Csaba Bálint Illés, Szent Istvan University, Hungary Anna Dunay, Szent Istvan University, Hungary Hussam M. Musleh, Szent Istvan University, Hungary

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#### Abstract

Micro-, small and medium-sized enterprises are accelerators of national economies, and the existence, the successful performance and the development of these enterprises play an important role in developed and underdeveloped regions of the world. Entrepreneurship education may be a key point for the successful start and operation of enterprises. Entrepreneurship may be taught at different levels, for less educated people with the basic knowledge (e.g. rural entrepreneurship programs, special programs for women), and there are programs for people with higher educational level. In this paper, we focus on the entrepreneurship education at universities, for students of different business and non-business courses. Therefore, the aim of the paper is to give insight into the special topics and methods of entrepreneurship education for international students at the Gödöllő Campus of the Szent István University, in Hungary. At this university, entrepreneurship education and enterprise management subjects are taught at three levels of education: bachelor, master and doctoral level, both in Hungarian and English languages. The basics of the courses are the same, but the education of international students raises special questions. These issues are related to the different types of enterprises, the different rules and regulations of enterprise management and the different attitudes and cultural-traditional background of the international students. The entrepreneurship education courses focus on case studies, learning-by-doing methods and teamwork of students from different countries, which may help them to prepare for their future jobs in multicultural environment. Our paper summarizes the experiences and the curriculum development of the past six years.

Keywords: entrepreneurship education, SMEs, foreign students, management, practice-oriented, multicultural environment

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#### Introduction

It is not easy to define entrepreneurship education, as it is only slightly differs from general management studies. Both sciences provide knowledge, skills and motivation to encourage entrepreneurial success, but entrepreneurship education focuses on the development of skills or attributes that enable the realization of opportunity, while management education is focused on the how to operate existing hierarchies. Management subjects like Business Economics, Marketing, Accounting, Finance, HR management, Logistics, etc. primarily focus on the operation processes in small, medium and large companies, and only few lectures of the courses deal with the starting of enterprises, idea generation, opportunity check, feasibility check and planning issues.

As entrepreneurship and the formation of new enterprises are among the main accelerators of national economies all over the world, it is very important to define the tasks of educators in different educational institutions. Educators' knowledge, skills, teaching methods and networking abilities play an important role in this process. If educational institutions and teachers are able to attract students and introduce entrepreneurship as a possible path of their future, if students are able to check their motivations, to see entrepreneurial life through real examples, and to try their abilities and skills in practical tasks, student contests, planning assignments etc., more students will probably choose entrepreneurial life (Pompa, 2016).

The importance of the institutional and educational background of enterprises and entrepreneurship is widely discussed by international authors, where authors introduce the main processes and network system of educators, the business sphere, the institutional background, the civil sphere and the teaching process itself, with all the interactions of this complex.

Many authors agree that entrepreneurship education shall be built on the synergic connections between entrepreneurs and professors or lecturers of the universities. This partnership network is mostly built on the scientific and professional network of the university staff, the alumni system and of course from other relations and acquaintances from the business sphere, and it is one of the pillars of the so-called entrepreneurial ecosystem (Galloway & Brown, 2002; Shattock, 2005; Joensen, 2009; Csapó, 2010; Fetters et al., 2010; Thorp and Goldstein, 2010; Feld, 2012; WEF, 2013, Nathusius, 2013; Acs, Autio & Szerb, 2014; Krawczyk, 2014).

The main players of the entrepreneurial ecosystem can be distinguished as external players and internal players. External players – for example players of the product and services markets and financial markets, state organizations and NGOs, existing companies – contribute to the creation of the financial background, technical support and they provide external tuition activities for the internal players (Figure 1).

Internal players are the students, professors and those entrepreneurs, who take part in education. Professors and entrepreneurs – in close cooperation – will transform the students to be nascent entrepreneurs, who will be able to join the entrepreneurial sphere in the future as young companies. Later, these newborn companies can mature and grow, and will be able to work as an accelerator of the national economies (Nathusius, 2013; Illés et al., 2016a, Illés et al., 2016 b).



Figure 1: Entrepreneurial ecosystem network of higher education (based on Nathusius (2013), Illés et al. (2016a,b)

This article primarily focuses on the 'transformation process' of students from firstyear students to be newborn entrepreneurs, by giving examples of our experiences at the Szent István University, Gödöllő Hungary.

The special feature of our educational structure is two-sided education: all courses are taught in Hungarian for Hungarian students and in English, for foreign students from different countries of four continents. After few years of experience, it is obvious that courses for foreign students shall differ from "domestic" courses in their topics, teaching methods, background and assessment and the requirements should be tailored for the required standards and the special needs of students with multicultural background.

## Theoretical background

### **Edgar Dale's Cone of Experience**

A very important question of education at each levels (primary school, secondary school, vocational schools and higher educational institutions) is to share and transmit knowledge in an efficient way, keeping the right balance between theory and practice. Edgar Dale's Cone of Experience (Dale, 1946) symbolizes the different levels of experience, connecting to the different sources of experience. In his definition, the cone explains the interrelationships of the various types of visualizaton and their positions in the learning process. For more successful and useful learning:

- Students use their eyes, ears, noses, mouths and hands to explore the experience,

- Students have a chance to discover new experiences and new awareness of them,

- Students have chances to practice their past experiences and combine them to create new experiences,

- Students can develop their own dynamic experiences.

Dale (1972) highlighted that most students in schools did not learn how to think, discover, and solve real problems, rather, students were forced to memorize facts and knowledge instead of practical use in most schools and as a result, any knowledge they acquired was inert in their real lives.

Dale's Cone of Experience (Figure 2) is built from 11 levels starting from concrete experiences (at the bottom) up to the more abstract levels. This model suggests that without direct experiences (learning by doing) the more abstract experiences (learning by observation and learning through verbal instructions) are less digestible for the students. Dale suggested to mix the different teaching techniques and to allow enough time for understanding, achieving and digesting the experiences. The original cone model does not make any ranking of the experience levels it suggests to use the lower levels to help understanding and to use the higher levels for achieving deeper levels of abstraction to make learning process more efficient (Molenda, 2003; Lee & Reeves, 2007).



Figure 2: Dale's Cone of Experience. Own figure using original of Dale (1946)

## **Retention chart or Learning Pyramid**

The original Cone of Experience is often misinterpreted and mixed by other information. One of the frequently added models is based on the so called Retention Chart (or in other name the Learning Pyramid) which shows the retention rate, i.e. that after 2 weeks individuals will remember:

- 10% of what they read
- 20% of what they hear
- 30% of what they see
- 50% of what they both see and hear
- 50-70% of what is discussed with others
- 75-80% of what is experienced personally (an activity in real life)
- 90-95% of what they teach someone else.

This model is also called as Learning Pyramid (Figure 3), and unfortunately, it is often mixed with the original Cone of Experience model (Subramony, 2003; Subramony et al., 2014 a,b).

The learning pyramid was developed by the National Training Laboratories, Maine, US, According to the learning pyramid (Figure 3) reading and hearing are the least effective tools of learning (of course the efficiency of these methods varies in different age groups and level of education). A more effective source of knowledge is seeing and hearing together, and the highest proportion of long lasting knowledge could be gained through such teaching/learning methods, where both parties (lecturer and student) will participate actively.



Figure 3: Learning Pyramid

Although the retention numbers are not justified by scientific methods, these proportions are widely used in the world of education and the numbers are considered as realistic. It is obvious that practical tasks will deepen the knowledge and forcing the students to perform discussions, do in practice and to present themselves before their classmates will make them more engaged towards the different topics. But it is also obvious that these methods should not be used in each age groups, young students (for example bachelors/undergraduates) are not well prepared or mature enough for teaching each other, but for PhD students (the future educators) it should be a common teaching and knowledge sharing method.

## Experiences of Entrepreneurship Education at Szent István University

In this case study the experiences of entrepreneurship education at the Faculty of Economics and Social Sciences, of Szent István University, Gödöllő, Hungary are presented (Figure 4).

At the University there are not special entrepreneurship courses but the content of the professional subjects fully covers this field.



Figure 4: Szent István University, Hungary

The University is of Hungary's largest institutions of higher education, situated in Central and Eastern Europe, close to Budapest, the capital of Hungary. The University works at different campuses\_ with 8 faculties, there are educational centers Slovakia, Serbia, Romania and the Ukraine as well, for the Hungarian speaking communities. The university is very popular among foreign students; many of them hold scholarship (Stipendium Hungaricum) and others are self-paid students from four continents.

At the Gödöllő Campus, there are 3 faculties: Faculty of Agricultural and Environmental Sciences, Faculty of Economics and Social Sciences and Faculty of Mechanical Engineering.

The Faculty of Economics and Social Sciences provides a full range of higher education courses of management and business studies in Hungarian and English languages at:

- Bachelor's degree (BSc in Management and Business Administration)
- Master's degree (MSc in Management and Leadership)
- Doctoral studies (PhD in management and Business Administration)

- Executive MBA programs for CEOs and professionals who are interested in management and business administration.

Of course, there are courses which are taught only in Hungarian language such as BSc and MSc in Commerce and Marketing, BSc and MSc in Finance, BSc and MSc in Human Resources, BSc and MSc in Rural Development and Agribusiness, MSc in Supply Chain Management.

As the largest group of students is studying at the Management and Business Administration bachelor course, and as the authors are the leaders and lecturers of this course, the experiences of this bachelor course are discussed in details.

The study program of this course focuses on practice-oriented education, which mainly means the increased share of seminars. Not only basic subjects (microeconomics and macroeconomics, mathematics, statistics and financial subjects) but also professional subjects (e.g. business economics, management of SMEs, project management, business planning, change- and crisis management) are taught with high number of practice-oriented seminars:

- Basic subjects (Microeconomics, Macroeconomics, Mathematics, Statistics, Financial subjects) are taught in the first three semesters in order to provide the basic knowledge and to support students to reach a more or less equal level of knowledge before starting the professional subjects.

- Professional subjects (e.g. Business Economics, Management of SMEs, Project Management, Business Planning, Change- and Crisis Management) are started from the second semester, with a rather theoretical subject (Business Economics) and subjects are built on each other.

- Internship period (65-75 working days) is a compulsory period of work, which students shall apply individually, and they spend their intern period at different small, medium or large companies of the business sphere or in the public sector, NGOs or municipalities. The main requirement is to perform managerial or administrative work at any departments of the company or institution. The internship period is performed under a contract between the university and the given company, and it is supervised and assessed by the professional supervisors of the given firm.

In the elaboration of course curricula, the continuous development is plays the key role, subjects are built on each other and the results are assessed after each academic year. Although there is no specific courses of entrepreneurship, the related subjects are inserted into the general process of education. The 'entrepreneurial' feature is given by the teaching and assessment methods, where skills, motivations and creativity are to be improved by performing individual and teamwork tasks assignments and presentations.

The following compulsory subjects are related to entrepreneurship education:

- 2nd semester: Business Economics (theoretical background, environment analysis, general management issues)

• *Tasks*: introduction of own country (individual)

- 4th semester: Management of SMEs (new venture creation and management of existing enterprises)

• *Tasks*: introduction of ourselves (individual), uniqueness, steps of new venture creation

- 5th semester: Strategic Planning, Project management (strategic planning and project planning methods and practices)

• *Tasks*: team work, problem solving in strategic and project point of view

- 6th semester: Business Planning (from business idea to business plan)

• *Tasks*: team work, mixed teams,

• Oral work business concept preparation (Business Model Canvas or Lean Canvas), elevator pitch,

• Written assignment for teams: creating a Business Plan from the canvas model.

The practice oriented education is supported by:

- the high number of seminars, where individual tasks and teamwork projects are performed under the supervision of the lecturers,

- the practice-oriented lectures which are held by the involvement of entrepreneurs and the representatives of the business sphere as invited lecturers (as an average, 30% of the lectures are held by invited lecturers),

- lectures give opportunity for students to give presentations in selected topics after self-preparation,

- field trips and company visits, organized by the lecturers,

- the involvement of entrepreneurs in the education process as internship partners and supervisors, thesis supervisors and reviewers and as members in final exam boards,

- entrepreneurs are frequently alumni students of the university, which may give an extra support for the students,

- in English-speaking courses, our foreign PhD students can get practice in education, as most of them are present or future educators in their home countries.

As it was described in Figure 1, entrepreneurs are among the most important pillars of the entrepreneurial ecosystem. Entrepreneurs support students in different ways, such as:

- knowledge and experience sharing (as invited lecturers or at company visits)

- donations and grants (for example at students scientific and learning contests, field trip support, etc.)

- internship partners and supervisors
- thesis supervisors, reviewers
- membership in exam boards.

An important question is that how can universities invite entrepreneurs into education. In official way, the two parties (university and entrepreneur/company) work in accordance with special agreements between the two parties, while in the unofficial way, the external persons (entrepreneurs and companies) work voluntarily, without any financial benefits, as the members of network system and the professional or business connections of the professors and other educator colleagues. For the most active and regular participants of this special educational work and support, this voluntary work is often awarded by the university by honorary lecturer status.

Besides the complex general questions of entrepreneurship education, there are special challenges of multicultural education. Most of the international students are scholarship holders, coming from countries of Eastern Europe, Middle East, Middle and South Asia, East African and Sub-Saharan African countries, Middle and South America.

In addition, there are self-paid students from these countries, and there are a high number of Erasmus+ students representing Europe.

These students have different cultural and educational background and they have different macroenvironment in their home countries. Sometimes it is very critical to balance these differences, and it is the role of course leaders and lecturers to manage the situation. The most important method for this is to let time and place for introducing their countries as individual or teamwork presentations, in an interactive way, in personal, social and professional aspects.

### Conclusion

As a conclusion, the successful educational and learning work is based on different factors (Figure 5). Without the appropriate motivations and attitudes of the teachers, without the relevant and up-to-date teaching methods the courses will not be

successful. It is particularly true for the very sensitive multicultural student groups, and one cannot use the same methods for domestic and international students. The formal background (atmosphere of the class, personality of the teacher, the consistent requirements, teaching materials and handouts, etc.) is also play an

important role in the education process.



Figure 5: Factors of success in education

Based on the five years of our experiences at the examined international course, it can be stated that teaching in a multicultural environment needs special attitudes of all participants, educators, students, the professional staff and course leaders.

The original idea of systematic education, i.e. starting with theoretical and basic subjects then focusing of professional subjects was successfully built successfully into the curricula.

The introduction of the mixture of theoretical knowledge and learning-by-doing methods was successful, which is justified by the good graduation results, successful internships and the satisfied international students who continue their studies at the higher (Master and PhD) courses of the Faculty of Economics and Social Sciences of the Szent István University, Gödöllő, Hungary.

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Contact email: Illes.B.Csaba@gtk.szie.hu