short, it was addressed to the

achievement of the Lisbon Summit aims (European Commission, 2000) to become a competitive and knowledge-based economy at a world level. At that time, the competitiveness of European universities was said to be smaller than it should have been (European Commission, 2003).

Since 1999, European universities have been facing a restructuring process with strong pressure placed on their quality. Research, innovation, transfer and diffusion of knowledge have been the fundamental base of the reforms; the free mobility of students, teachers and staff as well as the use of new technologies and lifelong learning activities are its main strategies. All these changes place the emphasis on the employability of graduates. For decades, university degrees have been a passport for success in the professional world because of the selective character of higher education. The last thirty years has brought an increasing number of students to universities in Europe. This led to the threat of falling standards, and a reduction in the acquisition of deep competences within a specific field and related to the ideals of a university education firmly rooted in the European tradition. In Spanish universities the new model represents also a dramatic shift in learning and teaching approaches as they have transformed structures from the monolithic model in which, in general terms, the transmission of knowledge had predominantly been in teacher's hands. The new scenario demands new competences and skills, which means that students have to assume an active role in the processing of information and the teacher becomes a facilitator in the learning process (Noguera, 2004).

The first consequence of the 'Bologna Process' has been an adaptation of curriculum, to create a structure of studies based on the definition of graduate's competences, a complex and difficult negotiation. These changes have not been introduced without discussion (Novoa and Lawn, 2002; Noguera, 2004; Tomusk, 2005). The nature of 'university' and its objectives in the context of current global system needs, have had to be redefined, though university courses should not only be an automatic answer to the demands of the labour market. A balance should be sought between development of knowledge and professional skills and competences. The university should keep its fundamental role as the place where research, intellectual debate and critical thinking sustain the creation of knowledge. The university is not a business (Delanty, 2001) but in recent years, it has become perceived as more and more legitimate as a result of economic development and through private funding, as expressed in Lisbon Convention (2000). In this strategy, there does not seem to be room for other models based on ideas of popular education and egalitarianism (Halvorsen and Nyhagen, 2005). The Bologna Process indicated rapid changes in a short time, but it could be argued that it largely represents an external force for internal reform.

The pressure to "fabricate a European workforce" (Novoa, 2002), increased criticism of the reforms in Spanish universities. The reluctance to change should not be considered as simple resistance to changes; on the contrary, they have been criticisms of the objectives of the reform, underlining the weak points of a process that seems to be more committed to the employers' interests than concerned with intellectual activity itself. Larsen (2006) raises questions such as 'What is the real objective of a bachelor degree? Is it a launching pad for further Masters specialization? Who is gaining from this process, and at whose expense?'. To this end, the survey developed by the European University Association and carried out in sixty two European universities, concluded that although there was a general agreement on the need for reform, this agreement was far too general when talking about how to implement it (Reichert & Tauch, 2005).

The introduction of the new structure has not been easily accepted either by staff or students, and radical positions have blossomed in many Spanish universities, especially in Barcelona and Madrid, where the academic life in some faculties has been disturbed or interrupted for weeks in 2009 (García, 2009; EFE, 2009; Playà, 2009; Chávarri, 2010). The

arguments against the process of change also focus on the lack of internal debate and the weak participation of the main stakeholders involved in the debate (staff and students) to redefine the role of universities. On the contrary, it has been perceived by many to be the pressure of the global economy on the European Higher Education Area, through standardization and against diversity (Kwiek, 2001).

This paper analyses the impact and development of the Bologna Process in the Geography degree at the Autonomous University of Barcelona (UAB). It describes how the route to convergence has been a complex process of six years of work that has produced a White Book on the state and the future of Geography in Spain, a pilot experience and the final creation of the new Bachelors degree in Geography and Regional Planning.

## 2. WHAT KIND OF GEOGRAPHY FOR FUTURE GEOGRAPHERS?

In 2003, the launching of the Bologna Process provided the opportunity for research aiming to formulate a White Book on the state and the future of Geography in Spanish Higher Education. The global aim of the study was to gain a deeper insight into the current situation and to provide the foundations for a common framework for all Spanish Geography degrees, by looking at other experiences in Europe. The project, funded by the *National Agency on Evaluation, Quality and Accreditation (ANECA)*, involved all twenty six Geography departments in Spain and the main professional subject associations, under the leadership of the UAB and the University of Valencia.

The initiative coincided with the launching of the Tuning survey by the HERODOT Network (Donert, 2007). Both projects have been closely related as their aims were to establish a common, agreed basis for general and specific competences in Geography, taking into account the opinions of the main stakeholders (univeristy teachers, students and employers). The work, ambitious and difficult, consisted of three parallel actions starting with an analysis of all Spanish geography degrees (their academic organization, curriculum content, evolution of numbers of students ....) and the evaluation of the generic and specific competences given to learners by the curriculum at that time. The second action focused on the study of other European Geography degrees (United Kingdom, Italy, France, The Netherlands and Portugal). The third one consisted of the development of a survey addressed to academics and professionals to create a definition of the main professional profiles produced through Geography. The main outcomes of this research were used as the basis of a new common curricular framework for all the Spanish departments (Tulla, 2004).

# 2.1. The definition of professional profiles and competences

The main research instrument was a questionnaire survey, designed to gather the opinions of all sectors involved in Geography. The starting point was based on the following questions: What kinds of jobs are Geographers doing and how will it be in the future? and, What kind of training do Geography students need to be able to work in these jobs? From this analysis, six different professional profiles were established (see Table 1) and the survey, adapted to these profiles, was sent to university teachers, employers and former students (who had graduated more than five years earlier and also to those recently graduated).

Questionnaires were collected from all Spanish departments providing a total sample of 417, from which, 50% of respondents were university staff, 10% were employers, 20% were former students (>5 years) and 20% were recent graduates. The average age of the respondents was 38,2 years and females represented 33% of the total sample. The answers confirmed the validity of the proposed profiles; none of them were underrepresented although those in research, education, environment, regional planning and GIS received more responses. The general impression at the end of the study was that the Bologna Process

represented an adjustment of the existing system with a stronger emphasis on more practical aspects (learning by doing), a decrease in theoretical issues and reinforcing more technical training (GIS) (Table 1).

**Table 1.** Professional profiles

Profesional Profiles	Job profiles	Training needed
Research. Education Dissemination	Research, Teaching, Publishing: Internet, media, guides	Geographical thought /Research methodology /Geography Teaching
Geographical Information Technologies	GIS/Digital cartography, Statistic analysis, survey design	Data bases/ GIS/Tele-detection Cartography Qualitative and quantitative analysis
Environment: Physical systems/ Natural resources	Protected areas management Environmental education, Agenda 21, Natural risks prevention.	Geomorphology/ Natural Resources/ Climatology/ Meteorology Biogeography/Landscapes/Risks Fieldwork techniques
Territorial planning and management: legal and physical dimensions	Management, Geo-marketing, Territorial planning	Territorial and landscape planning Economic activities analysis Transportation and mobility
Territorial planning and management: population and demographic analysis.	Demographic projections, Social observatories, Demographic statistics	Population distribution/ projections Demography/Social studies on population/Migrations/ Mobility
Socio-economic and territorial development	Local development agencies, Tourism/ cultural heritage International relations and trade.Geopolitics	Regional planning/ articulation Geopolitics/ geo- strategy Models of regional and local development

Source: Adapted from Tulla, A. (2004).

Individuals need a wide range of competences in order to face the complex challenges of today's world. Competency involves the ability to meet complex demands, by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context. So, it is more than just knowledge and skills. The OECD (2005) has collaborated with a wide range of scholars, experts and institutions to identify a small set of key competences, rooted in a theoretical understanding of how such competences are defined. The Spanish study addressed the evaluation of generic and specific competences of the six professional profiles aiming to identify the weakest points of the curricula, as perceived by all the participants in the survey; they were asked to evaluate the level of generic and specific competences they had achieved during their studies when compared with their current job requirements (Tables 2 and 3).

The results of the survey showed that the employers highlighted bigger deficits in contrast to the results of their employees, who were less critical. The young graduates perceived their training in a more positive way, but the elder ones were more aware of the weak points; in general, the biggest deficits were found to be in the practical competences rather than those developed in academic areas. The youngest geographers perceived Geography as a technical degree instead of a social science. This was a new perception on the state of Spanish Geography, which had traditionally been closely linked with History, Economics and other Social Sciences.

Table 2. Generic competences

#### **INSTRUMENTAL PERSONAL** Capacity for analysis and synthesis Oral and written communication in the national Critical and self-critical abilities Interpersonal skills language(s) Ability to work in an international context Knowledge of other languages Ability to work in an interdisciplinary team Planning and time management/Problem solving Commitment to work related ethics Information management skills /Decision making Use of information and communications technology SYSTEMIC **OTHER** Spirit of initiative Ability to work individually Appreciation of diversity Leadership and creativity Accuracy and precision/Responsibility Entrepreneurial spirit / Concern for quality Ability to communicate effectively with non-experts Capacity for change Dealing with uncertaintyProject design and management

**Table 3.** Specific competences

KNOWLEDGE	PROFESSIONAL	
History of geographical thought	To use fieldwork methodology	
Human, economic, cultural and social	To use geographical information	
geography	To elaborate and understand statistical information	
Environmental issues	To appreciate different representations of geographical	
Methodology and fieldwork	space /To use cartography	
Territorial planning/Regional planning/GIS	To make integrated diagnoses of public actions	
ACADEMIC	OTHER	
Understanding, interpretation and	To communicate geographical ideas and theories	
explanation of diversity and interdependence	effectively/ Ability for information synthesis.	
of regions, places and locations/ spatial	To understand problems in a multidimensional approach	
relationships between physical and human	To explain and manage complex problems	
environments	To draw knowledge, understanding and diversity of	
Sensibility and interest to spatial and	approaches from other disciplines and apply them in a	
environmental issues	geographical context	
Territorial knowledge and interpretation		
Combining detailed and general approaches		

Source: Adapted from Tulla, A (2004)

The conclusions of the White Book showed the transactional nature of the joint proposal and how a common framework resulting from different academic structures may not introduce any deep changes.

Therefore, in spite of Bologna being a take off point for big changes, the research suggested that it probably meant just a pragmatic and realistic solution derived from the great range of dimensions, dynamics and history of the twenty six departments involved. Nevertheless, the White Book represented a pioneering experience as a bottom-up approach in the process to create a common framework for our discipline. In this sense, it went as far as possible with the aim to reach a consensus of a common ground among a mixture of realities within Spanish departments. Actually, it was a valuable document for putting theory into practice in the years that followed.

## 3. THEORY INTO PRACTICE: STRUCTURAL CHANGES VERSUS ADAPTATION

## 3.1. A pilot program: testing the new system (2004-2007)

The White Book was produced during 2003-2004. At the same time, Catalan universities started the adaptation of some of their degrees, Geography among them. New teaching methodologies were introduced through a pilot program whose main aim was to articulate a process of institutional change involving the University and the Department. The introduction

of new degrees followed a complex system of controls required before getting the approval of the National Agency on Academic Quality. This process of change meant an adjustment of the existing curricula to the new three-year Bachelors degree format, bearing in mind the competences and the professional profiles developed in the White Book; a validation of the new curricula by the University administration at different levels; and to draw up new programs for all the subjects, in the general framework of the new methodology. Three years after the experience, a final report of the pilot programme presented the academic results, the level of satisfaction, both of students and academic staff, the analysis of the academic coordination role and the collection of all data required for the official implementation of the new degrees (Muñoz Pradas, 2007).

The academic results were evaluated in accordance with the burden of student's work (analysed through surveys on their use of time), the outcomes of methodological innovation and finally, the student's marks. However, surveys showed a very great diversity of study times, depending not only on the subject choice but also, on the student's trend to follow a slow track in their degree studies. In any case, the time devoted to course lectures or seminars exceeded that devoted to individual work, it much higher at the beginning of the course. In general, essays, individual study and the search of information accounted for the highest amount of study time while a significant use of tutorials was detected in optional subjects.

Students and teachers were polled several times and in different ways, in order to grasp their perceptions of the characteristics and consequences of the new degree organization. From the last year report (probably the most interesting since it included informants who had been studing for three years), we can conclude that the students positively appraised the procedures of evaluation, the possibilities to improve their knowledge in a better way (more educational resources) and the prospect of receiving a more individualized attention. In return, they suggested that the new approach implied a bigger workload, requiring more study time and creating greater stress on the completion of the academic calendar. The teaching staff found, in the new model, an opportunity to work more in depth, by better describing the scope and content of their courses and in introducing diversity in the evaluation practices and assignment criteria.

The role developed by academic coordination existed at three different levels, University level, Degree Coordination level and Department level. The survey demonstrated it to be an efficient system. The design of learning and teaching methodologies and the planning of general follow-up concerned the first level and specifically the IDES (Teaching Innovation in Higher Education), an academic service that promotes and articulates initiatives to optimse teaching; degree development concerned the second level. The advising of staff and students involved in the pilot program, as well as the collection of suggestions and remarks along the process, was taken on hands by the third level of coordination. As objectives, areas of action and competences were different at each level, the Degree Coordinator was assumed to be their common link. The evidence for quality needed for the accreditation of a new degree included the design of the subjects in an ECTS model, participation in in-service training courses and a catalogue of good practice. Evidence of quality concerning student achievement was also needed: the follow-up of their educational activities, focus groups and control surveys along the whole process and the analysis and evaluation of academic results. Concerning academic management, it entailed activities related to the spatial organization and the academic calendar.

At the end of each of the three years, an interim report suggested new actions of improvement was to be produced, to ensure quality. At the end of the pilot program, one of the main outcomes for teaching staff was the setting of working groups based on thematically similar subjects in order to benchmark them, to set their main competences and to readjust the student's workload avoiding overlap and interference between subjects.

## 3.2. Reaching the objective: the new degree for Geography and Regional Planning

In 2005, the new structure for university studies (Bachelors degree, Masters and Doctorate) was approved by the Spanish Government with some differences to the general European model. The process implied a big change in the traditional model of university studies in Spain and the origin of much scepticism among scholars. The new, approved structure relies on a degree of four years and a Masters course of one year. Students will have to pass 240 credits on theory and practice in basic geographical knowledge, compulsory or optional subjects, seminars, external professional practice, teacher-led work and other training activities. Thus, the period of study of the degree will be 60 ECTS per year and the structure of the curriculum have to take into account the following basic points: first year subjects will deal with compulsory basic knowledge and competences; the core of the degree, integrated by compulsory subjects, will correspond to the second and third years and finally, the last one, will be devoted to complementary learning and training through optional subjects. A concluding essay should complete the full studies (Table 4).

MODULES	ECTS
Basic training.	60
Compulsory subjects. Core of degree.	108
Optional subjects (includes external practices)	66
Final assignment	6
TOTAL CREDITS	240

**Table 4.** Subject modules and ECTS assigned.

Source: Departament de Geografia, 2007

The Department of Geography at the UAB defined the framework of their new degree for Geography and Regional Planning after analyzing the international evolution of Geography profiles, the increasing social demands on issues related to geographical knowledge, regional planning and social development and last but not least, the new professional profiles observed within labour market demands (Departament de Geografia, 2009). At a general level, the degree should cover the necessary basic knowledge for the six professional profiles collected in the White Book (Tulla, 2004): geographical research and its diffusion; geographical information technologies; physical environment, natural resources and environment; regional planning and management; population and demographic regional analysis; regional and local development. Likewise, the experience gained during the three years of pilot program made it possible to develop a degree based on the new educational model that, centered on the learning of the student, incorporates new teaching resources, technologies and strategies and a clearer and best defined evaluation methodology. The new degree was formally created by a Royal Decree (1393/2007) and started in September 2009, both in face-to-face courses and on-line.

## 4. CONCLUDING REMARKS

Bologna reform was intended to serve as an opportunity for a better distribution of work and resources and more coherent post-graduate study programs. Many universities did it, such as UAB, despite (or besides) the official Spanish policy oriented "to adapt" the existing curricula into a new degree of 240 ECTS instead of the 180 recommended by the European Higher Education Area. Anyway, the process has made evident an important change in the teaching methodology that has inevitably changed course content. Geography, at UAB, is a good

example of these changes. The new Geography degree probably does not represent a big change (as courses should be adapted not only to the official regulations but also to local resources, know-how and internal dynamics) but it shows a change in the sense of reflecting on a process of learning, which is much more student-oriented and this means a new way of planning for teachers. The experiences of the White Book and the pilot plan firmly penetrated into the everyday practices of the group.

Beside the methodological change in teaching and learning practises, the Bologna Process may also be considered as an instrument for deep changes to the "employability" objective. Universities are becoming more and more influenced by economic development and private funding. That is why there are different opinions of the real effect of the process, opening questions about the way it is being implemented, its final objectives and on the central forces and actors behind the whole action. The adaptation to a European Higher Education Area is presented as an inflexion point in academic life and a time for a reflection, but the discussion and controversy about Bologna represents, probably, the confrontation of different university models faced by a process of homogenisation. In many university circles there is a clear demand for open discussion and the involvement of all stakeholders. This has not yet been the case, in general, in Spanish or in other European universities. It is argued that the danger of Bologna Process is that it may be seen as a formal and bureaucratic adjustment in the shape of university studies, but in the future it will introduce deeper changes in our universities (Fejes, 2005; Tomusk, 2005). The degree might become an instrument to get young people into the labour market, while the higher levels, in which the private sector could play an important role, could introduce significant social differentiation.

The needs of the economic system should not be considered only from the labour market point of view and generate pressure on the "usefulness" of academic studies,. Rather, there should be widespread and deep reflection on the nature and the intellectual objectives of the European Higher Education Area in the context of global world. Its outcomes should be discussed jointly with that of the role of the universities in social development. There are important democratic and social justice values to support under the increasing pressures of new economic, social and technological challenges. News on the possible suppression of those degrees considered to be "less useful" increases the critical positions on the final objectives of this pressure for change. In recent decades, the university institution has become embedded, in the development of social values and attitudes, will these values now guide the university when facing the overwhelming demands for economic usefulness? (Tomusk, 2005).

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