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**PROMOTING THE ENTREPRENEURSHIP EDUCATION USING A BLENDED  
LEARNING APPROACH**

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**Abstract:** *For some countries, the discussion about entrepreneurship, more related to education, seems to be a taboo topic, while for others is a trend which must be valorized. There are many European documents and strategies regarding the promotion of entrepreneurship in the higher education context, from "Entrepreneurship in higher education, especially in Non-business studies", to "Lisbon Strategy 2010, Oslo Agenda for Entrepreneurship Education in Europe", or a newest one "Europa 2020 – A European Strategy for smart, sustainable and inclusive growth". This article aims to present two concrete examples of how entrepreneurship education could be promoted using a blended learning approach, based on interaction and focus on students. There will be presented how Apple company is oriented on education, not only on technology, and how iTunes U could be an important tool in teaching entrepreneurship. The second example will present an eMentoring process for developing entrepreneurship competences in an European project.*

**Keywords:** *entrepreneurship, eMentoring, iTunes U, blended learning*

## **I. WHY ENTREPRENEURSHIP EDUCATION?**

In scientific literature entrepreneurship has been defined as a process (Neck, Greene, 2011; Shane, Venkataraman, 2000; Audretsch, 2003, etc); method (Neck, Greene, 2011); individual's different qualities, skills, abilities and traits (Flora, 2006; Korunka et al, 2003; Brereton, Jones, 2001; Bosma et al, 2002, etc); behaviour (Chell, 2007; Stevenson, 2000; McKenzie et al., 2007, etc); combination of individual's behaviour and different qualities (Gibb, 2007), interrelated entrepreneurial personality traits, knowledge, abilities, skills, attitudes, and behaviour.

There are theoretical arguments that suggest support for new entrepreneurs should be provided on a mentoring basis (Deakins et.al., 1998:151).The research indicates that young entrepreneurs want support from someone who is neutral, objective and non-judgmental (Cull, 2006:17). The most frequently mentioned type of education and training in starting a business in GEM surveys' involved countries turned out to be self-directed learning. This includes reading books and special materials, observing or working in other people's businesses (Rastrigina, 2010:38). Mentoring involves principles drawn from experiential and cyclical approaches to learning, the entrepreneur learns from experience, but, with the mentor, learns 'how to learn' from that experience (Deakins et al., 1998:154).

Entrepreneurship is an important contributor to new ventures and helps to create jobs, wealth and economic growth. Providing young potential entrepreneurs with the appropriate skills and support is very important, entrepreneurship education being an important element to build a global competitive advantage.

Over the years, the focus of entrepreneurship education has evolved from developing ventures to emphasize the development of behaviours and skills. It was directed towards building business skills and theoretical/strategic planning skills, along with the intent to deliver entrepreneurship education to in an interdisciplinary approach.

Do students who take entrepreneurship courses differ from those who do not over the long term? Researches conducted in this field show some positive results, although as Myrah & Currie (2006) point out, the entrepreneurship curriculum is still underdeveloped and lacks standards, and its implementation at all levels is fraught with political tensions and philosophical dilemmas and resource struggles. Nonetheless, Rasheed (2001) found that students who have entrepreneurship training increased their science scores an astounding 39.0%. Fayolle et al. (2006) demonstrate that entrepreneurship education can have positive effects depending on students' background and initial perspectives. Menzies & Paradi (2003) found that among a 15- year cohort of engineering graduates, taking one or more courses in entrepreneurship was also a strong predictor of later reaching top management status. Lee & Wong (2003) show that a positive relationship exists between one's attitude towards entrepreneurial education and business start-up.

## **II. BLENDED LEARNING APPROACHES IN TEACHING ENTREPRENEURSHIP**

In recent years interest has increased in "blended learning," where traditional face-to-face teaching is combined with other elements, notably on-line supported activity. The role of technology has been crucial in enabling these developments. The term "blended learning" is often taken just to refer to the balance between face-to-face and online interaction, though this is a very restricted perspective. Nevertheless, there remains considerable prejudice in favour of face-to-face interaction, and indeed, a certain minimum face-to-face interaction is required by many educational regulatory regimes. The term "blended learning" is used in both academic and corporate circles.

While mixed-mode educational environments are nothing new, with the advent of new technology it has reached a new dimension. In essence, blended learning is a combination of educational interactions/interventions (Fleck 2009):

- Live face-to-face
  - formal (e.g. instructor-led classroom);
  - informal (e.g. work teams; role modelling);
- Virtual collaboration
  - synchronous (e.g. live e-learning classes); and
  - asynchronous (e.g. web learning modules, video and audio CDs/DVDs; knowledge databases).

Face-to-face pedagogy has been around for at least several thousand years whereas on-line methods have only been around for at most several decades and are still rapidly evolving. For example, comparing asynchronous text forums with face-to-face tutorials, forums have certain advantages. The text format tends to even out status and gender differences, while the asynchronous nature helps to level linguistic differences. Without the need for immediate real-time replies, there is more opportunity for non-native speakers to understand what is going on and to work out how to respond and what to write.

Blended learning focuses on optimizing achievement of learning objectives by applying the "right" learning technologies ; to match the "right" personal learning style; to transfer the "right" skills; to the "right" person; at the "right" time. Embedded in this concept are the following principles: Adapting the method of delivery to the learning objectives rather than vice versa; accepting that not only there are many different personal learning styles, but that entrepreneurship students particularly exhibit a preference for active, concrete teaching modalities; a belief that the most effective learning strategy is "just-what-I-need, just-in-time".

Below are presented two concrete examples of teaching entrepreneurship education which are based on concrete experiences (see Kolb's Model of Experiential Learning).

### **2.1. iTunes U. Podcasts**

One of the Apple objectives was to promote mobile education of "learn anything, anytime, anywhere" and it launched iTunes U in 2007 – a section of the iTunes Store dedicated to the distribution of educational audio and video podcasts by universities and institutes from around the

world, being considered “the world’s largest digital catalog of free education content”. At the beginning it was addressed for US colleges and universities and starting to June 2008, also for institutes from Australia, Asia and Europe (Nagel, 2008). iTunes U [www.apple.com/education/itunes-u/](http://www.apple.com/education/itunes-u/) is a free, highly visible and easy-to-use platform through which educational organizations can reach out to their students, staff and lifelong learners within the general public. On 8.02.2012, 447 universities and colleges were registered on iTunes U.

Complete courses (audio, video, books, presentations and other content), could be distributed at this moment using this application. Students and lifelong learners can experience these courses for free or by cost through iTunes U using their iPads, iPhones and/or iPods. More than 200 million iPhones were sold since the release (2007), and about 25 million of iPads were sold since 2010 until present. There are more than 225 million active iTunes accounts and the number is increasing continuously.

It is obvious that owners of Apple devices are obliged to have an iTunes account, but you are not obliged to have an Apple device if you want to activate an account. This means that all the resources on iTunes (including iTunes U and iBooks) are available for everybody.

Available categories on iTunes U:

- business
- engineering
- fine arts
- health and medicine
- history
- humanities
- language
- literature
- mathematics
- science
- social sciences
- society
- teaching and education

The Internet is full of useful resources on entrepreneurship education. Books, articles, studies, courses, podcasts, could be downloaded for free and respecting legal conditions (including copyrights). Below is presented a summarizing table with the searching results by “entrepreneurship” and “entrepreneurship education”.

**Table 1: Searching results for “entrepreneurship” and “entrepreneurship education” on different online sources - (29.02.2012)**

Source Searching by...	iTunes U			Podcasts	Apps for iPhone	iBooks on App Store	YouTube	Google
	Episodes	Collections	Courses					
Entrepreneurship	400	223	1	189	60	903	16.800	63 mill.
Entrepreneurship education	113	99	0	125	19	22	6.440	93 mill.

The idea of educational podcasts that are easily accessible takes mobile learning, to the next generation. Podcasting technology should not be seen as a tool to replace traditional classroom teaching of fundamental principles. Rather, it should supplement class materials, so that students can better understand concepts, theories, and applications that may not have been available during the class.

Apple points out that the benefits of iTunes U include that it is easily accessible 24 h per day, students can listen to the podcasts whenever and wherever they choose, and it helps to keep the students motivated because it engages them in a way that is very familiar to them.

Research examining the effects of teaching with multimedia, where the multimedia included audio, video, animation, graphics and text, found that the multimedia resulted in better recall than traditional lectures with PowerPoint slides (Hallett & Faria, 2006). Studies suggest a multimedia

repetition, combined with instructor-led guidance would improve learning retention and acquisition (Braun, 2002; Garcia-Morales and Llorens-Montes, 2006; Littman, 1995; Pagell, 1996; Smagt, 2000).

However, for multimedia learning to be effective, the overall cognitive load for the pictorial and verbal material needs to be taken into account (Mayer & Moreno, 2003). The addition of iTunes U as a resource for students in the classroom is interesting because it gives students a chance to listen to a lecture for the first time (if they missed a class) or listen to a lecture that they attended in person additional times after the class session is over. Since note-taking has been shown to influence achievement, the current study is interested in examining whether students would take notes when listening to a podcast of a lecture that they may have missed. It is clear that for a traditional lecture, students are expected to take notes. In a traditional lecture setting, the professor cannot be put on pause, or rewind, or asked to repeat a particular definition or example ad nauseam, all of which is possible with a podcast. So if students take advantage of this greater flexibility with the podcast, we might expect their notes to be more complete. On the other hand, if they treat the podcast less like a traditional lecture, and more like listening to music, then we might expect less complete notes than a traditional lecture.

## **2.2. eMentoring**

eMentoring could be defined as a relationship that is established between a more senior individual (mentor) and a lesser skilled or experienced individual (mentee), primarily using electronic communications, that is intended to develop and grow the skills, knowledge, confidence, and cultural understanding of the protégé to help him or her succeed, whilst also assisting in the development of the mentor (Johnson & Ridley, 2004).

There are many advantages for eMentoring over traditional mentoring, according to Beach & Brockbank (apud Johnson & Ridley, 2004): Face-to-face interactions may be distracted by visual clues, and issues related to setting, context, and atmosphere may hamper communication. E-mail and text based messaging are leaner communication channels that allow for more direct information transfer – thereby minimizing contextual issues. Other advantages are related to:

- Using a variety of multimedia learning tools: video, audio, text
- Enhancing communication and collaboration tools using Web 2.0 technologies etc.
- Flexibility in terms of time, space, work and offer
- The possibility of matching mentors and mentees from different states and cultural areas.
- Reducing financial costs and time invested in the activities
- Reaching to students and mentors from remote areas (or those who have other access difficulties), finding a place where to organize the courses, organizing the courses, infrastructure etc.
- Higher access for people of all ages, race, sex, religion, vocation, interests etc.

The University of Bucharest and the Romanian Institute for Adult Education, together with other five partners from five European countries, are involved in the CReBUS project “Creating a business in the digital age – developing entrepreneurship competencies for young Europeans through eMentorship”. It was selected for funding through Lifelong Learning Programme, transversal action KA3-ICT, it started in November 2010 and is going to be completed in October 2012. The main objective of CReBUS is to develop a training system in order to facilitate the development of entrepreneurship competences for young graduates between 18-35 years old, using WEB 2.0. Another specific aim is to create an online platform for learning, collaboration and e-mentoring.

The eMentoring activities were planned to be conducted on the Moodle platform [www.moodle.crebus.eu](http://www.moodle.crebus.eu). Between November-December 2011 more than 10 students/graduates from faculties of education sciences and administration were mentored by national entrepreneurs. A second stage of eMentoring started in March 2012 and more than 20 students will be mentored from entrepreneurs from foreign countries (i.e. students from Romania will be mentored by entrepreneurs from Latvia, Spain, Italy or Austria) until April 2012. From the Needs Analysis Survey, conducted between January-March 2011, it was found how the eMentoring in developing entrepreneurship competences should be like:

- 2 hours/week

- 30% theory and 70% practice
- The mentoring activities should be focused on practical opportunities, learning from entrepreneurs' experience.
- The most important opportunities of practical experience are for both entrepreneurs and students are opportunity to turn ideas into action, opportunity to learn from and with successful entrepreneur and opportunity to apply the skills which are necessary for personal development
- The preferred learning methods are: learning by doing and experience-based learning
- Most of the mentees and mentors use English as main language for a transnational phase

These activities aim to promote and encourage the entrepreneurship spirit, and the concrete result of each eMentoring process, where more than 20 tandems are implied, is a concrete business plan. More information and details about the project, products, reports and further activities can be found on [www.crebus.eu](http://www.crebus.eu).

### III. CONCLUSIONS

Entrepreneurship is a transversal competence which should be developed by engineers, economist, mathematicians, educational scientist, etc. It's more about spirit and attitude, and less about business plans or finances. The suggestions for teaching entrepreneurship, presented in this article, could be promoted in each faculty, but it's highly recommended a strong connection between university and business market in order to achieve the right objective of eMentoring process. In the last 2 year, many projects financed by European Union through European Social Found were addressed to promoting the entrepreneurship education. Online and offline courses and trainings were organized and this know-how should be somehow valorized in higher education institutions, too, as long as many trainers are teaching at the universities. More and more students should have access to entrepreneurship education courses and is preferred this happen during the BA or MA studies as part of the core curriculum.

Teaching entrepreneurship is based on the idea of experiential learning, so a group interaction via online would have a great impact, new experiences and new thinking reflections are produced. A national research should be conducted in order to see the student's preferences in learning entrepreneurship and also the most suitable teaching methods for delivering such a course in all higher education institutions.

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