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## HOW TO INTEGRATE ENTREPRENEURSHIP EDUCATION AND CREATIVITY INTO A BUREAUCRATIC ENVIRONMENT (CASE STUDY)

### **Abstract**

Research has revealed that there is a positive correlation between entrepreneurship and economic growth. As a consequence, the European Commission is taking action on enhancing entrepreneurship and recommends appropriate entrepreneurship training in schools and higher education. Besides other factors, entrepreneurship education is often characterised by creativity, problem solving, interdisciplinarity and practice orientation. With respect to these aspects, universities might not be the right environment to launch an education for entrepreneurship and creativity. They are often inflexible institutions characterised by bureaucratic structures, laborious decision processes, and highly regulated procedures. Although they should teach entrepreneurship and creativity, they are caught up in bureaucracy and stagnancy themselves. Nevertheless, universities are obliged by government to contribute essentially to entrepreneurship education.

In this case study, we examined the integration of entrepreneurship education under the challenging circumstances mentioned above. The university in this case study is home to more than 32,000 students and 4,000 employees, 6 faculties, 76 departments, and about 120 study programs. Due to cooperation with other institutions, about 60,000 students are allowed to participate. The program in this study provides basics in management, entrepreneurship and intrapreneurship to increase general employability and to promote creativity, interdisciplinary thinking and entrepreneurial acting. The findings of our study indicate the importance of a setting that allows students to participate irrespective of their discipline or the progress in their studies. Moreover, it seems advantageous that students can customise the program according to their specific needs. The importance of flexible integration into regular academic studies has to be emphasised. In this study, we provide an adequate solution to master this challenge in a bureaucratic environment.

### **Keywords**

bureaucracy, entrepreneurship education, integration, university

### **1. Introduction**

Europe's new companies alone, particularly small businesses, generate more than four million new jobs every year (European Commission, 2013). In response to the growing importance of these companies, the European Commission is taking action on enhancing entrepreneurship in Europe. According to the European Commission, "entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and

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risk taking, as well as the ability to plan and manage projects in order to achieve objectives.” (European Commission, 2005, p. 17, 2006, p. 4). Education should therefore develop awareness of entrepreneurship from primary school to university. Introducing young people to entrepreneurship triggers their initiative and helps them to be more creative and self-confident (European Commission, 2006).

When considering the requirements of modern entrepreneurship education the question remains whether universities are the best choice for implementation. They are often inflexible institutions characterised by bureaucratic structures, laborious decision processes and highly regulated procedures. In other words, although these institutions should teach entrepreneurship and creativity, they are often caught up in bureaucracy and stagnancy themselves.

The aim of this paper is twofold. Firstly, we examine the main characteristics of entrepreneurship education at universities. For this purpose, we present a short overview of relevant literature and structure the findings to elaborate the main aspects. Secondly, we analyse the situation at the investigated university and show how entrepreneurship education and teaching for creativity was implemented in a bureaucratic environment. In this section, we examine the most important factors regarding structure, integration and content.

## 2. Entrepreneurship education and creativity

The relevance of entrepreneurship education has been growing ever since the first entrepreneurship class was held in 1947 in the USA, and especially from the 1980s on, when Drucker's *Innovation and Entrepreneurship* was published (Drucker, 1985; Katz, 2003). In literature, there is a consensus that entrepreneurship can be taught and there is evidence that entrepreneurial attributes can be positively influenced by entrepreneurship education (Gorman, Hanlon, and King, 1997). It impacts students' awareness of entrepreneurship as an alternative career path to employment and provides them with skills needed to start and successfully run their businesses (Gorman et al., 1997; Slavtchev, Laspita, and Patzelt, 2012). In contrast, there is also some research indicating that entrepreneurship education does not have the intended effects. For example, Oosterbeek, van Praag, and Ijsselstein (2010) discovered that the intention to become an entrepreneur could even be negative. They argue that this could be due to the more realistic self-perception of students and the following decrease in optimism that they can start a successful business on their own.

Bae, Qian, Miao, and Fiet (2014) define entrepreneurship education as education for entrepreneurial attitudes and skills and entrepreneurial intentions as a desire to own or start a business. In accordance, Jones and English (2004) describe entrepreneurial education as the “process of providing individuals with the ability to recognise commercial opportunities and the insight, self-esteem, knowledge and skills to act on them” (p. 416). Literature emphasises different key aspects in entrepreneurship education. Based on our literature review, entrepreneurship education should imply the following four parts:

**Professional skills.** Entrepreneurship education should provide (theoretical) management and entrepreneurship knowledge. Students should be able to manage a company, therefore it is necessary to teach them basic skills in traditional business disciplines, e.g. management, marketing, controlling, finance and accounting (Jones and English, 2004). At best, they also learn the basics about business environments and get some insights in macroeconomic correlations. A proper theoretical education will enable them to assess opportunities and threats as well as strengths and weaknesses of their business ideas. Many authors propose a mixture of professional competences and soft skills. For instance, Vesper and McMullan (1988) demand knowledge-based courses about entrepreneurship and functional core areas as well as skill-building courses and practice. Similarly, Plaschka and Welsch (1990) postulate that entrepreneurship education should include theory-based practical applications on the one hand, and creativity, multi-disciplinary and process-oriented approaches on the other.

*Behavioural and attitudinal competencies.* This leads us to the second part of proper entrepreneurship education, which refers to skill-building courses. This category covers all aspects of soft skills such as personality traits, communication, language, personal habits, and social manners. But it also includes competences that are more entrepreneurship-specific, like opportunity recognition, opportunity assessment, negotiation, leadership, risk management, conveying a compelling vision, commercialising a concept, value creation with new business models, marshalling resources, resource leveraging, guerrilla skills, focussing, tenacity resilience, self-efficacy, and building and using networks (e.g. Jones and English, 2004; Morris, Webb, Fu, and Singhal, 2013).

Many authors advocate courses in creativity, creative thinking, and creative problem solving (Morris et al., 2013; Plaschka and Welsch, 1990; Solomon, Yar Hamidi, Wennberg, and Berglund, 2008; Vesper and McMullan, 1988). Amabile (1997) defines creativity as the “production of novel and appropriate solutions to open-ended problems in any domain of human activity” (p. 18) and entrepreneurship as the “successful implementation of creative ideas to produce a new business, or a new initiative within an existing business” (p. 18) and therefore entrepreneurial creativity as “the generation and implementation of novel, appropriate ideas to establish a new venture” (p. 20). In that context, Solomon et al. (2008) found that exercises in creativity can be used to raise the entrepreneurial intentions of students in entrepreneurship education.

*Practice.* Another very important point is practice. Literature suggests a vast field of practice-orientated activities, like working in start-ups, writing business plans, meeting entrepreneurs, simulations, videos of new venture start-ups, role play, and business games (e.g. Clouse, 1990; Vesper and McMullan, 1988). Neck and Greene (2011) suggest starting businesses as coursework, serious games and simulations, design-based thinking, and reflective practice as new methods in entrepreneurship education. Rasmussen and Sørheim (2006) also state the relevance of learning-by-doing activities in a group setting and a network context. Jones and English (2004) demand a teaching style that is action-oriented, encourages experiential learning, problem solving as well as project-based learning, and is supportive of peer evaluation.

*Awareness and self-assessment.* The last part of entrepreneurship education is about awareness and self-assessment. This part is for some reasons crucial, as it allows students to

discover their specific abilities, informs them about career options, and teaches them to assess which career – entrepreneur or manager – is most suitable for them (Graevenitz, Harhoff, and Weber, 2010). Research is ambiguous regarding the effects in this matter. On the one hand, some results suggest that initially undecided students are most likely to change their beliefs when attending an entrepreneurship class (Graevenitz et al., 2010). On the other hand, Slavtchev et al. (2012) show a positive effect of entrepreneurship education on students' intentions to become entrepreneurs in the long term (after some time in paid employment), but a negative effect on their intentions in the short term (immediately after graduation). This could be due to the fact that entrepreneurship education provides more realistic perspectives on what it takes to be an entrepreneur (Oosterbeek et al., 2010; Slavtchev et al., 2012).

### 3. Bureaucratic environment

In this section, we take a short look at universities, which are often obliged by government to contribute essentially to entrepreneurship education. The European Commission (2006) has also recommended fostering entrepreneurship in higher education and including entrepreneurship as an objective of education into curricula. Entrepreneurship should be embedded into curricula across all levels of education before the end of 2015 (European Commission, 2013).

But with respect to the above mentioned characteristics of entrepreneurship education, universities might not be the right environment to launch education for entrepreneurship and creativity. There are some obstacles that could interfere with these efforts:

- **Bureaucracy:** Universities are often bureaucratic institutions. They have standardised rules related to curricula, courses, lecturers, and content as well as the kind of teaching. These rules are defined in numerous laws and can restrict the options for a modern and unconventional education for entrepreneurship or creativity.
- **Decision-making:** Complicated and lengthy procedures often stop novel approaches even before they get started. Strong support from opinion makers is required to overcome laborious decision processes and bureaucratic barriers.
- **Structures:** Universities are characterised by inflexible structures. This problem is twofold. On the one hand, there are long-established departments and staff members who fear to lose their vested rights. On the other hand, there are strict rules for curricula that complicate the establishment of entrepreneurship education within these programs. For both reasons it is hard to implement interdisciplinarity that is strongly needed in entrepreneurship education.
- **Financing:** The unpleasant nature of budgets is that they are restricted. If somebody gets more money, another one will get less. This “mechanism” interferes with new disciplines and, due to distribution battles, limits them in their development.
- **Academia:** The scientific world is characterised by objectivity, accurateness, prudence, standardised methods, projectable procedures, and theoretical issues. Entrepreneurship focuses on practical issues, a high factor of unpredictability, exceptional methods, emotions, creativity, and courage. This should not be misunderstood: creativity, for example, is just as important for academia as accuracy

for entrepreneurship. They are not opposite poles, but often choose opposite approaches.

These issues have to be considered when implementing entrepreneurship education and appropriate actions have to be taken subsequently. Problems that affect the quality of entrepreneurship education and influence the entrepreneurial mindset have to be prevented.

#### **4. Case study**

In this section we analyse the situation at the investigated university and elaborate the most important factors regarding structure, integration and content of entrepreneurship education at an institution that meets the above mentioned aspects.

##### **4.1. Preconditions and objective of the program**

The location in this case study has more than 275,000 residents and about 60,000 students at eight universities or colleges of higher education. The investigated university itself is home to about 32,000 students and 4,000 employees, 6 faculties and 76 departments, offering more than 120 study programs.

The situation is characterised by a low affinity to entrepreneurship as a possible way to create one's own future. Only a very small number of students considers becoming an entrepreneur. Entrepreneurship education in the region faces challenges such as complex study law rules, a conservative mindset with regard to a "traditional" career, and fear of failure. Furthermore, the universities and disciplines have different cultures and socialisations.

To counteract these problems, the universities at the site and a local academic incubator established an inter-university program called TIMEGATE. The project name TIMEGATE stands for Transfer Initiative for Management and Entrepreneurship Basics, Awareness, Training and Employability. TIMEGATE provides essential basics about entrepreneurship and intrapreneurship to increase general employability and promote interdisciplinary thinking and acting. It is the answer to the challenge of creating a regional entrepreneurship ecosystem.

Specific objectives are:

- to position entrepreneurship as a bridge and crosscutting issue for students of all disciplines and to break down bureaucratic structures between universities,
- to integrate entrepreneurship into relevant networks at the site and to use regional advantages (young, well-educated environment, comprehensive industry spectrum),
- to develop an independent and formative mindset and to ensure entrepreneurial thinking and acting within the organisation, and
- to provide practically oriented content through external experts and enable students to learn from managers and entrepreneurs.

The whole program, which is free of charge for students, is funded by the involved universities and the Ministry. The latter provides extra funding for this cooperation between universities. This additional budget is very important for acceptance within the universities because it highlights the relevance of entrepreneurship education for the Ministry while avoiding distribution battles involving traditional programs and departments at the same time. For this reason, decision processes could be accelerated, enabling rapid compilation of the fundamental structure of the program with the support of university administration.

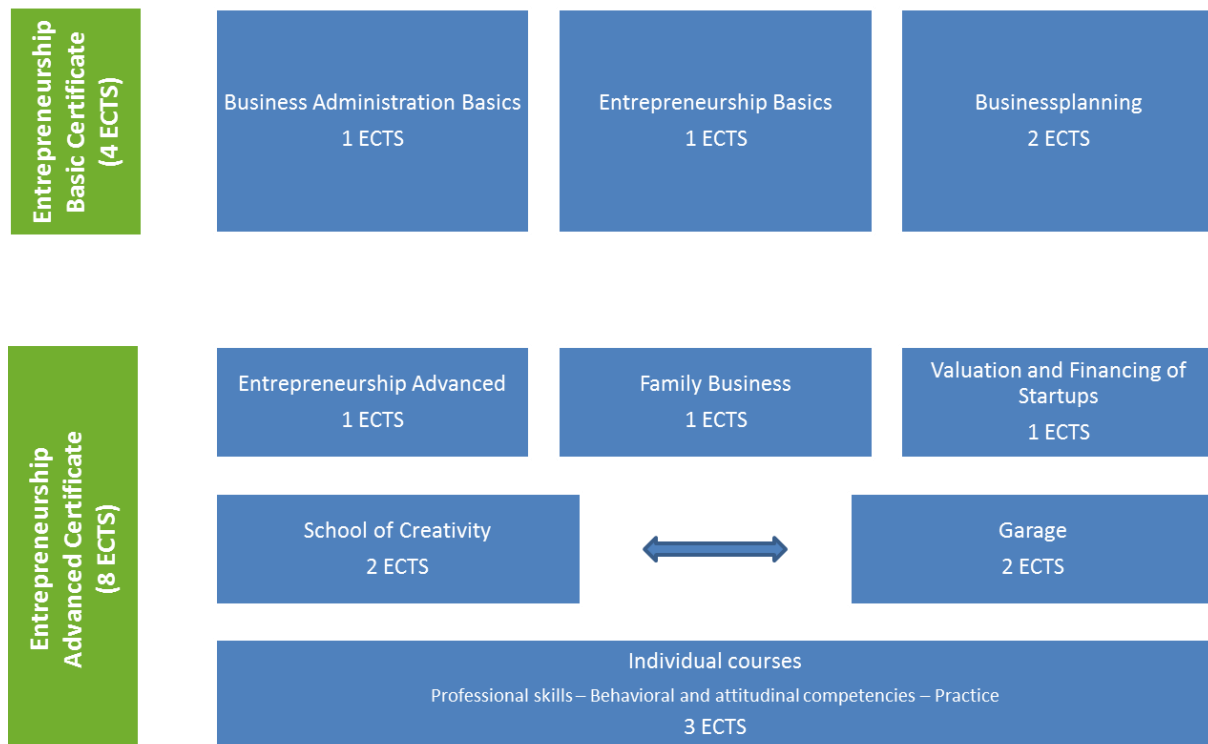
#### **4.2. Structure of the program**

In the program's development phase, it was necessary to decide how profoundly the program should be integrated into existing study curricula. Due to the fact that many legal and administrative regulations would have limited the program, it was decided to integrate it by means of elective courses, which are available and open to all students of the participating universities. Since all curricula require elective courses amounting to nine or more ECTS, it is possible for students to integrate entrepreneurship education into their regular studies and to attend courses without "losing" time. Furthermore, students can participate irrespective of their studies and academic progress.

Students can acquire certificates to formally confirm qualifications for the labour market. Those certificates still have numerous options to choose from, but also require the completion of certain obligatory courses.

#### **4.3. Content of the program**

The program consists of two certificates (Figure 1). The Basic Entrepreneurship Certificate includes three courses with one ECTS each. Building on the Basic Entrepreneurship Certificate, it is possible to earn an Advanced Certificate in which students can deepen content and can set individual priorities according to their own needs. For the Advanced Certificate it is mandatory to finish the Basic Certificate first. Furthermore, it is necessary to choose between the *School of Creativity* and the *Garage*. The former is designed for students without a concrete business idea to learn creativity techniques. In the latter, the students can refine their business concepts or work on their start-up. Additionally, students have to complete three more elective courses based on their needs (Figure 1: Individual courses). Over 30 courses are available in three major fields. Firstly, there are core business courses such as accounting, financing, marketing, leadership and management, and secondly, courses for e.g. soft skills, personality, psychology and creativity. Thirdly, the final part focuses on practical insights in specific branches of industry, for example pharmacy, health, and manufacturing. The lecturers are mostly experts with practical experience. They provide relevant knowledge in their areas and ensure practical relevance in teaching.



**Figure 1:** Entrepreneurship School

(Source: Authors' illustration)

According to the literature review, entrepreneurship education should target professional competences as well as behavioural and attitudinal competencies, practice, awareness and self-assessment. The program focuses on the following aspects:

- **Professional skills:** The *Business Administration Basics* and *Entrepreneurship Basics* courses, in particular, provide fundamental knowledge. Furthermore, students can attend core business lectures when they have to select their individual courses in the Advanced Certificate. The aim is to give interested students useful tools for an upcoming start-up phase.
- **Behavioural and attitudinal competencies:** The *School of Creativity* course enables students wishing to start a company to independently learn application-oriented techniques and methods for a structured development of start-up and business ideas. Students should get insights into creativity techniques and learn which concepts and methods are primarily used in economy and practice. More courses focusing on soft skills and personal competences are available in the context of the individual courses they have to choose.
- **Practice:** The whole program provides a high level of practice orientation. One special course is the *Garage*. Students apply preliminarily suggesting their ideas and providing an executive summary. After their successful admission to the *Garage*, students are accompanied by experienced mentors. They work in interdisciplinary teams for one semester to develop their own business models. Workshops on storytelling, legal basics, design thinking and e-business are currently available. The course defines basic aspects related to starting a venture. The 18 mentors form a key part of the course. They can be booked within the semester for coaching sessions

and advise on issues such as marketing, sales, design or even financing and software development. Through individual and personal coaching, open questions are handled competently and quickly.

- **Awareness and self-assessment:** This program leads to a better view of entrepreneurship as a very important topic. The main point is that it is not limited to business students. Because of the collaboration of local universities, it ensures that students of all disciplines become aware of entrepreneurship as a possible career option. The program will enable them to better assess themselves and their business ideas. Students learn about their strengths and weaknesses and find out whether they are qualified as an entrepreneur or not. Events such as panel discussions with entrepreneurs or start-up cafes lead to a higher awareness and complete the program.

#### **4.4. Specifics of the program**

This case study provides some important insights for the implementation of an entrepreneurship program at university. The following issues characterise the project:

- Collaboration between universities on the site enables entrepreneurship education for all disciplines and not just for the obvious ones. That not only provides an interdisciplinary approach, but ensures that all students become aware of this career option.
- Integration into curricula through elective courses allows students to attend the program without losing time doing their regular studies, irrespective of their academic progress. Furthermore, this approach avoids bureaucratic obstacles, opens up flexibility in implementation, and also allows for creative solutions, as it is not necessary to adapt curricula with regard to their content or extent.
- The program can be tailored to the personal needs of the students, as it offers a high number of optional courses. Hence, students can focus on their business ideas.
- Universities position themselves as partners and support the students before, during and after the founding. Network effects and synergies are used by integrating non-university partners.
- A high level of practice within the program ensures relevance for the economy.
- Entrepreneurship education is a pillar of university policy.

#### **5. Conclusions**

The economic relevance of entrepreneurship has increased constantly, and as a result, political decision makers in Europe and the United States have started to make increased efforts to foster entrepreneurship at schools and universities.

Literature reveals that proper entrepreneurship education should include professional skills (basic knowledge in core areas of management and entrepreneurship), behavioural and attitudinal competencies (e.g. soft skills, creativity, opportunity recognition, negotiation), practice (hands-on activities, e.g. business planning, starting an own business, interaction with start-ups), and courses for awareness building and self-assessment. The latter point is



not only important for drawing attention to an entrepreneurial career, but also for identifying and filtering those students with the highest potentials. In that sense, it can protect students from choosing the “wrong” career. Accordingly, there is evidence that entrepreneurship education does not necessarily have a positive effect on students’ intentions to become an entrepreneur in the short run, for it provides them with a more realistic perspective on what it takes to be an entrepreneur (Slavtchev et al., 2012).

In this case study, we examined the implementation of entrepreneurship education and creativity at a university. Universities are characterised by bureaucracy, laborious decision processes, inflexible structures and lengthy processes, restricted budgets and an ambiguous relationship between “theoretical” academia and “practical” entrepreneurship. For this reason, university might not be the right environment to launch education courses for entrepreneurship and creativity.

Our findings indicate the importance of a setting that allows students to participate irrespective of their discipline or study progress. Moreover, it seems advantageous that students can tailor the program to meet their specific needs. The importance of flexible integration into regular academic studies has to be emphasised.

Although at present universities may sometimes be stagnant and cumbersome institutions, they are crucial for creating new ideas and finding novel solutions. Therefore, universities and start-ups are more similar than expected.

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