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Competitive universities need to internationalize learning: perspectives from three European universities

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Abstract

The process of restructuring European universities in order to harmonize their educational systems is rapidly approaching a key milestone as 2010 looms large on the horizon. Our universities must take this opportunity to evolve into highly competitive environments that are unhindered by linguistic constraints and fully capable of transferring knowledge.
The objective of this paper is two-fold: on the one hand, it sets out to analyze new forms of education and instruction made available on engineering degrees within a context of ever-greater internationalization; and, on the other hand, it seeks to highlight the benefits arising from joint collaboration between the teams that comprise interuniversity networks. To that end, data taken from surveys conducted in three European universities are used as real case studies.
The results demonstrate that the internationalization of knowledge across universities has a positive impact on scientific productivity, improves the quality of education offered by the teaching staff and leads to greater student mobility. This strategy is intrinsically linked to learning from local experiences shared by members of the same university as well as from more global experiences made available through inter-university networks. It implies being willing to listen, to communicate, to engage in dialogue and means that we must seek to understand the potential contributions from the staff and students that make up each university.

Keywords: Bologna Process, European Higher Education Area, Competitive Universities

1. Practical implications of the european higher education area in universities

Lengthy conversations between university teaching staff on the European Higher Education Area and the future of management, teaching and research within universities to be introduced by 2010 are now a thing of the past. Today it is a reality that must be taken on board; no time is left for philosophizing, reticence or insecurity. Improvements to the quality of our university teaching and research represent the most stable objective and with that, improvements to everything else within the system: its structure, management, abilities, teaching resources and evaluation, among others. The time has come to transfer university knowledge beyond linguistic boundaries; without a doubt, the accreditation of qualifications contributes to this goal, as do study periods abroad, opening up extracomunitarian frontiers, employment opportunities in foreign firms, collaborative projects and research through

European inter-university networks. In order to move towards these goals, greater commitment is called for and greater personal effort must be made than has been the case until now. Specific training for teaching staff, and learning from common experiences between members of the same university and those from other universities will be needed, as well as a strong will to listen, communicate, dialogue and a desire to understand what each person can contribute.

Engineering qualifications are likely to be improved through the use of the most modern technology, the most innovative concepts and the experience of the most versatile experts. Aneca (National Agency for Quality Assessment and Accreditation) in its EICE[51] project (White Paper on University Computer Science Qualifications in the new European Higher Education Area (2004, p. 64), justifies this argument applicable to other areas of engineering by affirming that "*en el caso concreto de los estudios de Informática, la internacionalización es fundamental, no sólo por la posible demanda de los mismos por parte de estudiantes extranjeros, sino también por la propia naturaleza de los estudios, ya que los conocimientos a adquirir son de carácter intrínsecamente internacional, pues la tecnología en general y especialmente las TIC constituyen un campo del saber menos dependiente de las características locales o regionales, donde los avances se aplican de forma muy similar en todo el mundo independientemente de donde se originen* [in the specific case of computer science studies, internationalization is fundamental, not only because of the possible demand on the part of foreign students, but also because of the nature of the studies, as the knowledge to be learnt is of an intrinsically international nature, as the technology in general and especially ICT constitute a field of knowledge that is less dependent on local or regional characteristics, in which the advances are applied in a very similar way across the world regardless of where they originate]".

The EHEA also sets out as a general priority objective the "promotion of European cooperation in quality assurance with a view to developing comparable criteria and methods". In a more concrete way, one of the recommendations of the European Parliament and Council on greater European cooperation for quality assurance in higher education, in a meeting held on 15th February 2006 calls for "(...) quality assurance systems to be based on a series of essential features, including evaluation of programmes or institutions through internal assessment, external review, and involving the participation of students, publication of results and international participation."[52] (Recommendation 98/561/EC on European cooperation in quality assurance in higher education [Official Journal L 270 of 7.10.1998]).

This European dimension of dismantling frontiers and the generalisation of knowledge is also noted in the Declaration of Graz (European University Association (2003). *Forward from Berlin; the role of the universities*, p.1) when it speaks about the role of universities stating that "The development of European universities is based on a set of core values: equity and access; research and scholarship in all disciplines as an integral part of higher education; high academic quality; cultural and linguistic diversity".

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[51] *Estudios Universitarios de. Informática y Convergencia Europea* [University Studies in Computer Science and European Convergence]

[52] RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 February 2006 on further European cooperation in quality assurance in higher education (2006/143/EC) http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_064/l_06420060304en00600062.pdf (last accessed 25/04/08)

These recommendations formed the backdrop to the search for an interdisciplinary team of university members whose investigative work has led to the conclusions contained in this paper [*].

2. Situational analysis of the state of engineering qualifications since the beginning of internationalization

The pace at which universities have integrated all the proposals – since the first meeting held in Prague, in May 2001 - into their educational activities has been constant. The participant universities have come a long way in this sense, given their participation in EICE, as well as in another fifteen such projects. However, a lot of work remains to be done and difficulties to be overcome given the varied list of points that are covered in the Declaration of Bologna.

The very fact of wishing to examine such improvements in greater depth and to bring in significant and essential changes, which at the same time are enriching for these universities, are cause enough to justify wishing to continue with research through pilot projects. Improvements in the quality of teaching amounts to making the educational system more enriching, taking care that the acquisition, transference and updating of learning and knowledge is the most representative key factor; a point underlined within the Bologna process. Due to its particular determining factors, quality in engineering education undoubtedly demands that we set out to achieve the following objectives:

- Changes in the teaching methods used up until now
- Offer and assessment of the number of credits that may be taught on bilingual courses
- Follow up of the necessary changes
- Ongoing review of the feasibility of costs and investments for equipment (taking into account that information technology and software tools are the most appropriate in computing science)
- Refresher courses (for teaching staff)
- Assessment of teaching staff
- Assessment of student satisfaction
- A search for the determining factors that create links from the external world through the employment market, in order to know how to orient students throughout their academic courses.
- The degree of technological specialisation that is taught in the material (use of new software according to each area).

[*] This work is the result of a research project funded by the *Consejería de Educación* (*Junta de Castilla y León*) under reference UBU14/07, entitled "*The Transference of University Knowledge Beyond Linguistic Constraints: the Introduction of Bilingual Teaching into Computer Science Engineering and Industrial Engineering Qualifications at the University of Burgos, as a Prelude to the Bologna Process*".

- The scientific level of the teachers that convey the information (professionals that know how to communicate information on advanced applications that is based on research experience - congresses, indexed publications in reviews, national and international conferences, regional, national and European projects – given that it is a second cycle course).

- The professional profile of the students. It is considered very important to know how the material for these three subjects should be adapted and focused to establish a balance between course contents and each student's future professional skills.

Important work must be done in universities, in view of the improvements now underway, and more specifically for those oriented towards the internationalization of teaching. The offer of subjects taught in English is one of the aspects that is explicitly covered in the European Supplement to the Qualification. Not only does it enrich the teaching staff (improving the teaching experience of whoever gives the course) and the students (facilitating their preparation for and entry into the world of work), but it also adds value to the university (the offer of bilingual subjects can be a reason to attract more Erasmus students and to gain prestige and image beyond national frontiers).

Thus, collaboration with other universities that are further down the road is necessary. The network set up for this project allows us to share and to engage in dialogue with teachers from other centres on how they have managed to establish agreements and rules in matters concerning bilingual teaching from the viewpoints of an Area, a Department or a Vice-rectorate. It may be seen from the study that is analysed in this paper that in engineering qualifications another factor of some weight also exists, which is that a high percentage of the students are already immersed in paid employment, combining their studies in higher education with activities in companies. This means that the priority objective is to know whether the overall focus given to the subjects that are being taught is at the correct level for these universities and these students. High academic quality and more practical orientations in relation to the social and professional values of this collective make it necessary once again to set out the following objectives:

- To study the strategy for implementing bilingual teaching in their subject modules

- To seek out competent teaching staff for each subject area, not only in educational terms, but of course in terms of research and professional experience

- To know how to guide the subject matter that is taught in accordance with the needs of the market and to ensure that within a short period of time the student will know how to develop. In short, to prepare our students fully and completely concentrating on their professional skills.

3. Field-work methodology

The methodology used to reach these objectives will now be described. Having set out the critical points which have to be targeted, a questionnaire was drawn up for students as well as teaching staff (only the results concerning the students are shown in this paper as those for the teaching staff are still being processed).

The design of the questionnaire has sections that gather general information on the students' personnel data, their academic profiles, their opinions on the contents of the new restructuring

in the EHEA, the changes which it entails with respect to assessment methods and the assessment of their academic results, the importance of languages, the students' professional future and the degree of preparation that they have observed in the teaching staff in the face of these planned changes to university teaching. In total there are 40 questions shared out among the above-mentioned sections. It should be added that it was only the engineering qualifications were included in the study and the sample of students that responded to the questionnaire numbered 449. The information in the questionnaires was stored in a database designed for this study. Statistical treatment of the information was carried out using QAnalysis software which was used to obtain the initial results, which immediately led to reflections on the strengths, weaknesses, threats and opportunities available to each university. The work of preparing the questionnaire and collecting the information was carried out over the months of November and December 2007, and January and February 2008, respectively. Data treatment took place in March and April 2008. The following section shows the graphs generated from the data and their most interesting and striking considerations.

4. Mathematical simulation and graphs

Using the database designed to collect the 447 questionnaires, work proceeded with the Q-Analysis mathematical software tool to simulate the results shown in Table 1 and the subsequent graphs that are briefly commented on below.

Table 1. Q-Analysis Database

AVERAGE		Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24
TOTAL	T	0,951	1,029	-0,895	-0,269	-0,746	0,671	1,070	-0,490	-0,286	0,490	1,156	0,659	0,957	-0,681	1,929	-0,257	-0,516	1,019	-0,602	1,864	1,272
Country	ES	1,016	1,093	-0,842	-0,340	-0,824	0,657	0,991	-0,490	-0,427	0,496	1,181	0,625	0,887	-0,631	1,953	-0,323	-0,516	1,057	-0,788	1,958	1,233
	GER	0,646	0,734	-1,159	0,300	-0,389	0,740	1,484		0,380	0,464	1,041	0,829	1,282	-0,913	1,817	0,050		0,831	0,235	1,386	1,441
University	KOLN	0,646	0,734	-1,159	0,300	-0,389	0,740	1,484		0,380	0,464	1,041	0,829	1,282	-0,913	1,817	0,050		0,831	0,235	1,386	1,441
	UBU	1,118	1,280	-0,444	-0,014	-0,722	0,671	1,151	-0,342	-0,028	0,676	1,320	0,653	1,042	-0,028	2,233	-0,153	-0,461	1,108	-0,582	2,054	1,507
	UPV	0,952	1,040	-1,107	-0,339	-0,892	0,512	0,939	-0,521	-0,698	0,463	1,175	0,610	0,810	-1,032	1,935	-0,434	-0,712	1,018	-0,875	1,942	1,120
	UPVLC	0,750	0,750	0,129	-0,032	-0,750	0,800	1,235	-0,450	0,027	0,676	1,351	0,946	1,083	0,417	2,027	0,171	-0,175	0,925	-0,568	2,103	1,514
	UVA	1,103	1,143	-1,126	-0,617	-0,843	0,746	0,867	-0,565	-0,567	0,358	1,049	0,525	0,800	-1,009	1,777	-0,492	-0,463	1,108	-0,915	1,869	1,054
Age	18_22	0,942	1,035	-0,995	-0,418	-0,773	0,662	1,046	-0,557	-0,298	0,398	1,128	0,637	0,844	-0,796	1,820	-0,318	-0,524	1,019	-0,655	1,848	1,159
	23_26	0,913	0,994	-0,848	-0,169	-0,804	0,634	1,034	-0,536	-0,274	0,551	1,172	0,665	1,033	-0,649	2,025	-0,237	-0,553	1,025	-0,613	1,902	1,377
	>26	1,125	1,128	-0,585	0,050	-0,435	0,851	1,310	0,059	-0,273	0,705	1,238	0,739	1,244	-0,231	2,085	-0,036	-0,333	1,000	-0,289	1,800	1,439
NDegrees	1	0,950	1,053	-1,031	-0,342	-0,796	0,672	1,030	-0,559	-0,330	0,450	1,124	0,662	0,900	-0,865	1,888	-0,324	-0,538	1,006	-0,618	1,812	1,216
	2	0,970	0,908	-0,138	0,170	-0,483	0,677	1,293	-0,161	-0,018	0,706	1,344	0,651	1,298	0,418	2,177	0,121	-0,413	1,097	-0,537	2,159	1,615
Job	n	0,977	1,066	-1,000	-0,427	-0,803	0,668	1,012	-0,576	-0,368	0,430	1,095	0,637	0,893	-0,836	1,874	-0,353	-0,575	1,014	-0,660	1,838	1,209
	s	0,889	0,944	-0,650	0,103	-0,619	0,681	1,189	-0,267	-0,106	0,610	1,286	0,706	1,096	-0,342	2,062	-0,061	-0,359	1,030	-0,466	1,932	1,393

AVERAGE		Q25_ct	Q25_tg	Q25_i	Q25_ca	Q25_cr	Q26	Q27	Q28	Q29	Q30	Q31	Q33_E	Q33_H	Q33_B	Q33_N	Q34	Q36	Q37	Q38	Q39	Q40	Q41	AVG
TOTAL	T	7,728	7,200	7,379	7,440	7,232	2,344	0,144	0,724	8,134	0,305	0,396	5,729	6,255	6,289	7,102	1,279	0,858	1,034	1,242	1,157	0,409	0,975	**3,698**
Country	ES	7,818	7,107	7,476	7,637	7,324	2,279	0,128	0,767	8,332	0,297	0,389	5,728	6,391	6,480	7,191	1,244	0,839	0,954	1,189	1,090	0,462	0,987	**3,732**
	GER	7,278	7,667	6,889	6,444	6,764	2,658	0,222	0,500	7,149	0,347	0,431	5,736	5,577	5,333	6,620	1,448	0,954	1,462	1,500	1,508	0,136	0,889	**3,523**
University	KOLN	7,278	7,667	6,889	6,444	6,764	2,658	0,222	0,500	7,149	0,347	0,431	5,736	5,577	5,333	6,620	1,448	0,954	1,462	1,500	1,508	0,136	0,889	**3,523**
	UBU	7,763	7,276	7,803	7,632	7,724	1,947	0,039	0,934	8,263	0,527	0,600	5,543	6,600	6,800	7,542	1,458	1,041	1,028	1,466	1,274	0,535	1,000	**3,854**
	UPV	8,122	7,088	7,504	7,848	7,168	2,512	0,137	0,642	8,262	0,179	0,250	5,526	6,612	6,831	7,818	0,957	0,600	0,916	1,033	1,037	0,506	0,981	**3,751**
	UPVLC	7,744	7,333	7,667	7,385	7,462	2,313	0,175	0,800	8,800	0,718	0,875	6,450	6,441	6,485	6,618	1,750	1,143	1,444	1,667	1,486	0,417	1,000	**3,917**
	UVA	7,573	6,952	7,187	7,508	7,194	2,236	0,159	0,778	8,296	0,131	0,182	5,789	6,118	6,079	6,706	1,183	0,813	0,802	0,982	0,907	0,396	0,981	**3,589**
Age	18_22	7,582	7,018	7,178	7,327	7,064	2,333	0,126	0,750	8,187	0,242	0,321	5,678	6,295	6,264	7,117	1,188	0,865	0,981	1,138	1,093	0,382	0,961	**3,640**
	23_26	7,792	7,335	7,482	7,500	7,335	2,352	0,178	0,702	8,094	0,340	0,435	5,744	6,209	6,310	7,074	1,354	0,848	1,070	1,326	1,172	0,435	1,000	**3,731**
	>26	8,196	7,565	7,957	7,761	7,652	2,370	0,106	0,681	8,022	0,489	0,595	5,927	6,207	6,345	7,138	1,452	0,860	1,156	1,450	1,415	0,457	0,947	**3,852**
NDegrees	1	7,701	7,132	7,316	7,400	7,184	2,365	0,148	0,715	8,088	0,242	0,322	5,706	6,278	6,328	7,135	1,224	0,845	1,009	1,168	1,098	0,393	0,970	**3,671**
	2	7,908	7,615	7,769	7,708	7,538	2,200	0,123	0,769	8,369	0,661	0,745	5,852	6,152	6,067	6,917	1,607	0,930	1,164	1,644	1,475	0,500	1,000	**3,851**
Job	n	7,681	7,132	7,312	7,382	7,061	2,300	0,104	0,747	8,103	0,246	0,327	5,718	6,143	6,131	6,922	1,207	0,864	0,962	1,167	1,077	0,386	0,975	**3,634**
	s	7,796	7,384	7,500	7,536	7,572	2,436	0,230	0,669	8,201	0,444	0,546	5,748	6,475	6,592	7,441	1,450	0,860	1,184	1,397	1,333	0,460	0,974	**3,829**

Section 1. Personal Information. Half of the population is made up of students between 18 and 22 years-old, 39% are between 23 and 26 years old, and 11% are over 26 years old. For 85%, this is their first academic course of study, and for 15% it is their second. In this section, the most striking fact is that 32% combine their academic work with a paid employment which enormously enriches the study.

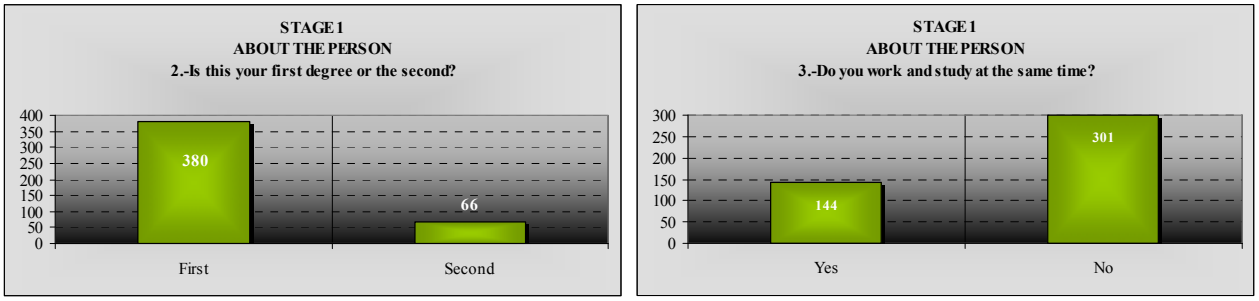


Figure 1. Section 1 Results. Personal Information

Section 2. The contents of the Bologna process. 21% have some knowledge of the contents of the Bologna process and 79% no knowledge whatsoever. These percentages are approximately the same when students are asked about the changes to which it would give rise in their qualification. A critical question concerns the value assigned to these changes; only 15% consider them to be very good or good whereas 70% consider them to be bad or very bad. It appears to 79% that the process might be complicated and difficult whereas 11% consider that it will be simple and flexible. 17% are familiar with the ECTS system whereas 83% do not know what it means. Three quarters foresee that the firms will have a more relevant role in combination with universities requiring more specific and concrete knowledge than they teach at present. The impact of the standardisation of qualifications at a European level is considered by 74% as very important or important. A question of great relevance concerns the assessment of the Bologna Process in relation to academic studies being combined with paid employment, on which point 43% consider that it is not taken into account, 43% have no information and only 8% consider that it is compatible. Motivation plays another fundamental role and its procedures should not be self-complacent but supportive. Only 2% confirm that the system motivates them as students in their learning processes, 24% roundly reject this idea and 49% are somewhere between doubt and assurance being unclear as to whether it helps or not. The most conservative, 63% consider it bad or very bad that the university carries out changes, whereas 23% consider that this reform is very important for their university. One of the most interesting results is that 62% consider that improving teaching resources for innovation is a good thing, whereas 30% do not consider it at all important. On the contrary, only 31% believe that their university has positive factors that make it more adaptable to this new process, although they do not know what those might be exactly. In relation to which actions would improve the educational system, 19% underline the method of assessing the student, 53% the learning method, 12% both and 10% would not change anything as they consider that the present system is perfectly constituted. 72% have never participated as a member on any working committee on the Bologna Process and 18% have worked on this initiative at some time or other.

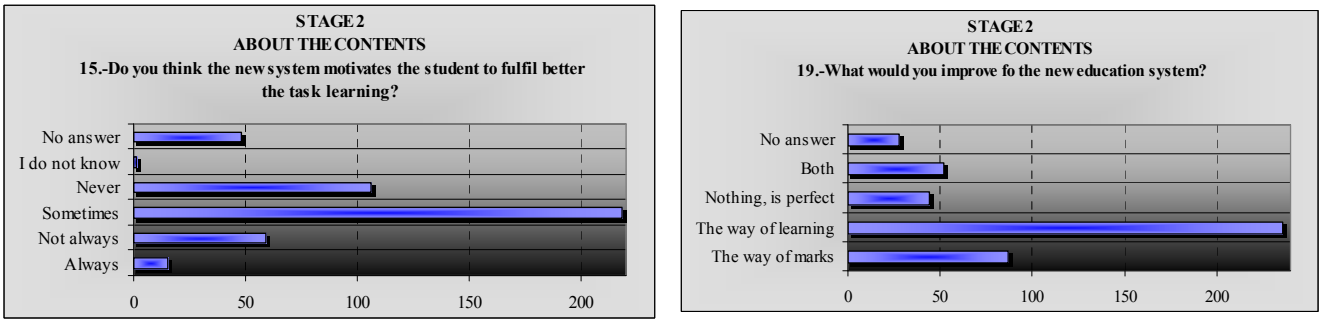


Figure 2. Section 2 Results. The Contents of the Bologna Process

Section 3. Student assessment methods. 21% correctly value the present assessment method whereas it is imprecise for 52%, and very bad for 10%. A quarter consider that the abilities developed in group work serve to improve on their present academic and future professional performance, whereas 34% are unable to establish a correlation fully between both actions, although on occasions they think that they serve for something and only 3% think they are of no use at all. The new EHEA is built around three fundamental elements, which are communication, personalised innovation and personal and group communication; thus, 5% believe that things will turn out as planned, 70% on occasions think things will turn out as planned, and 8% affirm that these points will never be taken into account. Another question of great relevance is on the scores awarded to technical knowledge, group work, initiative, learning capacity and creativity. Among all of these, the most highly valued by the chosen population were, in order of importance, technical knowledge, initiative and creativity. Accordingly, it is interesting to draw up a profile for each university, given that the scores change according to the students in the interview; thus for example, the priorities are different for students from the University of Cologne that in order of importance, chose group work first of all, followed by creativity and finally technical knowledge.

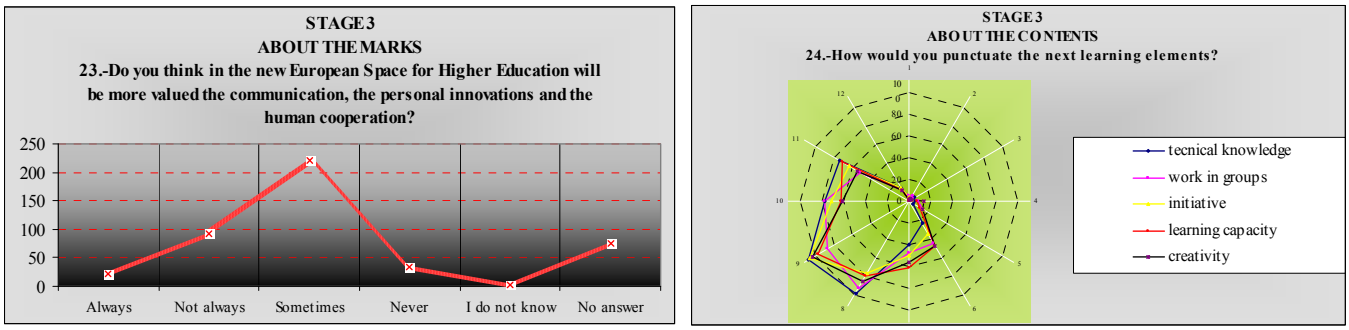
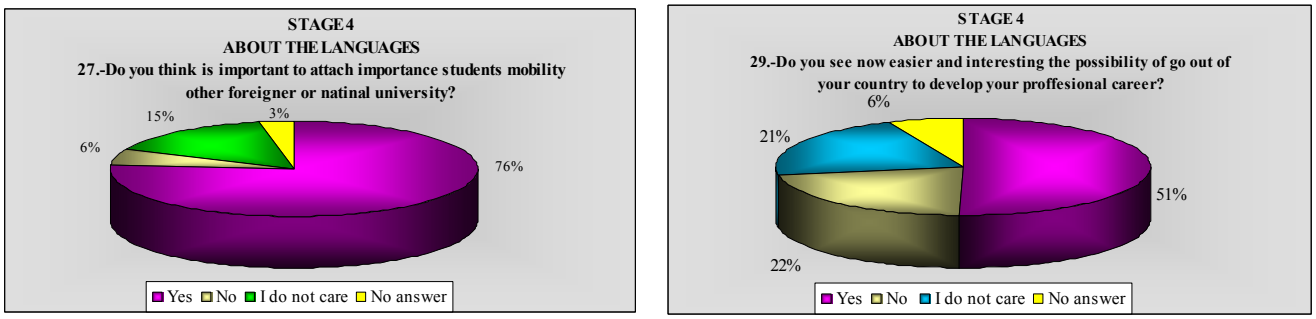


Figure 3. Section 3 Results. Marking

Section 4. The importance of languages. Two or three languages are spoken by 74% of the group in the study and more than three by 7%. However, 88% have never taken part in an Erasmus exchange or studied elsewhere during their academic study; 7% having studied abroad once and 3% on more than one occasion. Furthermore, 51% believe that it is important to recognise the fact of having followed part of one's studies in foreign universities. More than half would like to develop their professional career abroad and would like to study at a foreign university for either a term or a complete year. England, Germany, the USA, along with France and Ireland are the most popular destinations, whereas Japan, Spain and Austria



are high up on the list but somewhat less popular.

Figure 4. Section 4 Results. Languages

Section 5. The impact of the Bologna Process on professional life. For 72% of these students, the new restructuring involved in the Process will facilitate recognition of qualifications in the professional world. Thus, and in order of importance, the students consider that being a practical person and languages are the two factors that best prepare a person. Only 4% consider that academic marks (qualifications) are what counts. Furthermore, almost three quarters consider that firms will have to modify and renovate their types of contracts and their assessment of a person's abilities in order to secure a job.

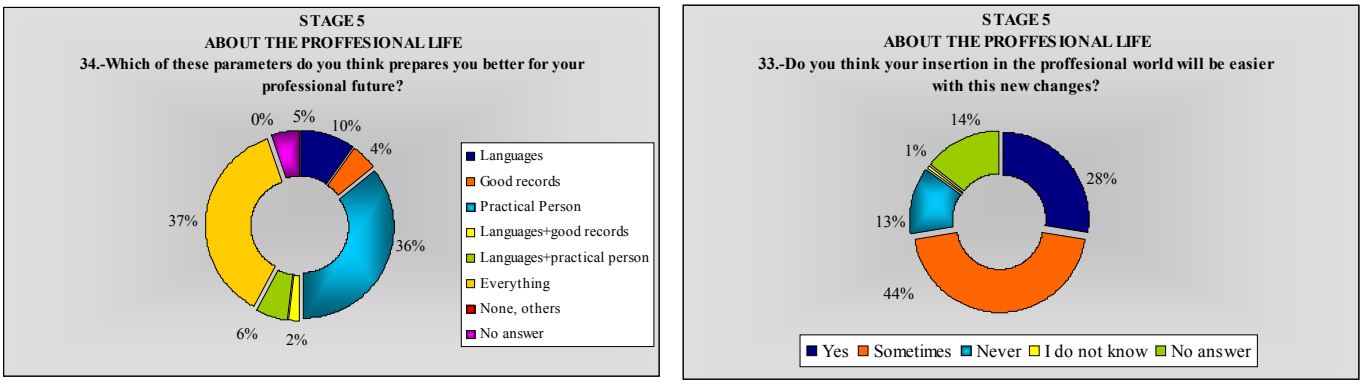


Figure 5. Section 5 Results. Professional Life

Section 6. The role of the teaching staff. 21% consider that the teaching staff is prepared to take on new didactic roles that are specified in the Process casting aside the more traditional teaching methods, although almost three quarters think that this is not the case. Furthermore, 31% believe that more communication will take place between students and teachers which will undoubtedly improve the final results, whereas 39% think that this will not always be the case and 14% believe that nothing will change on this point. With respect to individual tutorials, 33% consider that university teachers should be more committed to the tutorials and to providing individual attention within this new structure; 30% believe that it should remain unchanged, 12% attach no importance to it and 6% think that this will not take place. Finally, for 51% of the interviewees, universities should invest more in information systems student support mechanisms and private study.

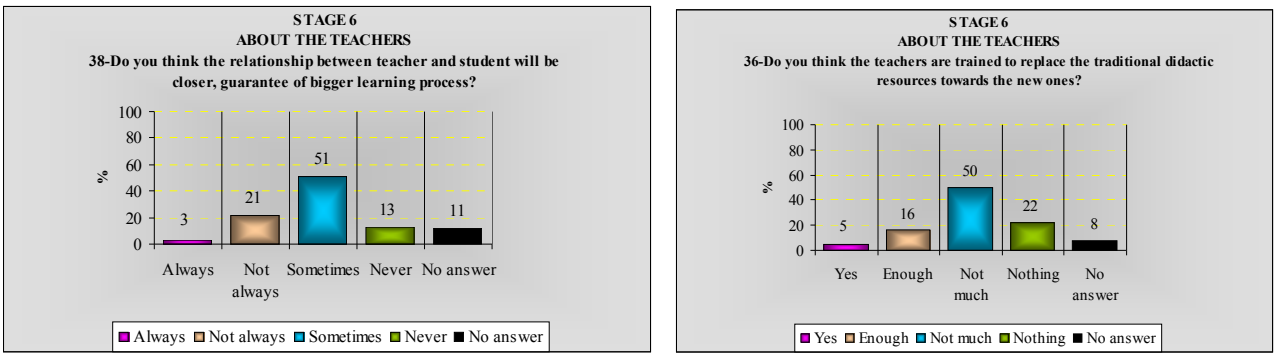


Figure 6. Section 6 Results. The Teaching Staff

5. Conclusions

The initial evaluation of the results is satisfactory – the general standpoint is one that welcomes the programme and expresses confidence in it, even though rather disappointing

percentages may appear in some cases, – and deserves to be analysed in the case of the most significant questions and as helpful lessons and examples in our universities.

The objective is not to draw up a league table of universities but to take stock of the situation and generate continuous improvements each serving as mutually supportive examples for the strong points and for changing what is not beneficial. Knowledge management, its transference and putting corrective mechanisms into action on the basis of information generated in universities from the inter-university network is a highly useful tool. It gives rise to a wide framework for inter-university work and cooperation. The following reflections taken from the results section are presented as initial self-help points:

- A very high percentage of the population under analysis is working while studying. This fact leaves a profound question mark as to the appropriateness of readapting university courses for 2010 by introducing a more practical component. Students learn to share out their time, to prioritize their commitments and it generates a working discipline that is very similar to what their future integration in the job market will entail.

- Around three quarters have no notion of the Bologna Process or the changes that it could mean for their qualifications. This fact is once again clearly highlighted, as this same percentage is repeated among students that say they have not participated in either meetings or committees on the Process. Undoubtedly these statements on being disconnected with the Process may justify certain rather undecided results. The conclusions that may be drawn from all this is to take full advantage of this period of two years up until its definitive implementation in order to include the presence of rather more students in the working sessions that there are at present. There is a great wealth in their appraisals that may be of help both to administrators and to the teachers themselves.

- Standardisation of accreditations is widely recognised by a great majority –three quarters– as a definitive step towards the creation of new and more potent structures for integration. The employment market is thereby presented as being closer and as offering greater opportunities. *A priori*, the enormous effort to adapt aptitude and abilities to the external world must come to an end, given that the same assessment system will be used for everybody. In this specific case, it is made more obvious given that 74% of interviewees speak two of three languages and 7% more than three, which is really positive and beneficial.

- However, only a minority have followed an academic course abroad. As argued in the Bologna Process, it is everybody's desire that all the universities offer a greater number of places for both students and teachers to enlarge their store of experiences and knowledge. There is not the slightest doubt that universities cooperating as academic structures will also grow and become stronger building on their reputation and merits every day. As a consequence, it is essential that each and every member of staff cooperating in this Project takes on board the urgent need to introduce bilingual education into Spanish universities, in such a way that it will be less taxing on students to summon up the will to study abroad either at the end of their academic studies or when they embark on their professional career. This is the initial starting point in order to eliminate the psychological, social, personal and academic barriers that a student faces when considering whether to apply for a study period abroad. The will is there but only a few taken the first step.

- Should motivation be an aspect to consider in this initiative in order to achieve a more committed approach from students towards personal effort, and towards their university learning process? Only a mere 2% consider that the new change will be motivating. There are more and more external agents that disrupt the concentration and the will to work of our students, and perhaps a call should be made to reconsider how we may change these circumstances in universities. Nothing is attained without effort and it is right to strive for what is really of concern to the teacher, which is the quality of the student's education. Using motivating and attractive tools should also form part of the material used in each class and with each person. Thus, bilingual classes are also proposed as a means to achieve improvements on this point.

- Three quarters of the interviewees consider that the teaching staff is not prepared to confront the changes. Moving from the traditional to the innovative teaching structures as proposed in the Bologna Process might at first result somewhat complex. This point may be overcome by understanding that – without losing the fundamental role of the teacher as the source of the knowledge that is transferred -, the teaching staff must make their teaching more participative. The personal work load, the enlargement of tutorial times, the assessment of group work and creativity assume greater weight than concise technical knowledge. This is also reflected in the order of importance given by the students themselves. These days, teachers must pause to reflect on their working methods seeking at all times to harmonise the grounding of the descriptors with the use of more personalised assessments. Thus, the importance is proposed of establishing markers to assess the teaching staff en-masse that in recent years has been investing time in refreshing their training, their text books or their teaching innovations.

- Communication plays an overarching role in this study. Communication links between teacher and student are closer than ever and this provides a space for the improvement of the final results. The figure of the teacher must be more cooperative although maintaining the rigour and seriousness that has characterised the work of university education.

- The paradigm of entry to the employment market is both a concern and an aspiration for students. The result of many years of effort and dreams of a prosperous future professional life become tangible when students manage to gain employment in accordance with the studies they have followed. On this point, it is also imperative to assess the quality of each university's actions that will be carried out under the Bologna process, which bears witness to the great hope invested both by students and by teachers in their future vision.

The need may be discerned, from all of these remarks, to internationalize our teaching methods and the education of our students. The future does not lie in a greater amount of material but in better quality teaching and explanations. In this sense, internationalization allows us to add new life to the traditional university structures, new and enriching ways of functioning and a widely recognised vision of the need to plan the extra-communitarian university area.