

**ECONOMICS**

*Sociology*

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## **POSSIBILITIES FOR DEVELOPING BUSINESS POTENTIAL IN ECONOMIC EDUCATION. EXAMPLES OF IMPLEMENTATION IN SLOVAKIA AND THE CZECH REPUBLIC**

**ABSTRACT.** One of the four key goals of the Strategic Framework for European cooperation in education and training "Education & Training 2020" is to increase creativity and innovation, including entrepreneurship skills at all levels of education and training. Entrepreneurship education is seen as an effort of educators to affect positively the motivation and students' attitude to entrepreneurship and therefore help develop skills important for being successful in business in the fields they are professionally trained for. The issue of entrepreneurship education should therefore be adequately reflected in the curriculum of training programmes, teaching methods and competency models. The paper describes the best approaches to implement the issue of entrepreneurship education at different stages of economic education in the Slovak Republic and the Czech Republic, based on the empirical research and the teaching experience of authors. Research was conducted in the years 2008-2015, the authors were researchers of scientific grants, which were mentioned in the paper. Objectives, research questions and hypotheses were verified in direct relation to the merit of the article – developing of entrepreneurial potential of students – and this was reflected in the research methodology. The research was a combination of both quantitative and qualitative methods, particularly pedagogical experiment and exploratory methods. With regards to the range of the original research, selected parts of unpublished results of the research are presented in the paper.

**JEL Classification:** A21, A22 **Keywords:** entrepreneurship, entrepreneurial potential, economic education, curriculum, teaching methods, teaching forms.

### **Introduction**

In terms of formal education in the Czech Republic and Slovakia entrepreneurial potential is developed on the basis of entrepreneurship education. The objective of

entrepreneurship education is to help transfer the knowledge, focusing on active identifying and using market opportunities, on the ability and willingness to take risks, to proceed tenaciously, to acquire knowledge and then to acquire skills in activities which would be targeted towards building an effective business and doing business. It combines the knowledge of entrepreneurship with the development of key competencies in relation to entrepreneurship, which are at the level of secondary education in the Czech Republic regarded as competencies to seek employment and entrepreneurial activities and in the Slovak Republic as initiative and entrepreneurship. In tertiary education, it is a purposeful forming of motivation and students' attitude to entrepreneurship and development of professional skills important for being successful in business in the fields which they are professionally trained for (Chromý, 2016). On the basis of content analysis and own research the authors aim to compare approaches to development of entrepreneurial potential and their educational effect in Slovakia and in the Czech Republic. The author's research is based upon the generalized scientific results of authors Turek in the Slovak Republic and Malach in the Czech Republic, which are the most important researchers involved in the research for a long-term period. However, the article is focused on the authors' own authentic experience of scientific projects and on the educational activities to develop the entrepreneurial potential of students. At their current and former workplaces both authors have been involved in the research and pedagogically engaged since 2008 up to now. The basic premise of the authors' research, which the main hypothesis comes out of, is based on the assumption that contemporary curriculum of secondary and tertiary education does not create conditions favourable for the development of entrepreneurial potential of students, with all the consequences that are recognized further in the paper in the selected sub-hypotheses. To achieve the objectives and verify hypotheses combined portfolio of research methods was used, mainly based on natural pedagogical experiment and exploratory methods.

## 1. Literature Review

According to Turek (2010), the entrepreneurship education is mainly related to initiative, creativity, responsibility, independent thinking and willingness of individuals to take business risks. In the Czech educational environment the comprehensively conceived curriculum of entrepreneurship education was developed by Malach (2008a), in which the following fact is emphasized: the development of general business presumptions, abilities and skills as a basic competence called "the sense of initiative and entrepreneurship" must also be complemented by mastering the system of professionally differentiated knowledge about business. Emphasising more the concept of responsible entrepreneurship should in turn lead to the situation that a career in business should become more interesting for young people entering the labour market. Hoppe (2016) states how different the concept of entrepreneurship at various levels of the educational system in Sweden is – in primary education the term is used to promote independence in solving problems, in secondary education it is associated with the establishment of enterprises and in the creation of a business plan (entrepreneurship). In 2011 in tertiary education there started pilot projects aimed at promoting entrepreneurship in specific fields of health and social care. In 2013, then this effort was extended to the wider promotion of entrepreneurial education at universities, while in 2014 pilot projects aimed at promoting entrepreneurial culture started. At the beginning there were problems without not having a clear implementation strategy. The first successful attempts fell back to the year 1980, in particular the Swedish branch of Junior Achievement and later in the 90s there were launched extensive implementation support programmes for entrepreneurship, especially in the northern parts of Sweden. Entrepreneurship education was seen as providing teaching resources for the development and stimulation of general skills, such as the willingness to

take the initiative, responsibility and ability to promote ideas into real life situations, the development of curiosity, independence, creativity and courage to take risks. At the same time entrepreneurial training promotes the abilities to make decisions, communicate and collaborate. To have entrepreneurial skills is to be able to seize opportunities and be flexible, to develop independently and create personal, cultural, social or economic values. Then the learning outcomes should be beneficial to personal maturing, they should not be limited only to the capabilities associated with founding and managing of enterprises. Premand *et al.* (2016) report on the new approach to implementation of entrepreneurship education at Tunisian universities, providing entrepreneurial training and personal training of students with the aim to develop a business plan for a very specific project of their choice. Students have the opportunity to create and defend a business plan as an alternative to traditional teaching. The newly formed concept of entrepreneurial development was mainly focused on increasing share of self-employment and on promoting entrepreneurial culture among university graduates, the programme also aimed at improving the employment rate of graduates. Subsequent research results have shown that students have practical experience in the implementation of projects or the creation of a business plan and better knowledge on the subjects taught. Students of experimental group have reached about 25 percent higher level of knowledge relevant to doing business than in the control group. The problem persists in entrepreneurship skills, which ultimately still lead to small increase in the proportion of self-employment among graduates after approximately one year after graduation. Jayawarna, Jones and Macpherson (2014) are highlighting the fact that those individuals who have a higher level of analytical and creative skills in childhood, who can benefit from a supportive family background, can invest in longer working experience and have a good level of primary education, are more likely to be successful in starting up the business. Success in early childhood may significantly affect the business potential in adulthood. This fact has also been confirmed by other authors who claim that educational success at an early age has a significant impact on the future business potential (Obschonka *et al.*, 2011; Schmitt-Rodermund, 2007). But it is unlikely that the link between early education attainment and entrepreneurial potential is so clear. Growing up in a family business is a particularly important predictor for children who become entrepreneurs or if they enter the family business as adults (Athayde, 2009). Indeed, Fairlie and Robb (2007) have found out that children of entrepreneurs are significantly more likely to start a business themselves later on. Research has shown that the inclination towards entrepreneurship in childhood, adolescence and early adulthood causes better predisposition.

## **2. Implementation of Tools for Supporting Development of Entrepreneurial Potential in the Slovak Republic**

Between 2008-2011 the authors Krpálek, Krpáľková Krelová and Štúr (2011) dealt with the innovative design of the concept of the course "Economy" with the implementation of entrepreneurship education in secondary vocational schools. The innovation was mainly implemented at the end of students' studies in fourth grade when they already mastered the basics of economic theory and business economics, including related disciplines such as basics of marketing, management and information system of businesses. The core of the research team led by authors Krpáľková Krelová and Krpálek comprised of academic researchers from Slovak Technical University, Faculty of Materials Science and Technology in Trnava and a student of doctoral studies Mr. Štúr. The aim of innovation was making the teaching of business education more effective in relation to the business potential of the population ending secondary education of non-economic specialization (18-19 years old). The matter of interest of the research was the entire teaching system that means both educational

content (curriculum) and all didactic material and immaterial resources, satisfaction of clients being educated, and social climate in the classroom. While doing the research making changes in the field of educational content, teaching methodology and social climate the authors particularly reflected the requirement for increasing knowledge and interest of students concerning the subject "Economy", developing entrepreneurship and entrepreneurial skills. The content was focused on the topic Company and Entrepreneurship, which is considered to be the main purpose of the research. The intention was to contribute to the expansion of established teaching methods, including of activities such as: discussion (during the entrepreneur's performance at lessons), group work (comparing purchase of a used car and a new car), project (preparation of a business plan), problem solving (individual parts of the business plan) and tasks for developing of information-communication skills (creation and presentation of a business plan in MS PowerPoint). As working on projects students developed following parts of a business plan: project summary, business description, description of goods or services, market analysis, marketing strategy, human resources, technology management plan, financial plan. In the performance of individual tasks the following was supported: the motivation of students, development of initiative, independence and creativity of students, team work, looking for information, the ability to communicate, organizing their work, implementing their own ideas, solving problems etc. Students in their work combined their knowledge from several subjects. Selected research model corresponded with that. The basis of the research method was pedagogical experiment following the observation of the natural environment, comprehensive didactic analysis and exploration via questionnaire. The items of the questionnaire consisted of closed and semi-closed items of Likert scale. The results were statistically processed in the IBM program SPSS and precisely evaluated by Pearson's chi-squared test. The main objective of the empirical research was to verify experimentally the effectiveness of teaching the subject "Economy" using the proposed concept of teaching methods that supports the implementation of education for entrepreneurship for this subject in secondary education with a focus on vocational schools. A specific feature of this research was to focus on non-economic fields, which corresponded to a research sample of schools because concerning business schools, economic lycées and other types of economic schools the potential for improving is only on the methodological level and in soft skills; professional training functions (ie. the professional competence of graduates) do not generally represent any problem. Respondents of the research consisted of students of fourth grade of secondary vocational schools in Topoľčany, Bánovce nad Bebravou and Partizánske. The sample group – consisted of 55 students of experimental class. The number of students of the control group was 59. The total number of students of fourth grades participating in the survey was 114. The hypothesis of the research was defined as follows: "Students of the experimental groups will assess mostly positively teaching of the topic Company and Entrepreneurship taught by our proposed professional methodical preparation". The authors expected that students would assess the teaching positively. The hypothesis is considered as valid, if the assessment of students is over 50%. The hypothesis was verified by a non-standardized questionnaire to assess the quality of teaching at the end of covering the topic. The statistical method used was the chi-square goodness-of-fit test. Considering that the authors have focused on experimental group and testing the hypothesis relating to it, they present only the results of individual items of questionnaire aimed at this group. From a pedagogical point of view to test the hypothesis where the data is obtained through a questionnaire, and where there is not a normal distribution of response rate, it is appropriate to choose the nonparametric test –  $\chi^2$  test or chi-square test. Pearson's chi-square test was selected which could be used as well as an independent test and the test of hypothesis about the dispersion of normal distribution. Hypothesis tested was the hypothesis of match

between the empirical and theoretical distributions. As a test criterion the authors use statistics:

$$\chi^2 = \sum_{j=1}^k \frac{(f_{e,j} - f_{o,j})^2}{f_{o,j}}, \quad (1)$$

From the questionnaire to evaluate the quality of teaching, which was presented to students after covering the topic Company and Entrepreneurship, the authors chose the items, divided into sections on the topic of teaching, out of which they selected only certain parts and a control question on an overall assessment of the topic for the hypothesis verification. Results of the first part of the research focused on the content are presented in the following table.

Table 1. The Calculation of the Value of the Test Criteria – Content of Teaching

Content	Empirical Frequency ( $f_{e,j}$ )	Theoretical Frequency ( $f_{o,j}$ )	$\frac{(f_{e,j} - f_{o,j})^2}{f_{o,j}}$
Answer	%	%	
1 – strongly agree, like it a lot, completely satisfied	32.7273	16.7	8.417391304
2 – agree, like it, satisfied	38.1818	16.7	15.13478261
3 – neutral, sometimes like it, sometimes dislike it	12.7273	16.7	0.526086957
4 – disagree, don not like it, not satisfied	3.63636	16.7	5.634782609
5 – strongly disagree, do not like it at all, very dissatisfied	1.81818	16.7	7.308695652
0 – do not know, unable to judge	10.9091	16.7	1.113043478
Students total	100	100	$\Sigma$ 38.13478261

Source: Authors.

The number of degrees of freedom  $\nu = k - 1 = 6 - 1 = 5$ , where  $\nu$  are degrees of freedom and  $k$  is a number of groups which belong among the monitored ones. From the value  $\chi^2_{\alpha}(k-1)$  which it is tabulated at the significance level of  $\alpha = 0.05$  and the calculations of subsequent sum  $\chi^2$  test, the following relation is valid:

$$\chi^2_{crit} = 11.070 < \chi^2_{test} = 38.135.$$

The critical value of test criterion is smaller than the calculated one, which means that in the responses of students there is a statistically significant difference. 71% of students tended to respond positively. The results of the second part of the research, which focuses on the methodological aspects, are presented in the following Table 2.



Table 2. The Calculation of the Value of the Test Criteria – Methodological Aspect

Methodological Aspect (the way teacher teaches)	Empirical Frequency ( $f_{e,j}$ )	Theoretical Frequency ( $f_{o,j}$ )	$\frac{(f_{e,j} - f_{o,j})^2}{f_{o,j}}$
Answer	%	%	
1 – strongly agree, like it a lot, completely satisfied	27.27273	16.7	3.656521739
2 – agree, like it, satisfied	32.72727	16.7	8.417391304
3 – neutral, sometimes like it, sometimes dislike it	16.36364	16.7	0.004347826
4 – disagree, don not like it, not satisfied	7.272727	16.7	2.939130435
5 – strongly disagree, do not like it at all, very dissatisfied	7.272727	16.7	2.939130435
0 – do not know, unable to judge	9.090909	16.7	1.917391304
Students total	100	100	$\Sigma$ 19.87391304

Source: Authors.

The number of degrees of freedom is unchanged so  $\nu = 5$ . The value  $\chi^2_{\alpha}(k-1)$  which is tabulated at the significance level of  $\alpha = 0.05$ , is unchanged. Based on the calculations and the following  $\chi^2$  test there is a relation:  $\chi^2_{crit} = 11.070 < \chi^2_{test} = 19.874$ .

The critical value of test criterion is smaller than the calculated one, which means that in the responses of students there is a statistically significant difference. 60% of students tended to respond positively. The results of the third part of the research, which focuses on the social climate, are presented in the following table.

Table 3. The Calculation of the Value of the Test Criteria – Social Climate

Social Climate	Empirical Frequency ( $f_{e,j}$ )	Theoretical Frequency ( $f_{o,j}$ )	$\frac{(f_{e,j} - f_{o,j})^2}{f_{o,j}}$
Answer	%	%	
1 – strongly agree, like it a lot, completely satisfied	29.0909	16.7	5.026086957
2 – agree, like it, satisfied	25.4545	16.7	2.504347826
3 – neutral, sometimes like it, sometimes dislike it	18.1818	16.7	0.069565217
4 – disagree, don not like it, not satisfied	12.7273	16.7	0.526086957
5 – strongly disagree, do not like it at all, very dissatisfied	7.27273	16.7	2.939130435
0 – do not know, unable to judge	7.27273	16.7	2.939130435
Students total	100	100	$\Sigma$ 14.00434783

Source: Authors.

The number of degrees of freedom is unchanged so  $\nu = 5$ . The value  $\chi^2_{\alpha}(k-1)$  which is tabulated at the significance level of  $\alpha = 0.05$ , is unchanged. Based on the calculations and the following  $\chi^2$  test there is a relation:  $\chi^2_{crit} = 11.070 < \chi^2_{test} = 14.004$ .

The critical value of test criterion is smaller than the calculated one, which means that in the responses of students there is a statistically significant difference. 55% of students tended to respond positively. At the end of testing, we chose a part focused on the overall evaluation of the topic taught – Company and Entrepreneurship in the subject of Economy. The results are presented in the *Table 4*.

Table 4. The Calculation of the Value of the Test Criteria – Total Evaluation

Teaching the topic Company and Entrepreneurship – total	Empirical Frequency ( $f_{e,j}$ )	Theoretical Frequency ( $f_{o,j}$ )	$\frac{(f_{e,j} - f_{o,j})^2}{f_{o,j}}$
Answer	%	%	
1 – strongly agree, like it a lot, completely satisfied	21.8182	16.7	0.852173913
2 – agree, like it, satisfied	36.3636	16.7	12.67826087
3 – neutral, sometimes like it, sometimes dislike it	20	16.7	0.352173913
4 – disagree, don not like it, not satisfied	10.9091	16.7	1.113043478
5 – strongly disagree, do not like it at all, very dissatisfied	5.45455	16.7	4.17826087
0 – do not know, unable to judge	5.45455	16.7	4.17826087
Students total	100	100	$\Sigma 23.35217391$

Source: Authors.

The number of degrees of freedom is unchanged so  $\nu = 5$ . The value  $\chi^2_{\alpha}(k-1)$  which is tabulated at the significance level of  $\alpha = 0.05$ , is unchanged. Based on the calculations and the following  $\chi^2$  test there is a relation:  $\chi^2_{crit} = 11.070 < \chi^2_{test} = 23.352$ .

The critical value of test criterion is smaller than the calculated one, which means that in the responses of students there is a statistically significant difference. 58% of students tended to respond positively. In the questionnaire for the evaluation of teaching the topic Company and Entrepreneurship the authors asked the control question relating to the evaluation of teaching quality of the topic. The result is presented in the *Table 5*.

The number of degrees of freedom is changed, according to the relation  $\nu = k - 1$  so  $\nu = 5 - 1 = 4$ , where  $\nu$  are degrees of freedom and  $k$  is a number of groups which belong among the monitored ones. The value  $\chi^2_{\alpha}(k-1)$  which is tabulated at the significance level of  $\alpha = 0.05$  is changing to  $\chi^2_{crit} = 9.488$ . Based on the calculations and the following  $\chi^2$  test there is a relation:  $\chi^2_{crit} = 9.488 < \chi^2_{test} = 10.545$

Table 5. The Calculation of the Value of the Test Criteria – Satisfaction with the Quality of Teaching

With teaching of the topic Company and Entrepreneurship I am generally:	Empirical Frequency ( $f_{e,j}$ )	Theoretical Frequency ( $f_{o,j}$ )	$\frac{(f_{e,j} - f_{o,j})^2}{f_{o,j}}$
Answer	%	%	
a) extremely satisfied	12.72727	20	1.454545455
b) very satisfied	14.54545	20	0.818181818
c) satisfied	36.36364	20	7.363636364
d) somewhat dissatisfied	21.81818	20	0.090909091
e) dissatisfied	14.54545	20	0.818181818
Students total	100	100	$\Sigma$ 10.54545455

Source: Authors.

The critical value of test criterion is smaller than the calculated one, which means that in the responses of students there is a statistically significant difference. 64% of students tended to respond positively. There was identified a statistically significant difference at the level of  $\alpha = 0.05$  among examined items. In all selected items and their parts students mainly positively assessed teaching of the topic Company and Entrepreneurship. Taking into account the statistical results it can be clearly stated that the formulated research hypothesis was confirmed. The experimental teaching was therefore beneficial and interesting for students and it developed not only professional competencies but also social competencies, communication skills and ability to work with information and communication technologies. Students were particularly impressed by the project teaching on creating and presenting their own business plan, where they had the opportunity to express themselves, as confirmed in the questionnaire for assessing the quality of teaching mediated after covering the topic Company and Entrepreneurship.

In 2008 the author Krpáľková Krelová started dealing with the entrepreneurial potential and gift of students for doing business as the main researcher and head of the research team addressing to the grant project KEGA 3/6216/08: Implementation of the subject "Leading to Entrepreneurship" to the study programme Teaching of Technical Profession Subjects at MTF STU. In the following section the authors will present results of research carried during the years 2008-2015, which contextually correlate with the above research of innovations in education to promote entrepreneurship and complete it suitably. The aim of the research is firstly to identify the business potential of that part of the population, which is already engaged in entrepreneurial activity in real life situations, then discover the level of entrepreneurial potential of university students in the sample of students MTF STU in Trnava and students of the Faculty of Finance and Accounting at the University of Economics in Prague and the level of entrepreneurial potential of students of selected secondary schools. The intent of the research is to compare the ascertained results with the results of Eurobarometer, 2009. The results of the Eurobarometer, 2011 compared with the results of the year 2009 in the Czech Republic and Slovakia differ only slightly. Based on the research results the researchers' workplace innovated curriculum of entrepreneurship education and introduced a new curriculum subject "Leading to Entrepreneurship". The research methodology is built on the basis of exploratory methods, namely the questionnaires detecting parameters such as adaptability, autonomy, decisiveness, problem solving, perseverance, etc. The questionnaire contained 22 closed dichotomous type questions. Triangulation of research methods is guaranteed by observation of the natural environment,



content analysis of curriculum and its innovation and implementation of a new business-oriented study subject. In the next section the results of questionnaires will be presented with detailed characteristics of individual groups of respondents, and compared with the results of the Eurobarometer.

During the months of June to September of 2009 diagnostic research on business potential of small businesses was carried out in which the author used the questionnaire identifying their entrepreneurial quotient. The questionnaire was distributed individually to 50 small businesses – sole traders, out of which there were 22 women aged 27-65 and 28 men aged 24-60. Respondents were from all over Slovakia. The areas of work were: services (catering, tailoring, beauty salon, and hairdresser's), consultancy, administration, computer science, health, engineering, transportation, construction, finance, real estate and accounting. The length of business was from six months to 19 years. The results of the research are presented in the following tables 6 to 9.

Table 6. The Achieved Level of Entrepreneurial Quotient among all Respondents (n 50)

Level	Number	%
I	0	0
II	4	8
III	19	38
IV	19	38
V	8	16

Source: Authors.

Out of all surveyed respondents 54% reached level IV and V, arising from the questionnaire people reaching these levels are not recommended for doing business or major weaknesses which would make it more difficult are expected. 16% (level V) should not do business at all.

Table 7. The Achieved Level of Entrepreneurial Quotient by Gender

Men (n 28)			Women (n 22)		
Level	Number	%	Level	Number	%
I	0	0	I	0	0
II	2	7.1	II	2	9
III	14	50	III	5	22.7
IV	10	35.7	IV	9	40.9
V	2	7.1	V	6	27.2

Source: Authors.

Up to nearly 43% of men and 68% of women entrepreneurs should not do business according to a questionnaire or their presumptions for it are very weak.

Table 8. The Achieved Level of Entrepreneurial Quotient by Achieved Education

Tertiary Education (n 23)			Secondary Education (n 27)		
Level	Number	%	Level	Number	%
I	0	0	I	0	0
II	1	4.3	II	3	11.1
III	9	39.1	III	10	37
IV	9	39.1	IV	10	37
V	4	17.4	V	4	14.8

Source: Authors.

The questionnaire did not show significant differences in the results of secondary or tertiary educated people.

Table 9. The Achieved Level of Entrepreneurial Quotient by the Length of Business

5 and more years			10 and more years		
Level	Number	%	Level	Number	%
I	0	0	I	0	0
II	4	11.1	II	2	16.6
III	13	36.1	III	3	24.9
IV	15	41.6	IV	7	58.3
V	4	11.1	V	0	0

Source: Authors.

In the group of respondents who do business for 10 years or more nobody appeared on level V, i.e. on the level which is not recommended for business. This is cheerful. Striking fact is that over 58% of these people are on the level IV with negative points. In the group of respondents doing business for 5 years or more it is recommended not to do business for 11.1% and according to the result of the questionnaire 41.6% can succeed with difficulties. The survey showed that Slovak small businesses or Slovak traders did not achieve a high or in many cases even the average value of the business quotient although many of them do business for many years (see *Table 9*). Afterwards there was research of the business potential of students at Faculty of Materials Science and Technology of the Slovak Technical University in Trnava. Survey respondents were students of bachelor's degree. Starting February 2008, 639 students from all disciplines and study years took part in it. To obtain the "entrepreneurial quotient" a quiz was used which had been previously assembled for research purposes in the United States in which the authors had investigated whether respondents had been willing to work till late at night if they had been willing to invest all the savings in setting up a business, if they as entrepreneurs had gone out of business they would have tried to find a stable job as an employee, if they had been willing to borrow money for business. Other questions were focused on whether they wrote goals they wanted to achieve, they loved adventures, and were cautious, etc.

Table 10. Achieved Entrepreneurial Quotient of Students by Type of Degree Courses

Field of Study	Technical	Economic	Students Total
Interval			
35 and more	1	0	1
15 to 34	51	39	90
0 to 14	132	103	235
minus 1 to minus 15	128	102	230
minus 16 to minus 43	48	35	83
Students Total	360	279	639

*Source:* Authors.

Students who score in the interval from 15 to 35 points have the potential to be successful in business, i.e. students have the gift and ability to do business. 91 students fell within the interval, which is 14.2% of the total number of survey respondents. The interval from 14 to minus 43 points means that students do not have sufficient potential to be successful in business without further training in entrepreneurial skills. 548 students scored in that way, which is 85.8% out of total respondents. Further survey of business potential of students continued in various secondary vocational schools and two tertiary education institutions (2010-2012). The aim of the diagnostic research was to verify the results of the 2009 Eurobarometer, which showed that the decision to become self-employed in Slovakia and the Czech Republic was made by around 26% of respondents, which is the worst result among the EU countries. Most of Slovaks and Czechs (65%) preferred to be employees, and the main reasons mentioned for this preference were regular income, job security and stable working hours. Approximately 62% of Czechs and Slovaks never considered starting business. Respondents of the survey were students of various types of vocational schools (e.g. SPS Strojarska – engineering, SOS obchodu a podnikania – trade and business, SOS – civil engineering in Trnava, SOS Dvory nad Žitavou, Grammar School in Banovce nad Bebravou, Business Academy in Partizánske, SOS Topoľčany, Slovakia) students of bachelor's degree of MTF STU in Trnava, Slovakia and students of University of Economics in Prague, Faculty of Finance and Accounting (Department of Teaching Economic Subjects), the Czech Republic. The age of respondents was between 17 and 22. Overall, 1183 respondents took part in the survey (1153 from Slovakia, 30 from the Czech Republic). The survey revealed that 1.26% of respondents had ideal conditions to start business, and 11.66% of respondents had satisfactory presumptions to be a successful entrepreneur. The results thus demonstrate and confirm the results of the Eurobarometer because up to 73.46% of respondents can succeed in business, but only if they try hard i.e. for these respondents the entrepreneurship education plays extremely important role. It is further noted that 13.63% of respondents does not have business potential and thus are not suitable for starting business.

### 3. Implementation of Tools to Support the Development of Entrepreneurial Potential in the Czech Republic

Since 2011 the author Krpálek has been testing and evaluating the level and development of business potential of students at the University of Business in Prague, bachelor's study of Aviation Transport Services in the subject of Business Economics. Testing is done in the form of a quiz about entrepreneurial quotient attractive to students (identical quiz, which was used by colleagues in Slovakia – see above) and at the same time using a test of financial literacy. Business Economics is taught in this professionally oriented study

programme as a two-term course, including lectures (two-hour weekly lessons) and seminars during which at the beginning and at the end the author implements testing and project methods. During the period of 2011 to 2015 the author was working with target groups of 106 to 133 students. After given instructions students took quizzes of business presumptions focused on assessing views and presumptions related to business activities, they took a financial literacy knowledge test and then answered ad hoc additional teachers' questions. To measure the business potential (Entrepreneurial Quotient EQ) quizzes of Eurobarometer were used and translated by prof. Ivan Turek and methodist Dr. Schuler (Institute of Experimental Psychology). The first interesting positive finding are relations of students who voted for starting business as the preferred choice after graduating from tertiary education before being employees – taking a job in the field of employment. The intention of doing business was preferred by more than a third of students (2011: 34.2% 2012: 38.5%, 2013: 33.1%, 2014: 33.4%, 2015: 35.7%), but with the fact that another quarter or third (in the time period) of students would like to get the work experience in the field of employment as employees at first place and then after that (within five years) start their own businesses. This preference of doing business exceeds the available data on the intentions of comparable groups of respondents from countries of transformed economies and is getting close to data representing advanced Western economies, where it is generally reported that about 45% of EU citizens prefer self-employment before a relationship of employment. The situation in the USA is on the other hand incommensurable with that because the ratio is traditionally significantly different in the sense that up to two-thirds of Americans prefer self-employment to employment. Entrepreneurial Quotient was movable in the whole group of students tested in the range of -21 points to +39 points (2011), -17 points to +44 points (2012), -30 points to +32 points (2013), -26 points to +41 points (2014), -19 points to +41 points (2014). In the positive reference zone where the business presumptions are undeniable, from 62.1% (2013) to 77.5% (2015) of tested students scored in this zone. A significant proportion of students (50.8% in 2011, 62.3% in 2012, 49.0% in 2013, 52.3% in 2014, and 59.5% in 2015) was in the range of +15 to +34 points, in which there are high chances to be a successful entrepreneur. Another interesting fact is the finding that not all students who have achieved a high score of points, and thus would theoretically have better personal skills and relatively higher motivation for entrepreneurship, expressed themselves in terms that they would like to start business after finishing studies, also the bigger part of these students (55-68%) would like to gain the experience as employees first before starting their own business. Another part of 14.7% (2011) to 18.9% (2013) of students was in the Diapazon between 0 to +15 points, where the success is by the quiz evaluation subject to other business-oriented education and purposeful strengthening of modifiable business presumptions. Students with exceptionally high levels of Entrepreneurial Quotient expressed themselves in their responses in the quiz and subsequently in the structured interview in the sense that they would be willing to sacrifice their free time for the benefit of success in business, they would be willing to go modest temporarily, to guarantee debts by their savings or go into debt, all for the reasonable price of business risk and prospects for an adequate profit. In this case expectations and elevation were clearly confirmed. A positive signal indicating a good level of preparation of assessed students was a good test result of financial literacy, signalling the ability to make decisions rationally and logically. Tests taken at the end of studies in particular turned out very promising. On the other hand already the entrance tests of financial literacy, especially in the period of last two years, point to the fact that financial literacy has been rather successfully implemented into the curriculum of secondary schools and students are familiar with the elementary logic of monetary, pricing and financial literacy even though being focused on personal and family finances not on capital, corporate finance and business. In the teaching of Business Economics except for the adaptation of the content of lectures and seminars in the form of continual examples, simulating practical processes of real business

economics there appeared, as part of the assessment of the activities, the individual creation and defence of a business plan (project) and optionally also the assessment of successful presentations of current news from the real world economy and the business.

The authors being the experts in didactics (methods of teaching) in the economic field at the University of Economics in Prague have good experience with the application of project-based learning, business incubator, modules of students' companies and economic games in the Junior Achievement programme, but especially with the deployment of a fictional company. Fictional company is an interdisciplinary integrated form of teaching which takes place in the form of simulation activities based on previously known theoretical knowledge necessary for the establishment of a business entity, processing a business plan, setting out the main goals, vision and mission of the company, creating an organizational structure, long-term and short-term planning, management of business and economic activities, human resource management, processing documentation in relation to the tax office and the financial statements. The course is organized in the way of working in teams which represent independent market subjects trading among themselves. The agenda of companies is processed by using the economic software Pohoda. The individual teams are formed based on the test enabling identifying the role of participating students and leadership types. The activity of the company is completed by public evaluation of the fulfilment of objectives, assessing the results of business activities and financial health, including the evaluation of work in teams. The aim is to prepare students for their jobs in the corporate sphere in the area of their own business activities and to educate future graduates to entrepreneurship. Students will develop practical skills in business, management of accounting and economic agenda with the support of economic software Pohoda. The results of the students' survey demonstrate the success of the course and the interest of taking it among students is growing.

Given that a similar type of research whose results published in the Czech Republic and Slovakia could be used for scientific discussion (discourse) is not available, or more precisely has not been apparently carried out, in their comparative analyses the authors proceed only from the results of the Eurobarometer, which are referred to in the text.

## Conclusions

When educating for developing an entrepreneurial potential it is important to teach with the activity approach, i.e. on the basis of own experience (learning by doing). The education for developing entrepreneurial potential will be effective only in the situations when students acquire and develop knowledge and skills based on their own experience when a partnership in the process of learning is reached based on the concept of self-responsible learning. Activating methods belong among current methods of developing entrepreneurship potential particularly problem-solving methods, case studies, project methods and economic games. Setting up and running fictional companies and students' companies in the Junior Achievement programme seems to be efficient. The authors agree with the findings of Malach (2008b) and other authors cited above mainly in the area of setting up appropriate diagnostic methods for assessment of the progress of pupils and students in gaining their competence to be innovative and gaining entrepreneurship skills and having systematic education for entrepreneurship during the entire education system. Similar situation is with the concept of financial literacy, which is mandatorily implemented into the curriculum at the primary to secondary education. Therefore, to implement entrepreneurship education it is possible to recommend the following methodological approaches, proven by teaching experience:

- deployment of blended learning or e-learning (digital learning materials and e-learning support) and such teaching methods which will save a portion of time allocation in direct teaching (esp. in seminars) to be able to develop soft skills of pupils and students;



time-saving will open space for activity-based learning and strengthen project-based learning,

- highlighting the pragmatic and practical training components, increasing the importance of interactive lectures and engaging top professionals in the direct teaching (including discussions and consultations with them), greater involvement of partners from real companies, significant enrichment of seminars by using case studies, moderated by their authentic authors,
- significant strengthening of hours and credits for work experience with the social partners, the integration and improvement of work experience and internships at companies including precision of the evaluation system,
- the involvement of students in research activities, start-up programmes and business incubators,
- assignment of topics of theses (student projects usable for the defence of the student's work as a substitute for one profile exam at the school leaving exam, theses and dissertations in tertiary education), which are based on the needs of real companies and are useful in business practice,
- the integration of entrepreneurship education in economic subjects in secondary and tertiary education, usable assessment (accepted by individual learners, understood and reflected) evaluation and monitoring of the business potential of pupils and students, motivation for personal growth and business ethics.

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