

TEACHING APPROACHES TO ENCOURAGE ENTREPRENEURIAL MINDSET OF STUDENTS

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Abstract:

In the paper, we analyse the possibilities for promotion of entrepreneurship among students in high schools. The paper focuses on the identification and exploration of the teaching and learning methods contributing to students' entrepreneurial intentions.

Entrepreneurially oriented teaching and learning should be action-focused, involving the students as much as possible, as well as individuals coming from contexts outside the schools. Besides, teachers' work experiences are also crucial. Literature stresses the importance of methods such as role playing, which might increase students' motivation for entrepreneurship, action learning for recognising business opportunities, guests from practice and business competitions for business ideas commercialization, live case studies for fostering creativity and innovation, etc.

In our study, we are primarily interested in recognising possible causal relationships between the teaching and learning on one side, and students' entrepreneurial intentions on the other side. The links regarding gender, parents' employment status and plans to continue education will also be checked.

Keywords: entrepreneurship; entrepreneurial competencies; entrepreneurial intentions

1. INTRODUCTION

Entrepreneurial individuals are those included in entrepreneurship or internal entrepreneurial initiatives. Antončič, Hisrich, Petrin & Vahčič (2002) define entrepreneurship as an independent process, in the course of which the entrepreneur creates something new and valuable, something that takes some time and effort. Such process relates to financial, psychological and social risks, but allows a reward in the form of money or individuals' satisfaction or independence. This definition also applies to internal entrepreneurial initiatives (de Jong & Wennekers, 2008), therefore exercising of entrepreneurial behaviour in big businesses. The intrapreneurs that operate within organisational borders are less autonomous, but their potential financial profits, as well as risks, are lower. Organisational context sets some limitations, but, on the other side, it offers entrepreneurs more safety, especially in the case of failure.

Research confirms the importance of entrepreneurially oriented education for the creation of entrepreneurial spirit and development of entrepreneurial competencies. Its influences on creating an entrepreneurial intention and on the quality of entrepreneurship or intrapreneurship are also important (e.g. the survival rate of new businesses and their growth) (Lans, Hulsink, Baert & Mulder, 2008). The governments of most countries recognise the importance of education for entrepreneurship and the need for promoting the young people's entrepreneurial mindsets and for the creation of new businesses (European Commission, 2008).

Lans et al. (2008) divide entrepreneurial education into the following activities: (i) aiming at changing the state of mind; (ii) encouraging entrepreneurial behaviour and (iii) managing specific business situations. In the first case, education should be aimed at creating fair values, attitudes, beliefs and expectations, related to successful entrepreneurship and intrapreneurship. In the second case, when we consider entrepreneurship as behaviour, education should encourage the transfer of competencies related to entrepreneurial behaviour (e.g. knowledge of a role of independent entrepreneur, entrepreneurial manager or entrepreneurial employee). In the third case, when entrepreneurship is placed in a real

situation, education should be oriented towards managing functional knowledge (e.g. how to start with the enterprise, how to explore the market, how to obtain financial means, etc.).

The purpose of the paper is to check the relationship between the entrepreneurial intention and some forms and methods of teaching in high schools. In the paper, we shall develop some basic guidelines or approaches to entrepreneurial education in the secondary education framework.

The paper consists of three parts. In the first part, we theoretically define the construct of the entrepreneurial intention and, in the second part; we describe the forms and methods of the entrepreneurially oriented teaching. In the third part of the paper, we describe the empirical research and its key findings. In the last part of the paper, a short discussion is followed by a conclusion, connected with available guidelines for entrepreneurially oriented teaching in the Slovene secondary education environment.

2. ENTREPRENEURIAL INTENTION

An intention is defined as the effort of an individual to use knowledge while behaving in a certain way and also his willingness to act in a certain way. It is an indicator of the will to try something (Ajzen, 1991). The intent is, therefore, a cognitive indicator of an individual being ready to show a particular behaviour (Fayolle et al., 2006).

Ajzen (1991) finds out that the intention is determined by relationships, and the latter ones are created in a form determined by external factors, such as e.g. situational circumstances. A particular behavioural intention is a function of two cognitive factors: the attitude to behaviour and the expectations.

Two basic psychological intention - related theories are the rational action theory and the concept of reciprocal determinism.

In their rational action theory, Fishbein & Ajzen (1997) assume that people behave reasonably and in interaction with the environment. According to this theory, the motivation for behaviour is affected by the perception of the relations between the desirability and availability of the objective, the expectations and pressures of the reference group, the subordination to the group, the previous behaviour and the sense of control over it. The two key elements of this theory are attitudes and the subjective norm. They both influence an individual's behavioural intentions, and the intentions affect his behaviour. Attitudes express our affection or aversion towards something. The latter is also strongly influenced by the subjective norm that contains the social component of response (Radovan, 2001).

Bandura (1997) argues that the motivation for an action also depends on individuals' perception of his efficiency. For the realisation of the entrepreneurial ideas, the intention seems to be the key element (Bird, 1988; Boyd & Vozikis, 1994). It is a state of mind that directs and guides an individual's behaviour towards the development and implementation of the business concept and it has an impact on their strategic thinking, as well.

The formation of an entrepreneurial intention is also influenced by an individual's beliefs (Fishbein & Ajzen, 1997) and the factors connected with the person's environment. Boyd & Vozikis (1994) believe that, as a consequence, an individual develops a repertoire of shared beliefs and possible reactions to stimuli. The collection is designed based on the personal aspects: personal history, personality and abilities, and the contextual aspects: the social, political and economic ones and it affects the cognitive processes and the construction of expectations, attitudes and sub - sequential intentions.

3. TEACHING APPROACHES

Research confirms the importance of entrepreneurially oriented education. In many authors' opinion, such education encourages the entrepreneurial intentions among young people and has a positive influence on the level of survival of companies and their growth (Lans, Hulsink, Baert & Mulder, 2008). On the political sphere, many countries recognise the need for entrepreneurially oriented education or for strengthening young people's entrepreneurial mindset and promoting the creation of new businesses (European Commission, 2008).

In the literature, two descriptions of entrepreneurially oriented education can be found - entrepreneurship education and entrepreneurial learning. The first is about (i) transmission of entrepreneurial attitudes

and skills through the development of relevant personal traits without any apparent connection with the creation of a company (e. g. creativity, risk-taking, responsibility) and (ii) specific training for creating a new business or a new company (e.g. technical and business skills) (European Commission, 2008). And entrepreneurial learning is broadly defined as (iii) all forms of education and training, both formal and informal, that contribute to the spirit of entrepreneurship and entrepreneurial learning with or without commercial objectives (Gribben, 2010).

In literature, several possible approaches to entrepreneurial learning in higher education environment are recognised. Jones-Evans, Williams & Deacon (2000) state importance of the action learning approach (Revens, 1980). Hampden-Turner (2010) find similar methods related to the integration of simulation or role-playing of running their own business as well as the integration of meeting some of the world's leading entrepreneurs. Harkema & Schout (2008) list examples of students - oriented learning of entrepreneurship through carefully and psychological test - based selection of students, students - planned learning and personal instructors. Hanke, Kisenwether & Warren (2005) determine that the introduction of the problem - based learning by remote studying strengthens students' self - efficacy and their abilities to manage uncertainty. Interesting approaches, including works of fiction or video clips, are stated by Bumpus & Burton (2008). Such methods can enable e.g. a better understanding of ethics and economic concepts, people-treating related matters, the use of different leadership styles, principles of strategic management, analysis of organisational culture and organisational behaviour concepts, etc.

So, methods of entrepreneurial learning should be action - oriented, they should include students into teaching as much as possible, as well as external individuals; including teachers' experience from real life is also vital. (European Commission, 2008). For entrepreneurial motivation, it is recommended: to apply for the role - playing, case - processing through discussion; to recognise business opportunities action - learning methods; to get acquainted with the processes of commercialization of business ideas guests from the practice and the competitions of business plans are the most suitable.

The group techniques should be used to motivate entrepreneurship, as well as case studies - they should be the most "alive" possible, referring to existing companies and current entrepreneurial examples. Business planning workshops should be included, as well as guests from practice being real entrepreneurs and also business simulations.

Besides that, the expert group of the European Commission (European Commission, 2008) finds out that approaches - as well as contents - to entrepreneurially oriented learning should vary considering the substantive scope of the school program, as well.

Table 1 summarises possible teaching methods that encourage entrepreneurially oriented learning.

Table 1: Overview of methods and forms of instruction in entrepreneurially oriented learning

Learning through experience and experimentation	Learning through observation and examples
<ul style="list-style-type: none"> - action learning - simulations - role playing - use of personal instructions - self-directed learning - problem-based learning - distance learning - competition of business plans - group techniques for creation of new ideas 	<ul style="list-style-type: none"> - meetings with leading entrepreneurs - integration of works of fiction or film productions - the inclusion of teacher's experience from real life - treating cases through discussion - studies of »live« cases - guest lecturers or entrepreneurs - business planning workshops

4. RESEARCH

4.1. Research methodology

In November 2013, we carried out a survey among high school students in Slovenia.

The pattern of students participating in the study counts 656 units altogether. 309 students come from the secondary vocational education in nine educational institutions - thirteen high schools (some schools consist of several high schools) or sixteen vocational training programs in the Savinjska region. A part of the sample is represented by 346 students of secondary technical education in ten educational institutions – twelve high schools and altogether seventeen technical educational programs in the Savinjska region. 57.3% (376) males and 42.7% (280) females were included in the research. 47.2% of students come from the secondary vocational programs, 52.8% from the secondary technical programs. 74.1% of students expressed a wish for further education. 36.8% of students have entrepreneurs - parents.

The survey was carried out in the classroom. Students filled in the questionnaires under the supervision of their teachers. After that, the data were collected, and the information was transformed into electronic format. The statistical processing was carried out with the SPSS program: the calculation of the mean value, the correlation analysis, the t-test. The questionnaire was developed based on the current surveys from the literature: e.g. Dermol, 2010; Možina, 2002.

4.2. Analysis and results

The exploratory factor analysis revealed three dimensions of the teaching methods: interactive, active and problem-solving teaching methods. The dimensions or factors of the teaching methods are shown in Table 2. Considering mean values of grades that students awarded to particular teaching methods, it seems that they do not appear in classrooms very often.

Students gave the highest grade to the frequency of appearance of the active teaching methods (M = 3.02). Among them, frequency of group work was particularly highlighted (M = 3.32), as well as in pairs (M = 3.31), but, on the other hand, they indicated that a particular situation when the teacher is teaching, and students are listening, still appears in a classroom quite often (M = 2.43).

In the students' opinion, methods of problem-solving seem the least frequently used in the classrooms (M = 2.77) – this goes especially for the use of simulations (M = 2.53) and visits of guests from practice (M = 2.69).

Table 2: Acquired competences of students

	N	Mean value (M)	Standard deviation (SD)
Interactive teaching methods	654	2,86	0,79
Project work (practical group projects)	654	3,12	1,08
Distance learning (e.g. e-classroom)	654	2,58	1,15
Competitions (e.g. the best seminar paper, a business plan, research papers)	654	2,76	1,17
Use of group techniques for creating ideas	654	2,88	1,06
Workshops	654	2,96	1,13
Active teaching methods	654	3,02	1,05
Work in a tandem (in pairs).	654	3,31	1,12
Summarising and evaluating (students together with teachers assess achievements, study result).	654	3,03	1,05
Avoiding frontal lectures (teacher teaches, students listen).	654	2,43	1,13
Group work	654	3,32	1,04
Problem solving methods	654	2,77	0,87
Guests from practice (e.g. entrepreneurs, managers, presentation of actual companies).	648	2,69	1,15
Excursions to companies.	653	2,81	1,20
Use of films and videos (e.g. for learning of entrepreneurship, management).	654	2,93	1,16
Problem learning (dealing with real problems from practice).	654	2,89	1,13
Simulation (game-based learning).	654	2,53	1,19

4.3. Analysis of entrepreneurial intention

Students appraise their entrepreneurial intention quite low ($M = 2.85$).

As seen in Table 3, the boys estimate their entrepreneurial intention considerably higher ($M = 3.02$) than the girls ($M = 2.62$) ($t(648) = 4.15$; $p < 0.001$). With students whose parents are entrepreneurs ($M = 3.13$), statistically significantly higher ($t(647) = 4.69$; $p < 0.001$), the assessments of the entrepreneurial intentions are seen when compared with other students ($M = 2.68$).

The students included into the secondary vocational programs, estimate their entrepreneurial intention typically higher ($M = 2.99$) than the students included into the secondary technical education ($M = 2.74$) ($t(635) = 2.61$, $p < 0.01$).

About the students who intend to continue their education and those who do not have this intention, statistically, significant differences do not appear.

Table 3: Assessment of students' entrepreneurial intentions

	N	Mean value (M)	Standard deviation (SD)
I very seriously consider becoming an entrepreneur.	648	3,04	1,28
I am ready to do anything to become an entrepreneur.	647	2,88	1,29
My professional goal is to become an entrepreneur.	646	2,74	1,32
I will do everything to start and run my company.	646	2,97	1,33
I am determined to create my company in the future.	646	2,94	1,30
I am seriously considering starting my own business	647	2,89	1,30
I have a firm intention to start my own business one day.	647	2,91	1,31
Within the next five years, I will create a company.	647	2,60	1,30

5. DISCUSSION AND CONCLUSION

Students assess their entrepreneurial intention rather weakly.

The entrepreneurial intention is statistically significantly influenced by three of the demographic peculiarities: gender, entrepreneurs – parents, and the level of education.

The boys estimate their entrepreneurial intention slightly higher than the girls and the students who have entrepreneurs – parents show greater entrepreneurial intention compared to other students. It seems that in schools the entrepreneurial intention should best be encouraged by the boys, the students who have entrepreneurs – parents and the students included in the secondary vocational programs. These demographic groups show the highest entrepreneurial intention.

The fact that the entrepreneurial intention is the highest for the students who have entrepreneurs–parents is not surprising. Considering the data from our research, students get the most entrepreneurial encouragement and knowledge from their parents. School, accordingly to students, comes second as far as encouragement is concerned, just right after parents and this fact might give the school an important role in the development of entrepreneurship and entrepreneurially oriented learning. So, students still recognise the school as an important means of knowledge transfer and development of abilities that enable someone for the active inclusion into the society and for employment.

In the analysis, we find out that, among teaching methods that might strengthen the entrepreneurial intent, above all, the interactive teaching methods should be pointed out. Their potential influence is relatively weak but positive. Accordingly, to the data, those methods have a relatively rare appearance in the classrooms, but they might be worth some encouragement efforts. The latter goes particularly for the use of group techniques of the idea - creating, the different competitions and the introduction of e-learning. The data show that working group projects and workshops in classrooms appear a bit more often than other methods of this way of teaching.

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