

# The Role of Education, in Particular Universities, in Encouraging Young People to Become Entrepreneurs

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## Abstract

The labour market is in constant transformation, requiring today's youth to prepare for increasingly dynamic career paths. In the European Union, including Hungary, the role of education in supporting young people's entrepreneurial development is becoming a matter of rising importance. Research findings only seem to agree that there is a complex and hard-to-detect link between entrepreneurship education and the number of successful businesses started by young people. When going through the literature, it is important to distinguish between the impact on the entrepreneurial intention from the results achieved in real action, while also being able to identify the role of prior studies in the success of the enterprises launched by young people and to separate it from family and other external factors.

**Keywords:** Entrepreneurship, Economic Education, Higher Education

**JEL Codes:** A20, L26, I23, I25, O15

## Introduction

In my review of both domestic and international literature on the role of education in the entrepreneurial development of young people, I aimed to examine existing analyses and research on the topic, also to define the research questions addressed and the methods used, while summarizing the most relevant findings.

In order to map Hungarian literature, I performed keyword search (entrepreneur, enterprise, young entrepreneur) in the MTMT database (Hungarian Scientific Bibliography Database) and identified relevant publications, examining the lists of results in detail. A similar method was applied to

search the MATARKA database (Hungarian Periodicals Table of Contents Database). I have also systematically reviewed the issues of the Economic Review, the Budapest Management Review as well as the Hungarian Science Journal starting from 2010. To discover additional related literature, I used the web-scale discovery tool "SuperSearch" of the Central Library of Corvinus University. The literature search was performed on publications both in Hungarian and in English.

## 1. Entrepreneurship education in the European Union

The prominent role of education in promoting entrepreneurship has also been recognised in the European Union. International studies highlight the role of higher education in entrepreneurship training, with researchers on the subject emphasizing both the importance of education for entrepreneurship as well as describing good practices. At the EU level, the importance of entrepreneurship education and the promotion of entrepreneurial mindsets is primarily justified by the need to create jobs (especially to reduce youth unemployment), to boost competitiveness and economic growth. The acquirement of entrepreneurial skills is in line with the concept of lifelong learning. The need for entrepreneurship education is becoming more and more relevant at a younger age. In addition to entrepreneurship courses and development programmes in higher education institutions, the need for entrepreneurship education in primary and secondary schools is also being more emphasised (European Commission [2002]). The European Commission's research programmes on entrepreneurship education have, among other things, explored and analysed the representation of the entrepreneurial concepts in national curricula (European Commission [2004]). The European Commission's expert group on entrepreneurship education welcomes the cultural change that stresses the need for entrepreneurship education, but also notes the lack of a coherent structure for integrating entrepreneurship education into the education system. Their key findings are as follows (European Commission [2002 pp. 7-8]):

- In almost all the countries surveyed, there is a reasonable policy commitment at a governmental level towards entrepreneurship education
- No indicators and no data series are available to analyse the field
- Evaluation of measures undertaken is mostly limited and occasional
- Programmes to promote entrepreneurship among primary school children are rare, despite the availability of several good practices
- The introduction of entrepreneurship education at the secondary school level is more common, but often based on the institutions' own initiatives

- The secondary and advanced vocational training system does not sufficiently guide students towards becoming self-employed or entrepreneurs
- At the academic level, entrepreneurship training is mostly directed at students enrolled in economics and business majors
- The "learning by doing" methodology, through which young people set up and run mini businesses, thus acquiring key entrepreneurial skills, is considered a common practice in most countries
- There is a limited supply of further vocational education courses for teachers on entrepreneurship (in-service training)
- The links and cooperation between educational institutions and the world of businesses are to be strengthened
- Lack of private funding for entrepreneurship programmes

An expert paper on entrepreneurship education in higher education has been published, focusing on non-business students, as viable business ideas are assumed to arise from technical, scientific, and creative fields of studies. The report points out that there are currently relatively few university lecturers in entrepreneurship education and that the methods typically used in practice do not apply the approaches that are considered to be the most effective based on previous experience (European Commission [2008]).

## 2. Global overview

The power of university start-ups is illustrated by Lüthje and Franke [2002], who have shown that if the 4,000 companies founded by MIT graduates and faculty were to form a nation, it would be the twenty-fourth largest economy in the world. For successful firms to emerge from higher education institutions, systematic work is essential. The lack of education and training on entrepreneurship at a global level has led to the GEM 2008 survey highlighting this issue. Entrepreneurship education and training and the propensity to start a business have been shown to be positively related, but the effect varies across countries with different levels of development (Bosam et al. [2008]). Data from the GUESSS surveys also emphasise the positive impact of entrepreneurship education on the entrepreneurial development, highlighting the difference between intention and actual action while exploring the factors that influence implementation, of which the role of gender (men are more likely to actually start a business) and education has been empirically demonstrated (Solesvik [2013]; Jonesou-Salo et al. [2015]; Varamaki et al. [2015]; Galvao et al. [2018]).

Joensuu et al. [2013] point out that supporting youth to become entrepreneurs is not an easy task, but a complex process through which students recognise their entrepreneurial potential and find business opportunities in which they can fulfil it.

The GUESSS 2011 data survey also aimed to examine the intention to start a social enterprise. Data on students from South African universities were analysed by Viviers, Venter and Solomon [2012], which showed that 54.8% of the young people within their sample would start a social enterprise, although only 9.4% had a specific environmental or social mission.

Morris et al. [2017] investigated the impact of the university ecosystem in influencing students' propensity to become entrepreneurs. Their analysis showed that entrepreneurship curricular and extracurricular programmes had a positive effect on their entrepreneurial spirit, while financial support from the university had a negative impact. Students' previous entrepreneurial experience moderated the stimulating effect of such programmes, as well as the negative impact of financial support from the university.

Maresch et al. [2015] used data from the GUESSS 2011 survey to evaluate the impact of entrepreneurship education among Austrian students majoring in business and economics as well as science and engineering. Their results show that entrepreneurship education has a positive impact on the propensity to start a business among students studying in areas of business, while such positive impact is less significant among students enrolled in science and engineering. According to the researchers, one possible explanation for this phenomenon could be the "Matthew effect" (Walberg - Tsai [1983]), which suggests that students who have previously acquired business knowledge are more likely to absorb and process business-related material. Passioni and Glavam [2018], who looked at the effect of the chosen field of higher education on entrepreneurial propensity, came to a somewhat opposite conclusion. For Brazilian students studying management, engineering and accounting, entrepreneurship education was shown to have a positive impact on the intention to start a business among students majoring in management and engineering.

To investigate students' start-up entrepreneurial activity, Bergmann et al. [2016] attempted to measure the impact of factors affecting entrepreneurial propensity at the individual, university and regional level. Their study found that individual factors had the greatest explanatory power for both start-ups and active businesses. While start-ups were mostly influenced by the university environment with limited effect of the regional context, the opposite was true for student enterprises that were already active.

Holienka et al. [2017b], based on the GUESSS 2016 survey, classified university students into 4 main categories according to their intention to start a business: doers, dreamers, procrastinators and abstainers. Based

on this classification, they made proposals regarding entrepreneurship education. They argued that universities should adjust their entrepreneurship education programmes to the entrepreneurial propensity of their students. Students with an already established business are interested in completely different topics than their fellow students who only have a strong entrepreneurial drive. Turning dreamers into entrepreneurs rather than abstainers also requires a different approach. Interdisciplinarity is key, as it is often the students coming from science and engineering backgrounds who have an idea for a product or service that can be commercialised, but who have no economic or entrepreneurial qualifications, which is why it is important to connect them with students with business studies and a higher entrepreneurial appetite. Universities that support entrepreneurial thinking have a responsibility to help students develop their initial ideas and support them to create sustainable businesses over the long-term.

Canever et al. [2017] attempted to answer the question of whether there are differences in the propensity to start a business between students attending public and private universities in Brazil. Their analysis revealed that there are no significant differences in the entrepreneurial attitudes of students from the two types of institutions in the country.

Gelaidan and Abdullateef's [2017] study of Malaysian business students in higher education showed that the most stimulating factors for university students' entrepreneurial ambition are relationship and educational support.

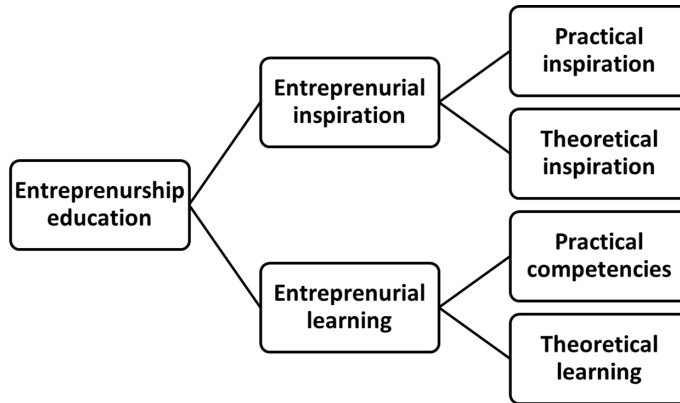
Susanj et al. [2015] have shown in a study on Croatian university students that those who participate in a business-oriented training programme have a higher propensity to entrepreneurship than those who do not.

During the research on entrepreneurial propensity, arises the question of whether personal characteristics or external environmental factors have a stronger influence. Sesen [2013], in a study on Turkish university students, concludes that the most significant factor in becoming an entrepreneur is entrepreneurial self-efficacy, followed by networking connections and access to capital. His results suggest that the university environment does not have a significant effect.

Nabi et al. [2018] used qualitative methods to investigate the conceptual and inspirational elements of entrepreneurship education among university students. Their model is illustrated in the following figure:

**Figure 1: Inspiration and learning in entrepreneurship education**

(Source: Nabi et al. [2018], p. 458)



The mixed-method, longitudinal research based on the model revealed that students who participated in entrepreneurship education programmes showed higher entrepreneurial knowledge and inspiration compared to their counterparts who did not take part in such courses. The insight gained from the in-depth interviews showed that entrepreneurship courses can have both positive and negative effects on students' start-up intentions. The reason for the decrease in entrepreneurial intentions is that although students had a certain entrepreneurial drive when they enrolled in the course, however, acquiring knowledge about more realistic and practical perspectives on entrepreneurship during the learning process had a negative impact on them. For such students, entrepreneurship education is part of a development process during which they are confronted with the complexities and challenges of being an entrepreneur. The entrepreneurial learning dimension of entrepreneurship education consists of two sub-dimensions: acquiring the theoretical knowledge needed to start a business, and the practical knowledge (to know how to implement it). Entrepreneurial inspiration can also be broken down into theoretical elements linked to external sources, such as reports and readings from certain individuals as well as into practical elements, the typical source of which is group-based, practice-oriented, experiential learning. The study reports that it is practical and theoretical inspiration that has the greatest positive impact on entrepreneurial intentions (Nabi et al. [2018]).

Hahn et al. [2020] have shown that the effectiveness of entrepreneurship education is influenced by whether the entrepreneurship course is optional or compulsory and by the entrepreneurial background of students' families. Silva et al. [2021] have shown that academic entrepreneurship education has a stimulating effect on young people's entrepreneurial

ambitions, but also that the university atmosphere and entrepreneurial skills play an important role as well.

Dvorsky et al. [2019] created an Entrepreneurial Propensity Index measuring university students in the Czech Republic, Slovakia and Poland. Their work found differences in the entrepreneurial propensity of students across countries, with the highest in the Czech Republic (0.470), followed by Slovakia (0.424) and Poland (0.412). The quality of university education was positively assessed in each of the three countries. The index combines observations on the social environment, the business support from the state, the macroeconomic environment, the quality of the business environment, access to financial resources, the quality of university education, personal attributes, business advantages and entrepreneurial propensity.

In their study of the propensity to start a business among university students in the Visegrad countries, Nowinski et al. [2019] came to the rather interesting conclusion that entrepreneurship education had a direct impact on youth only in Poland. According to the researchers, it is due to the fact that it is the only out of the four countries where entrepreneurship education is introduced at a high-school level.

### **3. Experience and research findings in Hungary**

In Hungary, the SEED (Foundation for Small Enterprise and Economic Development) assessed and evaluated the current situation of entrepreneurship education in 2008. The survey covered public education, higher education, and adult education. The final report of the survey contains several important conclusions. Key findings on youth entrepreneurial outcomes are as follows (SEED Foundation [2008], pp. 2-7):

- Low motivation to become an entrepreneur, although it is a positive result that young people are not prejudiced against entrepreneurship
- The economic education in public institutions needs to be improved: new education and training approaches are isolated; the development of modern, approach-oriented education requires the development of curricula, textbooks, teacher training and in-service training; the number of modern solutions is limited
- In higher education, entrepreneurship courses are typically offered to students of economic/business majors; the topic of entrepreneurship appears infrequently in BA courses
- The SME (small and medium-sized enterprise) sector, especially micro-enterprise owners are not particularly open to acquiring new knowledge

In their survey on Hungarian data, S. Gubik and Farkas [2016] showed that start-up intentions among students in higher education is mostly influenced by family background, while the impact of entrepreneurship courses and training offered by universities is not reflected in the actual entrepreneurial activity.

In their evaluation of the Knowledge Entrepreneurship Development Programme (SZE-Duo) of Széchenyi István University, Borsi-Dóry [2015] concluded that entrepreneurship education should be more emphasised in higher education courses in order to support and fulfil the entrepreneurial intentions of young people. They identify as a special characteristic of entrepreneurship education that instructors can only be qualified to teach entrepreneurship if they possess entrepreneurial skills themselves. The personal and professional background of the lecturers is crucial in the education of entrepreneurs (Pardo [2013]). Referring to international research, they point out that the field of entrepreneurship has not yet achieved its rightful place among other sciences, with the professional recognition of entrepreneurship education remains below that of other fields. The interdisciplinary nature of the subject also complicates the situation in terms of research (Borsi-Dóry [2015]).

S. Gubik and Farkas [2013] point out that it is important that students of science and social sciences also learn about the steps of starting and developing a business, whereby they identify the renewal of entrepreneurial services and their availability to non-economic students as a priority. Mentoring as a personalised support activity is increasingly important in supporting young entrepreneurs. Based on a questionnaire survey of Hungarian students, Zsigmond [2018] established a six-factor model of the competences, attributes and attitudes required for successful process management (Zsigmond [2018]). PwC's survey of Hungarian start-ups also highlighted the role that mentors might play in the start-up process [PwC, 2019].

Although encouraging entrepreneurship should be started at an early age, there are relatively few empirical studies on the attitudes of primary and secondary school children towards entrepreneurship. Horváth et al. [2019], somewhat alleviating this gap, investigated the possibility of integrating communication design into education by involving primary school students into their research. Based on their results, communication design as a methodology for developing entrepreneurial attitudes cannot be used successfully among 3rd-grade children but can be applied effectively among 6th and 8th graders.

Diószeginé Zentay [2018] uses the example of the University of Debrecen to analyse and urge the development of entrepreneurial skills among engineering students.



Erdős [2018] conducted a comprehensive literature review and analysis on the development of higher education institutions in Hungary as entrepreneurial universities. His results are extensive, with a single idea closely linked to spin-offs emerging from domestic universities. The spin-offs of Hungarian universities bear little resemblance to the dynamically growing businesses nurtured by US universities, so although Hungarian spin-offs do exist, such success stories and excellence in high-tech areas as those experienced in the US are unlikely to be reflected in the domestic market.

Czeglédi et al. [2016], examining the state of entrepreneurial training in Hungarian higher education, concluded that interactive methods such as role-play, discussion of case studies and simulation are not used with sufficient intensity in entrepreneurship education.

Varga et al. [2016], in their study on the perception of entrepreneurial skills taught in universities, concluded that the low entrepreneurial propensity of students is due to risk aversion, lack of self-confidence (the negative connotation of the term "entrepreneur" plays a role in this) and lack of proper expertise and professional knowledge.

Imre-Tóth [2014], [2015] conducted research on the changing role of universities and the function of entrepreneurship education in promoting entrepreneurship.

According to an analysis by Szerb and Lukovszki [2013] based on GUESSS 2011 data, the role of a supportive university environment and fellow students is not of particular importance in the development of entrepreneurial intentions. They showed that those who are not serious about becoming entrepreneurs consider their university environment to be supportive of them starting a business, while those who have a genuine ambition to pursue entrepreneurship are less satisfied with the support they receive from universities.

Kárpáti-Daróczi et al. [2019], analysing the dilemmas of engineering students becoming entrepreneurs, concluded that students who implement innovation during their studies may face a crossroads between commercializing their ideas as entrepreneurs or focusing on pursuing their degree. They believe that it is important for the university to support the process of becoming an entrepreneur, but that the "final product" is the graduate engineer and not the entrepreneur without a degree. The trust relationship between the students and the university is seen as a suitable basis for the initial incubation counselling and mentoring processes.

Rippa et al. [2020], involving European engineering students, showed that entrepreneurship education does not by itself influence the decision of engineering students to become entrepreneurs, but that such decision is determined by the interaction of several other factors.

Szerb and Márkus [2006], based on an international survey of 14 countries, entitled Collegiate Entrepreneurship 2006 (GUESSS first data collection), found a positive correlation between taking entrepreneurship courses and becoming an entrepreneur among the Hungarian sample.

S. Gubik et al. [2018], quoting Richert-Schiller [1994] and Lühje-Franke [2002], and referring to the work of Schrör [2006] and Autio [2005], point out that firms of tertiary graduates are more growth-oriented and tend to be set up in higher value-added sectors. They underline that therefore stimulating entrepreneurial intentions and activity of young people in higher education is an issue of economic policy (S. Gubik et al. [2018]). Partly as a result of such findings, universities face a rising expectation to prepare their students not only for employment but also for entrepreneurship (Szerb - Lukovszki [2013]). According to Imreh-Tóth [2015], there is a growing expectation for universities to promote entrepreneurship, especially in dynamic, innovative areas, which are ideal breeding grounds for high-growth start-ups.

#### **4. Methodological issues in entrepreneurship education**

The Small Business Development Centre of Corvinus University of Budapest has always been at the forefront of adapting modern, up-to-date entrepreneurship education methods. One such example is entrepreneurship education through student enterprises. The practical implementation and lessons learned of such approach were reported by Csapó-Filep [2007], Csapó [2007], [2008], [2010], who presented the advantages and disadvantages of different entrepreneurship education methods from two perspectives, one based on Szomor [1997] and the other on Jamieson [1984].

**Table 1: Advantages and disadvantages of entrepreneurship education methods**

(Source: Szomor [1997] based on Csapó [2007], p. 33)

Traditional lecture		Simulated business		Real business	
Advantage	Disadvantage	Advantage	Disadvantage	Advantage	Disadvantage
Can be well planned and implemented.	It classifies entrepreneurship education as a “general subject”.	It can be planned with sufficient flexibility.	Focusing on the markets makes it campaign-like.	Strong student motivation can be generated.	Difficult to plan and manage.
The lecturer dictates the topic, without any deviation.	It is difficult to keep students interested.	Good methods can be used to make it playful.	For students, it's not realistic enough, it's seen as artificial.	Certain skills can be developed strongly.	A great deal of responsibility lies on the teacher.
Well measurable, assessable in the standard way.	It focuses almost exclusively on knowledge and not skills.	It can develop a wide range of skills.	Performance is difficult to measure in a school setting.	It can also meet actual needs, e.g., school-related ones.	Profit orientation can be at the expense of learning.
There is low extra cost.	Difficult to find actually 'competent professionals'.	Relatively low cost.	Entrepreneurial responsibility is downplayed in simulation.	Legally exists and well-established.	It places extreme pressure on both students and teachers.
Fits in well with the regular school timetable.	Students quickly forget what they have learned.	More manageable than a real business.	The 45 minutes of time available is hardly ever enough.	Can be continued after finishing school.	Difficult to fit into the Hungarian legal system.
Familiar to both teacher and student.	Swimming is not something you can learn from a book.	It's like swimming with a life vest.	The result depends rather on the student's attitude.	Entrepreneurial responsibility is direct and sometimes expensive.	In many aspects, it is "outside" the school system.

**Table 2: Types of entrepreneurship courses/programmes**

(Source: Jamieson [1984] after Csapó [2008], p. 45)

	"Education about entrepreneurship"	"Education for entrepreneurship"	"Education in entrepreneurship"
Subject of education	Theoretical knowledge	Theoretical and practical knowledge	Practical knowledge
Basic objective	Promoting entrepreneurship	Assistance in starting up a business	Assistance in running a business
Target audience	Everyone	Those interested in entrepreneurship	Entrepreneurs
Teaching methods	Theoretical courses	Theoretical courses, simulated and real businesses	Mentoring, coaching
Typical subjects	Basics of entrepreneurship, small business policy	Business planning, business management	Seeking funding, protecting intellectual property

Despite its various risks and difficulties, entrepreneurship education through the launching of a real business is the most effective way of introducing entrepreneurship. In the spring of 2003, the Small Business Development Centre of Corvinus University (SBDC) launched the "Entrepreneur-friendly University - Entrepreneur-ready Students" programme, under which students and student units could apply with a business plan for private funding (the programme was also reported by Figyelőnet (24.hu [2007])). In addition to the theoretical knowledge provided at the university, the students also received financial support, while the winning teams were assigned mentors by SBDC, who helped to prevent new entrepreneurs from making major mistakes. During the evaluation of the programme, three important advantages were highlighted (Csapó [2007:40]):

- The mentor worked with a small group of students
- The sessions were targeted and focused on solving real problems of entrepreneurship
- Through the spill-over effect of the project, the example of the students involved had a positive impact on their peers

Csapó [2008] presented modern international experiences in entrepreneurship education and analysed the possibilities for adaptation in Hungary.

The essence of the Finnish Team Academy teaching methodology is to prioritize learning over teaching in a real business environment, through self-regulation and the development of entrepreneurial team responsibility.

It is applied in many countries in Europe. Gál et al. [2017] report on the essence of the methodology and its spread in Hungary and Europe.

In her research [2014], [2015], Mihalkovné Szakács examined entrepreneurship education from several perspectives. She analysed the relationship between entrepreneurship education and the development of entrepreneurial competences and studied the characteristics of a competent entrepreneurial teacher.

The experience of in-depth interviews with faculty members of Hungarian universities with Master's programmes in business development revealed that universities prefer to start correspondence courses, and try to introduce novelties into the training, but in many cases their implementation is inconsistent and not conscious. The heads of Master's programmes agree that the 75% theoretical teaching rate required by the regulations at the time of the research is very high, and that the training should be more practical, which is what they are aiming for. They consider it essential to increase interdisciplinarity and the cooperation of more diverse teams (Árváné Ványi et al. [2017]).

Imreh-Tóth [2015] investigated the possibilities of adapting successful Western European and American practices of entrepreneurship education in the Hungarian context, primarily in line with the specialities of the University of Szeged. Analysing the practices followed by the universities at the forefront of entrepreneurship education, he came to the conclusion that it is important to gain international experience on a professional basis, and that special courses for high-tech enterprises potentially born at universities are crucial, but that low-tech courses should not be forgotten either. The use of teaching methods that have been successfully applied elsewhere is to be welcomed, but the content must be adapted to the socio-economic cultural context of the country. It is essential to involve actual entrepreneurs in the training and to include case studies of domestic entrepreneurial issues in the curriculum. The role of student self-employment groups can also play an important role.

## **Summary and proposals**

Based on a review of the entrepreneurship education literature, both the results of international and domestic research demonstrate the impact of training and education on stimulating entrepreneurial activity. However, entrepreneurship education alone does not lead to an increase in the number or success rate of young people starting businesses. The process is much more complex, involving the development of entrepreneurial competences, the variety and diversity of methodologies used in educational training, and the impact of the academic environment.

While the transformation of the labour market means that new generations must prepare for an increasingly dynamic career paths, which means a significant upgrading of self-employment (see the case of self-employed individuals with KATA) and business start-up skills, there is currently no coherent, well-developed system of entrepreneurship education in the European Union or in Hungary that would allow this massive demand to be met adequately. It can be concluded that entrepreneurship has not yet taken its rightful place among other sciences in Hungary, and that the professional recognition of entrepreneurship education is below that of other disciplines. There are many isolated examples of well-developed and not as effective practice, from which it is time to create a national network of entrepreneurship education of comparable quality, but which reflects individual differences. The Young Entrepreneurs' College of the Hungarian Chamber of Commerce and Industry, which is currently being established, could be a potential coordinator of such network connecting state, higher education, civil society, and market actors. By collecting the best practices, training and qualifying entrepreneurial teachers and mentors, it could start laying the foundations for a new education system capable of providing high-quality training on a mass scale.

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