Employability through competencies and curricular innovation: a Portuguese account

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Abstract

More than 50 percent of Portuguese unemployed university graduates are out of work for more than six months (OECD 2009), against the OECD average of 42 percent. This suggests that universities need to do more to improve graduates' chances in the labour market, and in many ways, the Bologna reform provided European Union universities with an opportunity to tackle this issue. This paper describes the outcomes of the Bologna process, at the Faculty of Management and Economics (Catholic University of Portugal), which began in 2005. Undergraduate degrees' length was shortened to 3 years and strategies were implemented to improve graduates' employability. The main strategy was the competency-based approach of curricula development, and the creation of three new subjects dealing specifically with transferable skills: critical thinking, communication and teamwork, and systemic thinking.

Introduction

Employability is a notion that refers to the idea that individuals are now increasingly responsible for their own welfare and that of society and therefore they need to acquire specific knowledge and skills, especially the knowledge and skills that employers need (DfEE, 2000). This notion is also part of a broad global context built around the idea that knowledge is the new basis for wealth (Thurow, 2000:xiii). In Hillage and Pollards' words (1998:1) 'employability is about having the capability to gain initial employment, maintain employment and obtain new employment if required'. This is to say that it is individuals rather than the labour market who determine their own employability. Such an assertion fails to bring in the fact that it is the labour market that ultimately determines one's chances of finding employment. If there are few jobs available, employability will be low, even if applicants are highly educated and have acquired the necessary skills. However, the statement would be correct, if the labour market were an absolutely deregulated field, where employers were able to manage their work force as they pleased. In other words, the idea of employability implies absolute flexibility of labour markets and the dismantling of labour regulation. Hence, as there are still such things as labour laws and limits to the free will of employers, one's 'capability to gain employment' is still dependent upon the context of the labour market and the overall context of the economy both at local and global levels.

While academics engage in the discussions around the meaning and the consequences pertaining to the notion of employability, 'the skills agenda continues to be promoted in policy at national and institutional level' (Holmes, 2001). Skills become an issue when it comes to graduate employment where it is the person's own characteristics that matter. In other words, one's skills and one's personal qualities are the source of innovation and productivity in the economy (Brown and Heskeths 2004). Portugal constitutes no exception, and therefore, in the mid-1990s universities started to focus on graduates' employability[1]. The development of a university careers service was

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[1] The development of the Portuguese field of higher education is marked by strong political and social change. The first University emerged in 1290, the University of Coimbra, and until 1911 this was the sole existing university in the country. In 1911 the monarchy was overthrown and the newly created Republic founded both Lisbon's and Porto's

one way of encouraging students' skill development. However, it was the Bologna reform that paved the way to further developments at institutional and curricular levels. This paper draws on the experience of curricular innovation led at the Faculty of Business and Economics (FEG) of the Catholic University of Portugal (CUP), in Porto. A competency-based approach was adopted and a five stage implementation strategy was designed. This process started in 2005 and the first assessment will take place in January 2010.

Curricular innovation at FEG

Following Bologna, the Lisbon treaty defined as the strategic goal for higher education: '*to make the EU the most dynamic and competitive knowledge-based economy of the world, capable of sustaining economic growth with more and better jobs and greater social cohesion …*' (European Council, 2000). This goal enhanced Bologna's guidelines towards co-operation among HEI as well as curricular rearrangements.

First stage: market-valued skills

The process described in this paper draws on the contributions of the Person-Environment Fit Theories (a detailed account and literature review is found in Swanson & Fouad, 1999), focusing on the correspondence between one's personal characteristics and labour contexts where individuals choose to work. Furthermore, Swanson and Fouad (1999) consider that the adequacy between students' skills and their future working context will increase when students' self-knowledge is more developed, thus potentially contributing to higher levels of performance and satisfaction. In this sense, transferable skills become a key notion to foster university and employer's common understanding of employability. The relevance of transferable skills has been stressed both by employers and graduates. Cabral-Cardoso et al. (2006) asserted that both graduates and employers consider that HEI need to boost transferable skills development. This will not exclude other contexts which are equally relevant for students' employability and skills' development, namely extracurricular activities and work experiences (Oliveira et al., forthcoming). This suggests that innovative teaching and assessing practices are required, especially concerning the development and assessment of students' transferable skills.

At FEG the issue of curricular rearrangements included reducing the curriculum length from 4 to 3 years[2]. This entailed a choice of courses to offer at undergraduate and postgraduate levels. At this stage, the faculty decided to interview employers and alumni to help define which courses were crucial in the workplace at entry-level positions, and which might be discarded from the curriculum. Surprisingly enough, employers took for granted the scientific results of university training but criticised the lack of transferable skills that graduates systematically demonstrated. The alumni interviewed revealed that there was not a clear distinction in the work done by management and economics graduates. This was the first stage of the aforementioned strategy, where market-valued skills were identified. Teamwork, communication skills and critical thinking were among the skills that emerged almost unanimously in employers' discourse. Data from the interviews was then used to steer the second stage of the strategy.

Second stage: curricular deconstruction

public universities. Despite a number of Institutes and the Catholic Portuguese Universities, expansion of the public sector was not possible until 1972, when the dictatorship was under reform. Only after the revolution of 1974 did the demand for higher education explode and by the late 1970s a private sector had started to emerge. The public sector has also expanded since 1972 and maintained its dominance. In Porto, one out of six existing universities is public (Guimarães 2006). In 1977 public universities instituted *numerus clausus*[1] an attempt to contain the demand for higher education and, apparently, to avoid 'unemployment and sub-employment of university graduates' (Fundação da Juventude 1998:44-5).

[2] There had been a previous rearrangement that reduced curriculum length from 5 to 4 years.

In this stage the faculty discussed the curriculum focusing on the learning outcomes. There were a number of assumptions that guided the meetings. Firstly, ensure a diversity of subjects to be selected, providing students with a cosmopolitan and broad world vision. Secondly, identify a common group of subjects to offer to both business and economics students. Thirdly, the aim of the curriculum deconstruction was not to simply reduce the number of subjects in the curriculum. Rather, it was necessary to clarify the aims and learning outcomes of the selected courses. At this stage, there were reactions among academic staff, when the reduction of the weight of some courses, such as mathematics or statistics, was under scrutiny. Finally, given the alumni's comments, it was also decided that the first degree should be broadband. Thus, specialisation should be deferred to postgraduate courses. The outcome of this stage was an outline of the new undergraduate curriculum structure comprising 180 ECTS, which allowed us to move on to the next stage.

Third Stage: curriculum redesign

Redesigning the curriculum meant structuring the different subjects across the three years. The curriculum was modularized around 6 credit subjects. Students need to take 10 subjects per year, and are also required to take 9 core subjects (e.g. Microeconomics, Macroeconomics, Finance, etc.), 7 specific subjects (e.g. Accountancy, International Economics), 8 to 9[3] support subjects (e.g. Statistics, Mathematics, Ethics, Sociology) and 3 to 4 transferable skills (e.g. Critical Thinking, Communication, Teamwork, Systemic Thought and Entrepreneurship). The need to ensure the development of transferable skills led to the suggestion of a three-year based intervention, which will be detailed below. After redesigning the curriculum it was necessary to map the transferable skills.
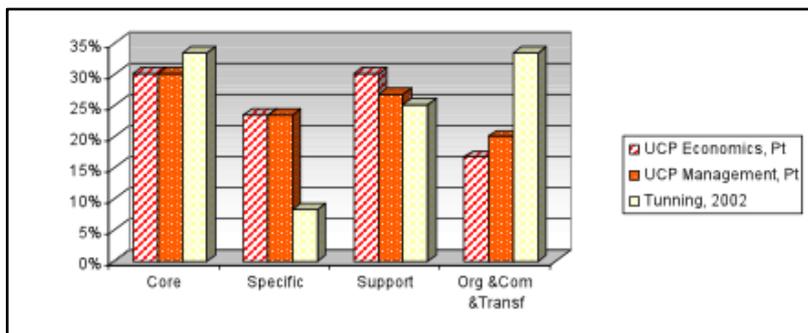

Fig 1 - FEG's curricular structure compared to the Tuning Project (source: Oliveira 2009).

Fourth stage: mapping transferable skills

This stage consisted of 'identifying the transferable skills involved in each subject, group of subjects and academic years' (FEG|DCO|Equipa PIC, 2008:6). Initially, the Starfish (Evans, 2001) model was used to map the transferable skills. However, this model was later abandoned as it was not validated, and currently a new one is under development. Mapping the transferable skills entailed two complementary action fields: (1) the identification of transferable skills within subjects and (2) self-assessment of pedagogical practices. Teachers were challenged to explore opportunities for skills development and encouraged to innovate pedagogically. A template with a description of the mapped transferable skills was initially proposed to the academic staff as a reference to assess students. From this template teachers were encouraged to develop their own tools. In addition students were introduced to the list of transferable skills included in the syllabus. This list details the specific set of skills under assessment in each subject. This is an ongoing process as each year teachers must reassess their pedagogical practices and adjust the set of skills that they intend to develop and assess. Students were also encouraged to self-assess their transferable skills through an

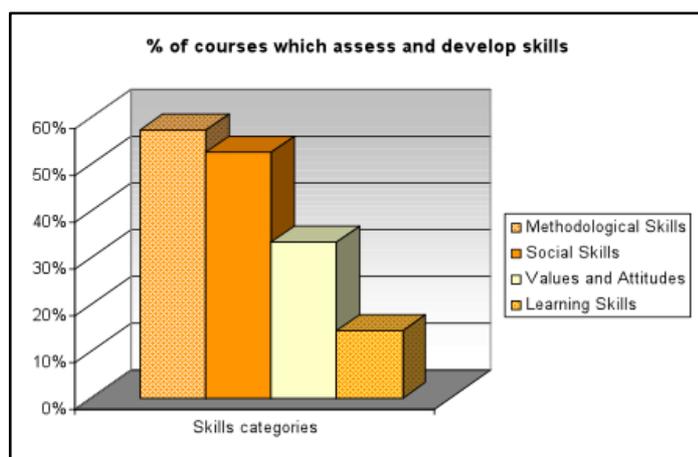online questionnaire. Based on results, students may be advised to enrol in an individual coaching programme.

Fig. 2 - Skills embedded in the curricula (source: Oliveira 2009)[3]

Fifth stage: student's individual coaching

In the first step of the coaching process students are introduced to the project. In a presentation the project is described and its methodologies clarified. Benefits and expected results are also explained. Students are also encouraged to take part in the coaching programme. The first step involves answering an online self-assessment questionnaire followed by a detailed analysis of the Individual Skill Self-Assessment Report. The second step aims at uncovering students' expectations, goals and needs. In the following one, the exploratory stage, students are encouraged to explore vocational experiences and extracurricular activities. The fourth stage involves identifying the skills that they need to develop further. An action plan is then produced detailing the means and goals of transferable skill development. At the end of the process, students may build an individual skills portfolio. It is a collection of supporting evidence of skills developed during the whole process (FEG|DCO|Equipa PIC, 2008a:9-17).

The three-year intervention

Besides the development of transferable skills described in the fourth stage, where skills were embedded in each subject, three new subjects, focusing specifically on a set of transferable skills (Project I, Project II, and Final Project), were created. These courses encourage student's critical thinking (first year), communication skills and teamwork (second year), and finally, to know (this means, to be able to apply knowledge in work or work-related situations). These three courses represent a pedagogical paradigm shift, from one centred on the teacher to another focused on the student. Project II and the Final Project also provide the opportunity for University – Business co-operation. This is because there is a set of activities involving either the development of field studies within a company setting or the participation of business representatives in academic activities. The main one is the skills' demonstration, which closes the activities of the Final Project.

Project I

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[3] Evans and colleagues (2001) suggest a five cluster organisation of personal skills and competencies, namely, (1) Methodological Skills (including the ability to handle multiple tasks and demands in complex and sometimes contradictory environments); (2) Social Skills (consisting of empathy and promoting feelings of efficacy in others); (3) Skills Related to Values and Attitudes (incorporating honesty and reliability, although they can be described as responsibility, resilience, determination, and awareness of rights; (4) Learning Skills (taking into account insightfulness and also being able to capture knowledge by reflecting on experience; and (5) Technical Skills (referring to work related skills to perform different tasks in a specific domain, the ability to keep oneself updated in one's professional area but also to be capable of functioning with new technologies).

Project I aims at developing students' critical thinking and literacy. At the end of the semester, students are expected to have produced a learning portfolio, to have written a 1500 word essay and to have taken a 3 hour exam. The subject is organised in weekly workshops conducted by teachers with different academic backgrounds. Activities are co-ordinated and a common teaching note ensures a degree of commonality. The students have access to an on-line platform and to web tools, such as forums and chats. This course follows a problem solving centred methodology providing students with a varied set of activities such as: analysing texts, debating, illustrating ideas, analysing graphs and tables, identifying errors, establishing context connections, using adjectives, metaphors, taking notes and time management. They are also involved in image interpretation, assessment and review as well as writing a 27 second film script. In addition, other courses contribute to Project I, namely, Ethics, Macroeconomics, Mathematics and Accounting, whose teachers identify the essay topics and suggest texts and other materials. The interdisciplinary trait of Project I enables the students to apply their acquired writing and critical thinking skills to the other subjects.

Project II

Project II's goal is the development of communication and teamwork skills. At the end of the course, students, organised in groups of five, should produce a 15 minutes oral presentation and are encouraged to be as imaginative and innovative as they can. In addition, they must submit a 3000 word report on the field work conducted in a local manufacturing company. The subject is organised in weekly sessions that offer a diversified set of activities, namely, data base research, field studies, oral presentations, along with communication workshops. There are also supervisory meetings with tutors who, as in the above example, also have different academic backgrounds. Co-operation with the entrepreneurial world takes place in different ways. One is the mentor, typically a senior professional who mentors a group of students. In addition, the final presentation involves a jury comprising representatives from companies.

Another crucial activity is the writing up of the CV, through a simulated job application to a virtual position, which is organised by the mentors. Mentors assess and comment on students' applications, individually or in small groups. Team Coaching is also available to students wishing to improve their teamwork performance. Coaches encourage teams to find alternative and more effective ways to develop their work, anticipating future situations and therefore promoting students' development of oral communication skills (between team members – assertiveness, and through contact with the outside world – the ability to deliver a presentation in public). Also worth mentioning is that the best overall performers, both as a team and as individuals, as well as the best presentation will be offered a six-week internship in one of the co-operating companies.

Final Project

The Final Project's goal is to provide students with the opportunity to demonstrate their knowledge. This is to say, to mobilise and apply the theoretical knowledge learned during the three years at the faculty. There are three different outcomes: (1) an internship, (2) the writing up of a business plan and (3) diagnosing an organisation (in the case of business students) or the resolution of three case studies (economics' students). At any rate they must always produce a report of their work, obeying the specificity of the selected activity. Students also undergo a skills' demonstration session with a jury consisting of members of local business organisations. The course is organised in weekly sessions, except for students engaged in internships. As a rule, students work in groups of five. Team Coaching is also available to help students prepare their presentation skills demonstration.

Closing Remarks

The competency-based approach adopted and described in this paper raises a number of concerns. One is the issue of time. Preliminary discussions took a long time, and there was also time spent on resolving conflict among the academic staff. It takes time to gain the co-operation of all the members of staff, given the scope of change involved in the curricular innovation process. Time is also required to build a network of alumni, business people and the university. This network is indispensable to ensure the success of the main activities, especially in Project II and the Final Project. Moreover, since this is an incremental process, time is required to ensure the acquisition of skills and knowledge. Another issue is the goal of the overall process. The three new Project subjects will not be successful unless students own the subject's goals. When this is the case, students' learning outcomes are enduring and will be useful in multiple work and life contexts. Finally, there is the issue of diversity. In other words, the diversity of assignments, tasks, assessment methodologies, as well as the multidisciplinary setting of the Project subjects which favours the development of transferable skills and students' self-knowledge.

The results of the three-year intervention will be assessed in January 2010. So far, the impact has been positive and already involves 30 companies and other organisations in the skills' demonstrations juries. Twenty-one students have been offered internships and representatives from companies have participated in the classroom activities of seven courses. However, this is just the beginning.

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Appendix

Online self-assessment questionnaire - a brief description

The questionnaire covers three sections. *The first section* relates to vocational experiences that significantly encourage the development of soft skills. Thus, it includes work experiences, volunteer work, civic engagement, geographical mobility and further training. Students are expected to rate such experiences according to their relevance and duration.

The second section - the skill assessment questionnaire - comprises a set of 17 soft skills organised along four dimensions:

(1) Methodological Skills (Problem-Solving; Systemic Thinking; Personal Management; Creativity)

(2) Social Skills (Communication, Assertiveness; Interpersonal Relationship; Teamwork)

(3) Skills related to Values and Attitudes (Persistence; Responsibility; Integrity and Ethics)

(4) Learning Skills (Motivation to learn; Openness to Change; Pursuit of Quality and Excellence; Knowledge Management)

The third section assesses the vocational development of students using Savickas's Student Career Concerns Inventory (2002) and adapted by Ramos, Crespo, Gonçalves e Coimbra (2002).