

TEACHING ENTREPRENEURSHIP CONCEIVING AN ABORTIVE UNIVERSITY COURSE

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Poučavanje poduzetništva

Sažetak

Razvijeni svijet je u krizi jer je dosegao razdoblje izobilja. Ovo je rezultiralo prestankom ekonomskog rasta i visokim stopama nezaposlenosti. Iako je novi ekonomski mentalitet prioritet, moraju ga pratiti zakoni vezani uz poduzetništvo koji će omogućiti nove dobrobiti za rastuću populaciju. Međutim, trenutno ima previše zaposlenika, a premalo poduzetnika. Budući da u Portugalu postoji Agencija za akreditaciju koja procjenjuje prijedloge za kolegije u visokoškolskom obrazovanju te budući da vjerujemo da se poduzetništvo može poučavati, osmislili smo novi dodiplomski kolegij utemeljen na ovoj ideji. Nažalost, nakon devetomjesečnog rada na osmišljavanju kolegija Poduzetništvo, kolegij nije prihvaćen jer se skupina profesora koji su sudjelovali u evaluaciji nije složila da je moguće poučavati/učiti kako postati poduzetnik. U ovom slučaju, dok političari i društvo govore o poduzetništvu, Akademija je konzervativna i tvrdi da fakultet treba studenta pripremiti za tržište rada. Stoga, cilj ovog rada je prikazati način na koji se može steći Poduzetnička sveučilišna diploma.

Ključne riječi: poduzetništvo, visoko obrazovanje, metodologije poučavanja, kompetencije, ishodi učenja

Abstract

The rich world is in crisis as it has achieved an era of abundance. This has resulted in the lack of economic growth and high unemployment rates. Though a new economic mentality is a priority, it must be supported by policies of entrepreneurship which enable a new wellbeing for a growing population. However, there are currently too many employees and too few entrepreneurs. Since there is an Accreditation Agency in Portugal which assesses new proposals of Higher Education courses and because we believe that Entrepreneurship can be taught, we have created a new graduate course fundamented on this vision. Unfortunately, after having worked for nine months to conceive this Entrepreneurship course, it was not accepted because the team of public evaluating professors disagreed on the likelihood of teaching/learning how to become an entrepreneur. In this case, while politicians and social forces speak about Entrepreneurship, the Academy is conservative and defends that university must prepare students for the labour market. Hence, the aim of this paper is to share the manner in which an Entrepreneurship University Degree can be conceived.

Key Terms Entrepreneurship, High Education, Teaching Methodologies, Competencies, Learning Outcomes

Introduction

It is well known that unemployment is growing all over Europe and that economic growth is anaemic. The 2012 Annual Growth Survey highlighted the commitment to facilitate the creation of new businesses and a smarter and more lenient regulatory regime for micro and small enterprises (European Commission, 2011a). Small and Medium-sized Enterprises (SMEs) accounted for 99.8 per cent of non-financial enterprises in 2012, which equated to 20.7 million businesses (Table 1). The great majority (92.2%) were micro-enterprises (fewer than ten employees), 6.5% were small enterprises (10 to 49 employees), and while 1.1% were medium-sized (50-249 employees). Large businesses (equal or more than 250 employees) accounted for just 0.2% of enterprises in the non-financial sector of the EU. SMEs provided 67.4% of jobs and a Gross Value Added (GVA) of 58.1% in the whole EU. According to these indicators (employment and GVA), the performance of SMEs was above the EU27 average in Austria, Belgium, France, Germany, Luxembourg and Malta, however, below average in the Czech Republic, Estonia, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Poland, Portugal, Romania, Slovakia and Spain (Ecorys, 2012).

Table 1. Number of enterprises, employment and GVA in EU-27, by size-class, 2012

Source: Eurostat/National Statistics Offices of Member States/Cambridge Econometrics/Ecorys

	Enterprises	Employment	GVA / EUR Millions
Micro	19,143,521	38,395,819	1,307,360,7
	92.2%	29.6%	21.2%
Small	1,357,533	26,771,287	1,143,935,7
	6.5%	20.6%	18.5%
Medium	226,573	22,310,205	1,136,243,5
	1.1%	17.2%	18.4%
SMEs	20,727,627	87,477,311	3,587,540
	99.8%	67.4%	58.1%
Portugal	99.9%	78.5%	61.1%
Large	43,654	42,318,854	2,591,731,5
	0.2%	32.6%	41.9%

Consequently, not only is a new entrepreneurship mentality needed but new policies which promote the creation of new companies and new jobs are also mandatory so as to overcome problems such as, the rising unemployment and lack of economic growth existent in most EU countries. Hence, entrepreneurship can be defined as the process of creating value by bringing together a unique package of resources to exploit an opportunity (Sahlman et al., 1999).

Since the welfare system in Europe has made people less interested in taking risks (Wilson, 2008), it is necessary to change both this conformist attitude along with the educational system so as to help prepare future generations to become both more entrepreneurial and more prepared to face the globalised world.

The Lisbon Strategy (2000) established the objective of transforming the EU into the most competitive and dynamic knowledge-based economy in the world by 2010, thus enabling sustainable growth with more and better jobs and greater social cohesion. Seeing that entrepreneurship and innovation are crucial in this context, it is a priority to have students exposed to the reality of entrepreneurship as soon as possible so that they are more likely to become better entrepreneurs in the future (Wilson, 2004, 2008).

Besides this initiative (e.g. Green Paper on “Entrepreneurship in Europe”, 2003), the Small Business Act for Europe was adopted in June 2008 by the European Commission, whose main objective was ‘to improve the overall approach to entrepreneurship, to anchor the “Think Small First” principle permanently in policy making from regulation to public service, and to promote the growth of SMEs by helping them tackle the remaining problems which hamper their development’.

In November 2011, the European Commission published the proposal, Programme for Competitiveness of Enterprises and SMEs (COSME) 2014-2020, aimed at facilitating the access to financing SMEs by; creating a favourable environment for enterprise creation and growth; encouraging an entrepreneurial culture in Europe; strengthening sustainable competitiveness of EU enterprises, and supporting the internationalisation of SMEs while improving their access to markets.

The European Commission (2012a) also promoted the strategic framework for European Cooperation, Education and Training 2020, to enhance creativity, innovation and entrepreneurship at all levels of education and training. Youth on the Move, An Agenda for New Skills and Jobs, and Innovation Union are three flagship programmes present in six countries (Denmark, Estonia, Lithuania, the Netherlands, Sweden and Norway) and in two regions (the Flemish community of Belgium and Wales in the United Kingdom), and as a result these comprise specific strategies so that entrepreneurship is implemented in primary and secondary education.

Entrepreneurship goes beyond the creation of new businesses. It is therefore, a state of mind needed to create sustainable change. Consequently, it is undeniable that increased competition in a globalised world and given the situation in the more developed economies, HEIs may have an important contribution in order to help recover economic growth, especially at the level of research. Consequently, this is achieved by encouraging partnerships with companies and in internships/ training programmes of future entrepreneurs, capable of creating more wealth and employment based on innovation and quality, thus targeting the global market.

In fact, universities have started to promote entrepreneurship mainly based on the hi-tech and knowledge-intensive domain and so this has been possible by stimulating entrepreneurship in many different ways such as,

- creating entrepreneurship courses;
- providing internship opportunities in local businesses;
- investing in research with business applications;
- supporting new enterprise incubators (start-ups and spin-offs).

One third of European Higher Education Institutions (HEIs) has specific entrepreneurship programmes which grant a degree. Surprisingly, almost half have specific Masters, and one quarter have PhD programmes (Niras et al., 2008).

The European Commission (2012b) promoted a study, based on a survey, to the European HEI alumni who attended entrepreneurship education and to a control group of alumni who had not participated in this type of education. Its main conclusion was:

The results show clearly that entrepreneurship education makes a difference. Those who went through entrepreneurial programmes and activities display more entrepreneurial attitudes and intentions, get a job earlier after finishing their studies, can innovate more even as employees in a firm, and start more companies.

Nonetheless, entrepreneurship education should not be confused with business and economic studies. Entrepreneurial programmes should offer students the tools to not only to acquire or develop business knowledge and essential skills and attitudes but also to encourage creativity, initiative, tenacity, teamwork, understanding risk, sense of responsibility, problem solving, communication, networking and leadership. This is the entrepreneurial mind-set which helps entrepreneurs transform ideas into action and also increases employability significantly (European Commission, 2013). Even established companies in Europe need managers with entrepreneurial mentality because only 3% of SMEs are high-growth-oriented (the “gazelles” - Birch, 2002).

Although practical entrepreneurship outcomes are not guaranteed, HEIs can play an important role in fostering entrepreneurship (Potter, 2008). The Survey of Entrepreneurship Education in HE in Europe (Niras et al., 2008) concluded that *“offering degrees in entrepreneurship was not necessarily better than offering no degrees”, because it considered that “it is more important to embed the entrepreneurial vision in all courses [...]. Nevertheless, the results indicated that entrepreneurial degrees constituted an important tool for the entrepreneurial institution.”* Courses in this area lead to the understanding of what entrepreneurship is and thus help students become successful entrepreneurs (Bridge et al., 2010).

Though there are several Entrepreneurship Programmes (Bachelor Degree) in many American and European Universities, we defend that more proactivity in relation to entrepreneurship teaching in Portugal is mandatory. Thus, why not conceive a higher education degree in entrepreneurship in Portugal, when unemployment is becoming structural? Keeping this in mind, work needs to be started on a new curriculum which aims at preparing students to become entrepreneurs or, if this is not possible, to become an intrapreneurial manager at existing firms.

Hence, this paper depicts the process of conceiving a new degree in entrepreneurship, the partnerships and synergies established to support the programme, the final proposal submitted to the Portuguese Accreditation Agency (A3ES), the final decision of A3ES, as well as our conclusions concerning the subject.

The conceiving process

The European higher education system provides greater mobility to students, teachers and researchers. This process known as Bologna, initiated a change in teaching and learning, for it focuses more on the student rather than on the teacher, thus curricula is based on the competencies that students must acquire.

Mitra and Manimala (2008), based on Gibb (1993), pointed out the differences between what universities have to offer and the learning needs of entrepreneurs:

The first promote more critical judgment after analysis of large amounts of information; information understanding and recalling; the assumption of common goals; demand verification of absolute truth by studying information; understanding of the basic principles of society in the metaphysical sense; the search for the correct answer, assuming that there is always time to do it; learning in the classroom; seeking information from experts and authoritative sources; assessment by written tests; and the acceptance of learning success by passing exams based on knowledge.

While the learning needs of entrepreneurs go through intuitive decisions made with limited information; by understanding the values of people who convey filtered information; recognition of the variety of goals of different stakeholders; for making decisions on the basis of judgments of confidence and competence of people; in seeking to implement and adjust practice to the basic principles of society; by the development of appropriate solutions under time pressure; for learning while doing and by doing; by seeking information from anyone anywhere and check its practical utility; for evaluating people and events through direct feedback; by the success in learning measured by problem solving; by learning from mistakes and failures; and by providing products and services to society.

Accordingly, universities should not only concentrate on the acquisition of skills by students but also on the transmission of knowledge and information.

A very important cultural issue concerns the graduate in Management who is not subject to as many failures as the graduate in Entrepreneurship because s/he has accepted a job in already established organizations, thus not risking a lot in most situations. However, entrepreneurship education also gives the possibility of obtaining employment as a manager. Moreover, it is our belief that even with advanced studies in entrepreneurship, not everyone becomes a successful entrepreneur because there are multiple factors that influence this, from the idea or product concept to the existence of favourable conditions to achieve success. Nevertheless, even those, who do not become entrepreneurs, will contribute with their entrepreneurship spirit to social change, at a personal, professional and organizational level, and this is an aspect which the country is in dire need. In other words, there is a need for a more open spirit to innovation, change, mobility, flexibility, adaptation, reconstruction, and sustainability of organizations with a more humane outlook.

Note that, in the United States, on average, an entrepreneur only succeeds after his/her 5th attempt at business, while in Europe, and especially in poorer countries, such as Portugal, the degree of resilience is very low, not to mention the possibilities of obtaining conditions after several attempts. As such, what the Academy can do is, change this conformist and passive scenario, in which most of our workforce live in, and eventually have a positive impact on community life and on the affirmation of Portugal in a more competitive world.

As a result, we have started the process of creating a new graduate programme in entrepreneurship, with the help of several colleagues from different areas of expertise (business sciences, education, engineering, sports and psychology). Consequently, it is fundamented on a framework built according to an agreed list of well-defined competencies and learning outcomes so as to achieve the set programme objectives which contribute to various scientific disciplines and subsequently enable models of teaching-learning-assessment adjusted to the different established skills.

There are good practices concerning entrepreneurship education promoted by the European Commission (2008), therefore the purpose of this programme must be well defined, this is, linked to the expected learning outcomes; a good balance between theoretical and practical aspects; use of interactive and pragmatic methodology; organization of activities and events to improve students' ability to work in groups so as to build strong team spirit, and to develop networks and spot opportunities; invite guest lecturers (e.g. experts on patent law or company financing, alumni entrepreneurs, experienced business people, etc); exchange ideas and experience among teachers and students from different countries; etc.

The academics involved in this proposal were consulted, and consequently all agreed with the way in which this 1st Cycle was being organised:

- introduce the general purpose of the degree
- define general and specific competencies/skills that the programme must develop to form entrepreneurs;
- identify the curricular units which contribute to the development of such competencies as a whole;
- determine objectives, competencies and learning outcomes intended for each curricular unit;
- select the best qualified teachers available for each unit;
- format and adjust the curricular syllabus to 100, 125 or 150 student work hours or to each type of curricular unit;
- define the best curricular unit sequence throughout the programme.

General Purposes

Contribute to the economic, social and cultural changes that Portugal needs, by giving priority to creating wealth and jobs, thus defending that graduates in Entrepreneurship must have an innovative mentality directed towards internationalisation and an attitude and aptitude based on creating and acting upon a new management philosophy which portrays social concerns and sustainability. At a time when employment opportunities among graduates is not fully realized, it is urgent to develop new businesses, by equipping students with tools to initiate their own activity, as opposed to most 1st Cycle courses that prepare them to be employees. Within organisations, entrepreneurship graduates can also contribute to their own continuous development, as they are concerned with and have the ability to innovate and take risks so as to ensure the future sustainability of a business.

Thus, the general objectives of this Degree point to the possibility that students may become entrepreneurs or, alternatively, intrapreneurial managers in established firms.

If we combine education for entrepreneurship with a business context, such as the case of the Greater Porto and, in particular, the municipality of Maia, we can then obtain more favourable conditions for the emergence of new business ideas and eventually the possibility of creating new enterprises (e.g. Toledano and Urbano, 2008).

There are more and more student workers who not only have a vision and business experience, but who are also attracted to higher education degrees which can help them create their own business successfully. Nevertheless, such students may only obtain this degree if they develop innovative ideas, develop entrepreneurial skills, master management techniques, and submit projects which are viable in the job market. Moreover, they also have the advantage of being helped by motivated teachers, towards entrepreneurship with effective liaison with the business community. Considering the focus of the degree programme and the courses being taught with entrepreneurial orientation, there will always be a greater likelihood for more entrepreneurs in this country.

Thus, which general and specific competencies/skills are needed to promote and have new entrepreneurs?

After having studied the Competency Theory, competency was defined to be a set of capabilities, knowledge and experience connected with the necessary effort which results in high performance (Carvalho, 2009). Additionally, not only did we talk to many entrepreneurs but we also studied much literature so as to define the main characteristics of an entrepreneur.

Developing Competencies in the programme

According to the opinion of researchers and entrepreneurs, becoming a successful entrepreneur implies several qualities and competencies. Some of which are highly important such as commitment or even passion, self-confidence, self-reliance, persistence, willingness to take risks, eagerness to complete tasks and hard work so as to achieve set objectives. Nonetheless, creativity is also an essential characteristic, seeing that entrepreneurs usually tend to have innovative methods to solve problems. Moreover, being successful entails that entrepreneurs should also be market-oriented, therefore there is not only a need to learn and acquire all the necessary information from market and business stakeholders, but also the necessity to understand the human need to be satisfied, and consequently the obligation to plan the adjusted and profitable responses to those needs. Other characteristics considered to be good predictors of a successful entrepreneur are ambition, courage, curiosity, optimism, sense of responsibility, as well as management and/or business experience in the field.

The overall goal of entrepreneurship education is to make students acquire good attitudes, knowledge and skills in order to act and behave in an entrepreneurial manner (Heinonen and Poikkijoki, 2006). Thus, after many hours of study and debate, we have defined the necessary learning outcomes for the programme in Entrepreneurship, in other words, an outline of the competencies/skills students must develop to become an effective entre(intra)preneur. As a result, a list of the necessary competencies was drawn up, some of which are composed, and have been divided into 6 groups and 35 items:

- **Thinking/ Analysing competencies as the ability to carry out effective analysis, interpret complex information, and generate new ideas and strategic objectives:**
 - Creativity and Innovation: be creative and aware of the value of creativity both in the development of business and the focus on innovation;
 - Planning: be able to plan the necessary steps (strategic and operational) to achieve the set goals;
 - Control: be able to supervise and assess individual, collective and organizational performance and results;
 - Address problems: be able to foresee and analyse problems;

- Open-mindedness: be available and open to new business perspectives and visions and/ or different ways of carrying out functions and tasks;
- Market Orientation: be willing to meet the needs of stakeholders and fulfil their conditions;
- **Self-management competencies as the ability to learn, develop and take control of any given situation:**
 - Adaptability: the ability to act according to different situations and environments and to show different skills;
 - Self confidence: the belief in one's personal capabilities and experience in order to surpass all obstacles;
 - Risk Tolerance: the ability and willingness to take risks, face challenges and survive instability;
 - On-going learning: the understanding and willingness to learn continuously;
 - Learning from mistakes: the awareness of the necessity to learn from one's errors;
 - Acting ethically: meet the ethical implications of business and act accordingly;
 - Time management: the know-how to manage time personally and professionally.
- **Influencing competencies as the ability to gain the commitment of others while anticipating agreements:**
 - Networking: to create and work within a network as well as to understand that sharing is the solution to many problems;
 - Teamwork: to understand the importance of working with groups of people;
 - Communication: to make communication easy among people;
 - Persuasion: to be able to convince others to share a vision;
 - Negotiation: to act in order to achieve consensus, internally and externally, so as to meet the needs and desires of all stakeholders.
- **Objective achievement competencies as the desire and ability to get things done and achieve a high standard of performance:**
 - Resilience: to cope with stress, adversity and failure;
 - Commitment and engagement: to compromise and be persistent, thus the ability to devote oneself, with heart and soul, to succeed in a project or activity;

- Capacity to make decisions: to make timely decisions, even though they may be risky, difficult or daring;
 - Initiative: to perceive a situation that corresponds to an opportunity and to be the first to transform it into a business project;
 - Sense of quality and excellence: to have the desire to better serve others and accomplish anything by merit by which to be proud of;
 - Work capacity: to work hard so as to become successful;
 - Ability to meet deadlines: to be aware that meeting deadlines is crucial and is a priority in any successful business;
 - Result-oriented: to desire and strive to achieve results.
- **People and group management competencies as the ability to gain the commitment of others and develop their potential:**
 - Leadership: to have clear objectives and the ability to be a role model, to create work methodology so as to gather, guide, develop and motivate people;
 - Organization: to bring together resources (human, technical, material and financial) and efforts to create a project, and thus organize them in order to ensure the efficiency and effectiveness of its implementation to achieve the desired outcomes;
 - Coordination: to coordinate the work and tasks of people;
 - Self Motivation and motivating capacity: to be motivated and to encourage others;
 - Awareness of the different roles of each person;
 - Delegation: to know how to delegate responsibilities and still maintain control over business.
- **Technical competencies as the knowledge in scientific fields of business sciences and languages:**
 - Management skills;
 - Information and communication technologies;
 - Languages.

The Entrepreneurship Programme

Though our proposal presents many curricular units nominated in a traditional manner, they do have a practical entrepreneurial orientations similar to what happens in other countries (Table 2). Closely linked to the proposal of a Graduate Degree in Entrepreneurship defended by the European Commission (2012a), are the orientations for entrepreneurship training/ internship, specific attitudes, types of knowledge and competencies.

After having outlined all the objectives, competencies and specific learning outcomes intended for each unit, it is well-known that *“a common European understanding and approach to learning outcomes for entrepreneurship education is still to be developed”* (European Commission, 2012a). Nonetheless, we tried to link the objectives of the curricular units (what the teacher intends to lecture) to the learning outcomes (what a student is expected to learn).

One other important issue is to establish the best teaching models related to each competency.

Table 2. Entrepreneurship Degree: The Curriculum

1st year – 1st semester	
Introduction to Entrepreneurship	Profile, competencies, industrial sectors, business plan structures.
Economics I	Microeconomics
Communication techniques	To speak in public, to make presentations, to write a proposal, etc.
Personal development	Development of personal competencies
English I	Business technical language
Sports I	Principles and practices of collective work
1st year – 2nd semester	
Accounting techniques	Register methods and accountability concepts
Management informatics	Use of TIC to make management decisions
Sports II	Theory and practice of sports training
Market orientation	Fundamentals of marketing and strategical orientations
Economics II	Macroeconomics
English II	Technical language of negotiation
2nd year – 1st semester	
Accounting	Understanding accounting financial and management maps
Statistics	Quantitative analysis of data

Budget management	Budgeting techniques and management control
Investment analysis	Investment project analysis and decision making
Group dynamics and conflict management	Creation and development of effective teams
Marketing	Strategical and operational marketing
2nd year – 2nd semester	
Total quality management and business excellence	Quality theories and practices
Planning and strategic management	Strategic and operational planning. Individual, collective and organizational assessment.
Market analysis	Demand and supply assessment techniques
Business law	Basical concepts and practice applications of Labour, Commercial and Tax Laws.
Entrepreneurship and innovation	Creativity, innovation, and ideas development
Health and safety at work	Work conditions.
3rd year – 1st semester	
Human resources management and leadership	Human capital motivation, and individual and collective management techniques
Operations research	Optimization methodologies in management decisions
Production management and logistics	Stock, production and distribution management
Knowledge and intellectual capital management	Knowledge and information management
Entrepreneurship project I	Creation of a plan to start a new business, or change or innovate an existing business.
3rd year – 2nd semester	
Negotiation techniques and outsourcing	Negotiation and contracting
Internationalization models	Study of business expansion models
Financial management	Sources of business financing and management
Information systems management	Information systems, electronic commerce
Entrepreneurship project II	Creation of a new business, or implementing change or innovation in an existing business.

Teaching methodology

Traditional methods are not very good when developing entrepreneurial characteristics, attitudes, skills or competencies. Seeing that a teacher must become more of a moderator than a lecturer, the use of interactive learning and experience-based teaching methods is crucial upon developing entrepreneurial skills and abilities.

An enquiry, carried out by the European Commission (2008), asked experts to highlight which teaching tools/methods could be more appropriate or effective in offering entrepreneurship programmes and courses. The results indicated not only a preference for methods based on group and team techniques for creating new business ideas but also for the use of case studies. Other proposed methods included business planning workshops, inviting guest speakers (namely entrepreneurs), business simulations, practical entrepreneurial activity, and brainstorming/creativity exercises. A study by Mitra (2008) also pointed out several methods of entrepreneurship education: hands-on training, creativity techniques, case studies, communication training, development of interpersonal skills, teamwork, inviting entrepreneurs, role-playing, developing a business plan, etc. hence, all practical pedagogical methods. Additionally, the American experience shows that the courses are structured to be as experiential as possible, incorporating real-life cases, case studies, learning by doing through projects, internships and business plan competitions (Wilson, 2008).

As a result, we asked the appointed teachers to incorporate all these pedagogical methods in their curricular units. So that the process of teaching/learning can be more effective, we rely on several partnerships with entrepreneurial supportive institutions.

Partnerships

The university, *ISMAI – Instituto Superior da Maia*, has been supporting and promoting entrepreneurship since 1999 and it was this same year that *ISMAI* helped to create the Science and Technology Centre of Maia (*Tecmaia*), which is composed of 73 enterprises and research centres and employs 1,476 people. Moreover, the lecturers have a close relationship with the industrial environment, this is, there are 567 partnership protocols and hundreds of collaborative and conjoint events (55% in the for-profit sector, 30% in the public sector and 15% in the social sector). We have helped to create new businesses, namely through supporting entrepreneurship programmes like *PREMIO* (Promoting Entrepreneurship & Innovation), *ENTER* (Entrepreneurship, Enhancement & Reinforcement), *MaiaFinicia* (financing new start-ups) and *CEITEC* (Entrepreneurship Center, *ISMAI-Tecmaia*). Many lecturers have been working on these programmes for the last 6 years. Institutions such as *Tecmaia* are the primary^t supporting base of specialists to our students. Secondly, there are about 3,400 firms in the industrial zone of Maia.

The reaction to our proposal and our answer

Several months after, we received from the Accreditation Agency in Portugal the following appreciation:

There is a detailed description of degree objectives and competencies to develop in students, consistent with the defined objectives and mission of the institution. However you can not fail to mention that a degree in entrepreneurship, particularly with the features that were presented, does not create immediate potential entrepreneurs, but only could instill in future graduates some propensity to be an entrepreneur. Indeed research carried internationally in this area indicates that there is no clear positive link between training in such courses and business creation.

The positioning of some curricular units in the programme structure is debatable. For example, Introduction to Entrepreneurship placed in the 1st semester of the 1st year; positioning the Market Orientation one semester before Marketing; and introducing two Sports curricular units makes no sense in a programme of this kind. The syllabus of Entrepreneurship Project I and II are not adapted to the skills of students who intend to admit to the course. And the curricular unit of Health and Safety at Work forecasts the study of scientific areas that students in this study area do not follow. The curriculum should contain a greater number of courses in the scientific area of entrepreneurship and innovation.

How is the law, we present the following contradictory:

a) The course Introduction to Entrepreneurship aims to be effectively a starting course with clear objectives:

- Determining the initial profile of each student, so that they are aware of the aspects that should improve over the programme;
- Study of Portuguese production activities, from what exists and does not exist, stimulating demand for ideas and best areas to work along the way in order to achieve an enterprise project. This project can imply the meeting of other scientific and technological resources, which will be provided by the partners from the business community;
- Identify success stories, studying their route;
- Identify alternative models to achieve business plans, due to projects related to different activity sectors;
- And to know the funding procedures – obviously a first call of attention to this important factor of success.

b) The placement of the course of Market Orientation in the 1st year, 2nd semester, is justified by the content it presents. The students learn what is Marketing, as science and technology, its historical evolution, and how it is possible to study its operational application by evaluating the strategic direction of the company. Thus, in this context, it is an introductory curricular unit. The course of Marketing appears later, with classic topics for entrepreneurship, studying the concepts that involve a marketing plan from the idealization of an offer to applications of the marketing mix and its assessment, and therefore aiming to contribute for the creation of a business plan.

c) A major problem with young entrepreneurs has to do with their lack of competence to strategize, lead and manage teams. It is known that in large firms and military organizations, these kind of skills are developed through physical activities and sports. It was in this context that we experience we dared to include Sports courses in the proposed degree.

d) The curricular units of Entrepreneurship Project I and II are the logical corollary of the development of skills throughout the programme. It is intended to be a Project Work to apply the knowledge and skills acquired. The student will have to meet, perhaps the technical skills of other scientific fields (eg, engineering, computer, etc..), but he doesn't need to be an expert in those areas. That is, the design of products and services can be achieved during the bachelor programme and developed in these curricular units, while prototype testing must be done in suitable production units that collaborate with us. We don't want the student to be an engineer or industrial designer able to create and test a product, but only to have a business idea, which should be developed in partnership with teachers, with the broad business community in the background. To do all this, autonomously, in a three year degree becomes virtually impossible, looking at the many possible areas of specialization, in which students could create new business. So, from the 1st year, students will be guided to create and test ideas, learning to create networks of information and consultation with experts and entrepreneurs who can help them succeed in developing a new business. As argued Schumpeter, the entrepreneur is one who can gather the resources needed to create something new, and need not necessarily be the owner of the idea, work or finance.

e) The existence of a curricular unit of Health and Safety at Work is related to the fact that many graduates, managers or entrepreneurs, do not have the notion of their legal and human obligations and responsibilities in what concerns these matters. Thus, it is not intended that students learn the techniques of hygiene and safety, as experts, but only to know how to promote the control of all health and safety contingencies involving business area chosen.

f) This proposal presents many undergraduate courses that, although called in a classic mode, have an entrepreneurial orientation and practical application. Incidentally, the same is true internationally, and in some cases it adds the word "entrepreneurship" to enhance their dominant orientation, which is not generally used by us.

Conclusions

To sum up, it has been argued that entrepreneurship can be taught and consequently the skills required to be a successful entrepreneur can be developed, however the sooner this is acquired in life, the more successful an entrepreneur will be. Moreover, this does not imply that these skills cannot be worked on and improved in Higher Education.

The established team adjusted working methodologies so as to create an updated and dynamic Degree in Entrepreneurship. After analysing several Higher Education courses of Entrepreneurship and reviewing literature and interviewing entrepreneurs, we tried to outline the main characteristics and skills that would better contribute to form new and successful entrepreneurs. Therefore, these were systematized into 6 groups of competencies: thinking, self-management, influencing/persuading, achieving set objectives, managing people and groups, and techniques. Then, teachers were chosen, especially those with greater entrepreneurial experience, and asked to participate in the syllabus which would comply with the goals and desired learning outcomes, as well as suggest teaching methods best suited to the learning and development of students for the entrepreneurial context. All this work was mentioned in the proposal, which was rejected not only at the outset but the explanations by the proponents to the objections raised by the Agency, were also discarded and subsequently resulted in the non-approval of the new degree.

Nonetheless, the work and the final product conforms to all the specifications proposed by the European Commission in their reports, as well as applies to the most current recommendations for research in this scientific area.

Hence, while politicians, businessmen and economists speak about stimulating entrepreneurship, it seems that several scholars still doubt the goodness of this type of learning, so developing a more specific teaching methodology focused on the formation of potential entrepreneurs or intrapreneural managers is not possible.

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