

The Importance and Potential for Development of Entrepreneurship Students at Middle and University Schools

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Abstract— Many experts in the field of economics and politics anticipate a dynamic increase in entrepreneurship in the 21 century. Realizing that entrepreneurship is crucial for the companies who want to be competitive worldwide, the European Commission pays special attention to supporting entrepreneurship. Entrepreneurial skills have been included into key competencies in the field of education and training and should therefore be acquired continuously within all stages of education, starting from primary through secondary up to the university institutions, including life-long education. Only well trained teacher is able to support the features of student as responsibility, creativity, initiative, sense for team work and others. These features with knowledge and skills from area of entrepreneurship are one presupposition that students will be successful at job market. This is one of the reasons of education change. Teaching process should be focused on entrepreneurship skills. The paper mentions examples from a good practice in the form of research results which were dealing with development of students' entrepreneurship skills at middle and university schools. Surveys were made at middle schools and universities in the Czech Republic and the Slovak Republic. Particular training of future teachers of specific subjects (economic and technological) presents the main meaning.

Keywords—entrepreneurship, research, skills, education, talent of entrepreneurship, active methods.

I. INTRODUCTION

PROMOTING of guiding students to entrepreneurship at secondary schools and universities should lead to the overcoming of the obstacles to enterprising skills development and the innovative potential growth. Membership of the Slovak and Czech Republic in European Union means to keep the Charter and to implement entrepreneurship into the school curriculum at all levels of education. The Charter recommends to realize special lectures about entrepreneurship at universities. European Commission emphasized the

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requirement to enable citizens the abilities they necessary for their life and work in the new information society.

Priority of the actual curriculum reform is adaptation of educational goals, contents and didactic means in secondary and tertiary educational to the conditions on the labour market, where graduate of secondary school and universities belong to problematic groups of applicants for a job. The reason is not only absence of technical practice in particular branch, but also low level of self-activity by solving of concrete problems and problem situations, insufficient flexibility in making decision, nondeveloped communication, personal and interpersonal abilities.

Business enterprise is demonstration of human ability to do that. The economic effect of enterprise is result of human ability, motivation and creativity.

Entrepreneurship can be divided on:

- 1) **outer** – it is connected with ability to find and use opportunities, which spring up by business activities in contact with outside surrounds (necessity of business plan devise),
- 2) **internal** – is discovering and effective exploiting of internal activities (creativity, innovation, compatibility, rationality).

Contents of the term education to the entrepreneurship aren't still stabilized in term of pedagogy. We can accept education to the entrepreneurship look like formation of positive attitudes to the entrepreneurship and competences, which are important for entrepreneurship as for example, initiative, creativity, readiness take the risk, responsibility, practice how to establish a firm [21].

Graduates would have to be prepared also on the change of their professional orientation in the span of the life and on the various retraining. Because of this, it is important to identify world jobs and sphere of the business, which have to be focused on application in the responsible branch of the education and comprehensively on world jobs at least on the level of the basic orientation.

The European Reference Frame for Key Competences for Lifelong learning suggests the following eight principal domains of *key competencies*:

- ⇒ communication in the mother tongue,
- ⇒ communication in foreign languages,
- ⇒ competences in science and technology,

- ⇒ digital competence,
- ⇒ learning to learn,
- ⇒ interpersonal competences and civic competence,
- ⇒ *sense of initiative and entrepreneurship*,
- ⇒ general culture.

The sense of initiative and entrepreneurship is an active attitude, it means the transformation ideas to the actions. Because of that the school system should support this from early ages and should develop and support those activities, which would represent accredited basis

II. ENTREPRENEURSHIP EDUCATION

Entrepreneurship is understood as a key factor of competition, a source of growth and job positions on European level and in a context of industrial crises.

Innovations and creativity are key parameters in a development of company and significant aspects of ability of Europe to solve challenges of international industrial competition and sustainable development [1]:

The first challenge is to secure that everybody can gain “sectional” key skills, as for example to learn how to teach and communication skills, sense for initiative and entrepreneurship, digital skills (including medial literacy), cultural awareness and verbalization. These skills and application of new technologies must be reflected in study programs, pedagogical methods and qualifications. More intense cooperation between universities and entrepreneurship sphere by students and teachers supports entrepreneurship.

The second challenge is to secure fully functional knowledge triangle of education, research and innovation. To reach excellent results in area of education and research the European Institute for Innovation and Technology can inspire and implement a change, especially with a support of multidisciplinary and partnerships between institutes of education and entrepreneurship sphere. Partnership between companies and various levels and spheres of education, specific preparation and research can help to reach better focus on skills required on the labour market as well as by support of innovation and entrepreneurship in all education forms [20].

The European Commission has observed a rate of education support in area of entrepreneurship in 31 European countries and five regions [13].

The European report says that eight countries Denmark, Estonia, Norway, Lithuania, Holland, Sweden, Wales and Flanders part of Belgium have started to implement specific strategies to support education in sphere of entrepreneurship. Other thirteen states: Austria, Bulgaria, Czech Republic, Finland, Greece, Hungary, Island, Lichtenstein, Poland, Slovak Republic, Spain and Turkey have implemented it as an integral part into own strategies related to life-long education of youths.

The half of target countries go through the reform of education connected with support of education in sphere of entrepreneurship. The two thirds accept it as a part of syllabus of primary education. However the subject is not as an

independent subject at elementary schools, the half of countries defines education to entrepreneurship and skills (initiative, preparedness to risk and creativity) as education aims [1].

From perspective of secondary education, the half of countries has implemented education as a compulsory subject as well as economy or social sciences. In Lithuania and Romania there is entrepreneurship taught as a compulsory independent subject [14].

There are many possible improvements. Only one third of European countries have a national directives and teaching materials for education in area of entrepreneurship. Twelve countries support initiatives connected with education of entrepreneurship, as for example a support of mutual cooperation between education sectors and entrepreneurship sphere and establishment of small companies led by students. Special specific training for teachers exists only in the Flanders community in Belgium, Bulgaria and Holland [15].

Therefore we can say, if we want to stay an equal competitors we have to invest into skills of students, their ability to adapt and innovate [12]. It means we need to support a real ideological change in Europe leading to entrepreneurship.

Learning by doing method is important by leading to entrepreneurship on the base of own experience. Education will be effective only when students gain and develop knowledge and skills on base of own experience.

III. FLASH EUROBAROMETER 354 “ENTREPRENEURSHIP”

Between the 15 June and the 8 August 2012, TNS Political & Social, a consortium created between TNS political & social, TNS UK and TNS opinion, carried out the survey FLASH EUROBAROMETER 354 about “Entrepreneurship”.

This survey has been requested by the EUROPEAN COMMISSION, Directorate-General Enterprise and Industry. It is a general public survey co-ordinated by the Directorate-General for Communication (“Research and Speechwriting” Unit).

The FLASH EUROBAROMETER 354 covers the population of the respective nationalities of the European Union Member States, resident in each of the 27 Member States and aged 15 years and over. [Eurobarometer]

The survey involved more than 42,000 respondents from different social and demographic groups. The survey was conducted by telephone (except in India, where the interviews were conducted face-to-face) in their native language name of DG Enterprise and Industry. The methodology used is that of Eurobarometer surveys as carried out by the Directorate-General for Communication (“Research and Speechwriting” Unit). [18]

Total number of Czech respondents: 1.000

Total number of Slovakia respondents: 1.000

One factor that has been studied is the role of education in entrepreneurship.

Significant results are presented below.

Respondents were asked whether they have ever taken part in any course or activity about entrepreneurship, which is

defined as turning ideas into action and developing one's own projects.

A quarter (25%) of respondents in the Czech Republic say that they have taken part in this type of course – slightly more than the 23% of people at EU who have done this. 75% say that they have never taken an entrepreneurship course (76% say this across the EU).

Three out of 10 respondents (29%) in Slovakia say that they have taken part in this type of course, which is relatively high compared with the 23% of people who give this response at EU level. 70% say that they have never taken an entrepreneurship course (76% say this across the EU). [Eurobarometer, 2012]

From these results it is clear that it is extremely important to implement entrepreneurship in school curricula at all levels of education and extend offers courses in lifelong learning.

IV. SCIENTIFIC RESEARCH FOCUSED ON THE DEVELOPMENT OF ENTREPRENEURSHIP SKILLS

The following chapter discusses diagnostical researches processed at selected middle vocational schools and universities in the Slovak Republic and Czech Republic.

A. Identification of the Entrepreneurship Potential of Students

Researches were processed as a part of grant project KEGA 3/6216/08 Implementation of the subject "Leading to entrepreneurship" to the study programme Teaching of technical professional subjects at MTF STU.

In the Czech Republic the research has started in this year 2012 in the project FRVŠ 1310/2012 Innovation of the subject "Controlled pedagogical practice" in bachelor study programme of teaching at the Department of Didactics FFÚ VŠE in Prague.

Aim of research: One of the aims of diagnostic research was to prove results of Euro barometer from year 2009, which show that decision to be independent person from perspective of financial profit, would be typical for approximately 26 % of respondents in the Slovak and Czech Republic. It is the worse result from all countries of EU.

The most of Slovaks and Czechs (65 %) prefer to be employed and the main reasons are: regular income, stable job position and work time.

Approximately 62 % of Slovaks and Czechs did not consider establishing own company. The results of Euro barometer are similar for the Czech and Slovak Republic.

Diagnostic research was made in years 2010 - 2012.

Research method: we used anonymous *questionnaire*, which was translated from Euro barometer by prof. I. Turek. The questionnaire enables us to find out what are the chances to be successful in entrepreneurship. (Are You Ready to be an Entrepreneur?). The questionnaire has 22 parts, while maximal number of gained points is 43.

Age of respondents was in a range from 17 to 22 years. **Total number of respondents: 1183** (1153 from the Slovak Republic, 30 from the Czech Republic).

Results of research (Table I):

Table I: Entrepreneurship Potential

Entrepreneurship potential		
	Schools together	
	Number	%
Interval		
+ 35 and more	15	1.26
+15 to +34	138	11.66
0 to +14	403	34.06
-1 to -15	466	39.40
-16 to -43	161	13.63
Total	1183	100

Source: own research

Evaluation of quiz (Your entrepreneurship quotient EQ):

+ 35 points and more: You have all presumptions for successful entrepreneurship. You can reach extra successes in entrepreneurship.

+15 to + 34 points: Your talent, your abilities give you a good chance to become a successful entrepreneur. If you do not have Your Company, try it.

0 to + 14 points: You can be successful in entrepreneurship if you will gain needed skills and you will study the field of entrepreneurship.

-1 to - 15 points: You can be successful in business, if you will extra try to compensate own negatives and to be same like others who have better presumptions to have a company.

-16 to - 43 points: Your presumptions, your talent determine that you have to do something else than lead own company. We do not recommend to enterprise.

Interpretation of results:

As we can see only 1.26% of respondents have reached in questionnaire 35 and more points, so they have all presumptions to enterprise and 11.66% of respondents have talent and presumptions to be a successful entrepreneur.

The results prove and confirm the results of Euro barometer because 73.46% of respondents can be *successful in enterprise, but only when they do their best*, it means these respondents should follow *the important task of education to enterprise*.

Then it is obvious that 13.63 % of respondents do not have entrepreneurship potential and so they are not good for enterprise.

B. Talent for Entrepreneurship

As talent we understand inherited and natal dispositions to perform in a particular area of psychological activity. If person is not dealing with a concrete activity, talent will not be developed.

Many specialists say that there are specific personal features which are typical for successful entrepreneurs. There belongs also preparedness to risk, resistance and strength which help to go through negative experience.

Aim of research: the aim of research was to find out if respondents (students) have talent to lead a business and if research results of entrepreneurship potential were approved.

Diagnostic research was processed in years 2010 - 2012.

Method of research: non-standardized anonymous questionnaire was used, it was written by Dr. Ivan Sarmány – Schuller from the Institute of Experimental Psychology SAV Bratislava. The questionnaire contains 25 parts. The parts are formulated in the form of notification sentences.

They are concrete statements and respondent selects one of three answer possibilities: if he/she agrees - 2 points, if he/she agrees partially – 1 point and if he/she disagrees –no point. Respondent can reach totally 50 points, while the chance of successful entrepreneurship is possibly already by the half of points.

Research respondents: Total number of respondents was 1183 and **786** respondents took part on questionnaire.

Research results (Table II):

Table II: Talent for Entrepreneurship

Talent for entrepreneurship		
	Schools together	
	Number	%
Interval		
0 to 25	125	15.90
26 to 50	661	84.10
Total	786	100

Source: own research

Caption:

The higher point number (from possible 50) was gained, the higher chance is that you will be successful in enterprise. When the result is 25 points it is possible to improve it, but less points show that it is less possible that you can be successful in business.

Interpretation of results:

The results prove that approximately **16%** of respondents have no entrepreneurship talent.

When we compare the results of the first and the second questionnaire we can see a minimal difference between respondents who do not have entrepreneurship potential and who have no talent (entrepreneurship potential 14% and talent for enterprise 16%).

We can **state**, that **73.4 %** of respondents think that implementation of the teaching of entrepreneurship plays an important role in education to gain and use entrepreneurship skills. Only then they can be successful in business.

Therefore we recommend emphasizing an importance of topic on development of entrepreneurship skills in education of teachers or in pre-gradual training of teachers of economical as well as technical subjects.

V. MORE OPPORTUNITIES TO DEVELOP ENTREPRENEURIAL SKILLS

The development of education to entrepreneurship at universities and middle schools should be an important contribution for removing of psychological and specific barriers of a wider entrepreneurship development and a growth of innovation potential. To be a member of the European Union means also an importance of implementation of entrepreneurship to curricula on all education levels [17].

A. Possibility of development of entrepreneurship skills at Slovak University of Technology in Bratislava

There are various ways of a support of graduates with education institutes, especially in finding a good position on labour market.

The Slovak University of Technology contributed to a creation of university technological space in a project of the Grant scheme for development of innovations and technologies INTEG of the National agency for development of small and middle entrepreneurship NADSME. The project develops a segment of small innovative companies in Bratislava and Trnava region and it stimulates cooperation with Austria [16].

The Slovak University of Technology provides a space for own activity to their students and graduates. They can change entrepreneurship opportunity to create an organization creating values. It enables for students to develop own attitudes, directions and skills to become managers. The project helped to create real possibility of cooperation of pedagogical university workplaces orientated on practice in Bratislava region [3].

The next method is an implementation of an independent subject into study programmes on particular levels of education (middle schools and universities). This subject should develop not only knowledge but also entrepreneurship skills [11].

From long-term perspective we can see insufficient state of the subject Training of entrepreneurship in technical study fields.

Therefore we decided to implement the subject “Training of entrepreneurship” in all study programmes of technical specialization in the project KEGA 3/6216/08. The subject has been added to syllabus of the first study year of the second level as a compulsory subject for all study programmes in the complex accreditation of the Slovak University of Technology in 2009. The subject was taught the first time in the academic year 2009/2010 [17].

B. Syllabus of the subjects Training of entrepreneurship

The specialists (management of small and middle enterprises, sociology and teaching of technical professional subjects) have participated on forming of subject content [10].

Curriculum of the subject:

- 1) Introduction to entrepreneurship, legislative, legal forms of entrepreneurship
- 2) Personality of entrepreneur

- ⇒ stress
- ⇒ load
- 3) Working groups, social relationships, managing of people, survey
- 4) Entrepreneurship plan
 - ⇒ Market survey
 - ⇒ Marketing
 - ⇒ Financial plan
- 5) Banking system
 - ⇒ Banking products for entrepreneurs
 - ⇒ Negotiation with bank clerks

Because the subject is finished with classified credit, the condition of accomplishing of subject is 100 % participation on seminars and preparation and presenting of own business plan.

Defense was processed by a three-member commission formed with a teacher and students. Presentation took 10 minutes and a presentation technology was available.

C. Structure of business plan

The business plan consists of the following components:

- ⇒ Abstract
- ⇒ Description of company
- ⇒ Description of product, service
- ⇒ Analysis of market
- ⇒ Marketing
- ⇒ Strategy
- ⇒ Management
- ⇒ Technical - organization plan
- ⇒ Financial plan
- ⇒ Appendix

Students have to submit a printed business plan during exam by commission. At the beginning of experimental teaching we made a questionnaire with an aim to find out attitudes and expectation of students. Anonymous questionnaire contained 11 closed, open and semi-open parts. 171 students took part, they were mostly students of technological study fields.

The most important results are:

What is your opinion on implementation of subject "Entrepreneurship education" into the master study programme at SUT (Faculty of Materials Science and Technology)?

Table III: Implementation of the subject

Answer possibilities	Number (%)
I strongly agree with the subject implementation	15.3
I agree with the subject implementation	60.3
I cannot give an opinion on it	14.4
I disagree with the subject implementation	10.0
I strongly disagree with the subject implementation	0

Source: own research

The next illustrates that 85% of students expressed satisfaction with the education of the subject concerned. It is a positive signal for project investigators as well as for teachers involved in experimental teaching.

Table IV: Expression of satisfaction

Answer possibilities	Number (%)
Absolutely satisfied	4.4
Very satisfied	35.3
Satisfied	45.3
Little satisfied	12.5
Not satisfied	2.5

Source: own research

- ⇒ **75.6 %** of students of full-time study form and 100% of students of combined study form agreed with an implementation into study plan
- ⇒ **54.5 %** of students of full-time study form and 55.3% of students of combined study form recommend the subject as compulsory elective
- ⇒ **74.6 %** of students of full-time study form and 66% of students of combined study form recommend to provide new on-line study materials
- ⇒ **78.4%** of students of full-time study form and **57,7%** of students of combined study form evaluate own knowledge in area of entrepreneurship as not sufficient.

After accomplishing of experimental education students evaluated a **quality of experimental teaching** in an anonymous questionnaire.

The most important results are:

- ⇒ **81%** of respondents considered an education subject content as very interesting to especially interesting
- ⇒ **50%** of respondents would select the subject as optional
- ⇒ **21%** of respondents consider a content as very useful and 62 % of students as useful regarding to the future practice
- ⇒ **85%** of respondents were satisfied with education
- ⇒ **57%** of respondents said that their expectations were fulfilled
- ⇒ **100%** of respondents positively evaluated an attitude and professionalism of teachers

The following aspects were positively evaluated: range, relationship of teachers to students, form of teaching, form of testing.

Aspects which should be improved: to enlarge a content of banking system topic and work psychology.

Positive evaluation of teaching of Training of entrepreneurship persuaded us that the subject has a position in study plans of students of magister study form, especially students of technical and technological study fields. There is a big interest in subject. We consider as very important that graduates are able to form work places and they do not stay unemployed or look for free positions [2].

D. Possibility of development of entrepreneurship skills at the Faculty of Financial and Accounting of University of Economics, Prague

We have cooperated with the Department of Didactics of Economical Subjects FFÚ VŠE in Prague already by solving of the above mentioned grant project. The cooperation processed with regard on long-term experience with integration of economical subjects in a form of subject exercises, training offices, practice in entrepreneurship sphere. Student and fictitious company is a workplace, a source of information and creative impulses by education structure. It is a model which is very close to a contemporary definition of student and fictitious companies where students decide about business intention, company concept. The company is established, organized and managed by students only with supervision of teachers. This model was considered by transformation and creation of a subject supporting education to entrepreneurship. We have applied experience of colleagues teaching the subject "Didactics of work in fictitious company" (it is an actual part of subject portfolio at University of Economy) by teaching of the subject "Training of entrepreneurship".

The Department of Didactics of Economical Subjects has secured a study in study field of teaching already from the initial phase VŠE and from year 1953. There was always interest in this study. Its advantage is that it enables a qualified summarization of exact economical study with human orientated study of pedagogy and psychology. There will be a possibility to gain two professional qualifications – economical and also pedagogical. Graduates act as teachers of professional economical subjects at middle schools, as teachers of higher vocational schools. Many of them teach at university and they participate in research and public administration.

Knowledge of modern pedagogical psychology emphasizes a need of autonomy increase by learning, need of transfer from external regulation to auto regulation. The most of authors from area of pedagogy emphasizes a dialogue and a wider application of teaching methods, based on activation and cooperation. These methods should support a formation of students' knowledge of active processes and communication and not passive acceptance. Students develop their abilities to communicate, cooperate and study. The mentioned reasons show an importance of integrated teaching forms, project and cooperation teaching. Teaching of future teachers of professional subjects should reflect these trends and accept them like a challenge. To secure a successful concept process it is important to form it from a system connection of integrated teaching forms with teaching of entrepreneurship.

The implementation into training of teachers of professional subjects helps to project quality education programmes containing integrated professional subjects. Integration of teaching process– teaching with activity – is the most efficient method of gaining and application of knowledge and development of entrepreneurship. Topic of integrated teaching

forms (especially fictitious companies, students companies- the programme of Junior Achievement, fictitious offices, subject exercises, various forms of practice in enterprises and project teaching process) are implemented into training of teachers of professional subjects.

Curricula of middle schools contain various practical orientated subjects. We can mention for example fictitious office, fictitious company or students Company. It is required to train future teachers for teaching of these subjects.

The next part contains a description of training method of future teachers so they are able to develop entrepreneurship skills of their future students.

The study programme of magister degree Teaching of professional economical subjects includes a compulsory subject (course) Didactics of fictitious company in the second school year of winter semester. The subject is orientated on seminar.

E. Didactics of fictitious company

The aim of subject is to prepare students for leading of fictitious company as a specific subject from perspective of professional economical aspect as well as didactic aspect.

The students are able to apply specific knowledge and skills, to use various teaching method which are needed by teaching of the described subject. Work in fictitious company is a specific practical subject which has been implemented into curricula of Academies of Business and other middle schools from 1992.

The content of subject is:

- ⇒ Fictitious company as an education subject at middle school.
- ⇒ Special aspects in application of teaching methods.
- ⇒ Establishment of fictitious company – selection of subject of Entrepreneurship and organization form.
- ⇒ Documents necessary for establishment of fictitious form-content and form.
- ⇒ Centre of fictitious companies, their regulation and definition of activities. Cooperation of company with CEFIF.
- ⇒ Offer catalogue of fictitious company, activity of marketing department.
- ⇒ Relations to other fictitious companies, billing and invoicing.
- ⇒ Accounting in fictitious company.
- ⇒ Fictitious company and taxes. Topic of health and social insurance.
- ⇒ International contacts of fictitious companies.
- ⇒ Evaluation of work quality of fictitious companies.
- ⇒ Evaluations of students in fictitious company.
- ⇒ Visit of fictitious company or trade fair of fictitious companies.

After accomplishing of the above mentioned study field the graduates should be ready to develop entrepreneurship skills by students of middle vocational schools and to support initiative and entrepreneurship.

Referential frame defines eight key competencies (Recommendation of the European Parliament and Council from the 18.th December 2006 on key competencies for life-long education (2006/962/ES), while Initiative and entrepreneurship is one of them.

All key competencies are important in same level, because each of them can contribute to a successful life in knowledge society. To know key competencies in effective way, it is important to change a content and method of teaching, new teaching methods and strategies should be implemented. They should lead to an interactive learning and they were based on experience and they are related to real life.

Education to entrepreneurship cannot be identified with teaching process in economics. This education must be processed at elementary, middle schools and universities, as well as in life-long education considering age aspects in all subjects – in dependence on curriculum. Leading to entrepreneurship must be implemented into curriculum of all types and grades of schools. Entrepreneurship cannot be learned by studying of textbooks and memorizing of entrepreneurship definitions. Attitude of action - learning by doing, activity of students (establishment of small companies or virtual companies), presentation of results are distinguishing for creation of entrepreneurship [3].

Efficient teaching of entrepreneurship requires a cooperation of schools and companies - business, industrial, services and training of teachers in area of entrepreneurship teaching process.

VI. ENTREPRENEURS' OPINIONS ON THE PREPAREDNESS OF THE SECONDARY SCHOOL GRADUATES ENTER TO BUSINESS ENVIRONMENT

The above-mentioned diagnostic research also focused on the opinions of entrepreneurs regarding the preparedness of the secondary school graduates for entrepreneurial activities. The questionnaire used in the research contained 28 questions and was published on the Internet. Addressed were the entrepreneurs in the region of Brezno (central Slovakia), who were notified of the questionnaire by e-mail. Out of 68 subjects, 47 ones responded. The research was carried out in co-operation with Ing. I. Kvietková who utilized the collected information in her master thesis.

We were interested in employers' requirements regarding the competencies and skills of the secondary school graduates entering the labour market. The responses of 40 % of the entrepreneurs questioned clearly determined experience and manual skills as crucial for the entrepreneurial sphere. At present, an employer expects to take on a graduate ready to fit in the company after brief instruction course and with no need to be introduced into basic business activities.

This is the area where the secondary schools must take swift corrective action and strengthen the segment of practical training.

Table V lists the insufficiencies in the competencies of the secondary school graduates regarding their performance in practice.

Table V: The most frequent insufficiencies in the competencies of the staff with secondary education

List the most frequent insufficiencies in the competencies of the staff with secondary education	
1.	Insufficient knowledge of managing various activities in a company
2.	Insufficient knowledge of laws and legislation
3.	Insufficient problem-solving skills
4.	Low flexibility in thinking
5.	Memorized knowledge acquired in the secondary school
6.	Difficulties in learning new knowledge necessary in a company

Source: own research + diploma thesis of I. Kvietková, Entrepreneurship students at vocational schools, 2010.

Table V indicates that it is important to pay special attention to training the entrepreneurial skills necessary to manage a company and to solve all the management-related problems. Regarding the abovementioned, crucial is the requirement of tighter connection between theory and practice.

Another objective of the above-mentioned diagnostic research was to find if the staff with secondary education disposes sufficient knowledge of entrepreneurship, acquired in the secondary school.

We found that, after graduation, a graduate does not dispose enough knowledge of entrepreneurship. The inquired entrepreneurs have performed in the entrepreneurial environment for 10 years at minimum, which is a proof of their high-quality knowledge and experience; their responses can therefore be considered highly credible.

The addressed entrepreneurs recommended the following **improvements in teaching entrepreneurial subjects** in secondary schools:

- ⇒ introduction of new entrepreneurship-oriented subjects,
- ⇒ improvement of education by applying the acquired theoretical knowledge in practice,
- ⇒ development of autonomy, flexibility, activity and critical thinking.

VII. QUALITY ANALYSIS OF TEACHING ECONOMY SUBJECTS

In the academic year 2012/2013, we carried out a diagnostic research into the quality of teaching Economy subjects in a selected vocational school. The research involved 70 students whose opinions were collected by using an anonymous "Questionnaire on assessing the quality of teaching by students" (Turek, I. and Albert, A.). The following tables show some of the research results.

We were interested in the following opinions:

- ⇒ weather the pupils would choose Economy subjects if the subjects were just optional, not compulsory;
- ⇒ what were the pupils' opinions regarding the usefulness of the knowledge acquired in the Economy subjects;
- ⇒ what were pupils attitudes to the Economy subjects.

The results are shown in Tables VI and VII.

For your practice, you consider the knowledge learnt within the Economy subjects (Table VI):

Table VI: Useful of the knowledge of Economy subjects

Scale	No. of responses	%
a) extremely useful	2	2.86
b) very useful	24	34.29
c) partially useful	37	52.86
d) little useful	4	5.71
e) totally not useful	0	0.00
f) I do not know	3	4.29

Source: own research

The knowledge of Economy subjects is considered to be extremely useful for future career by 2.86 % of pupils, very useful by 34.29 % and partially useful by 52.86 % of pupils.

The pupils were asked to circle the word expressing their attitude to the Economy subjects. We found that 62.86 % of pupils considered the Economy subjects “useful”, 41.43 % “complicated”, 38.57 % “important” and “suitable”, 34.29 % “interesting”, 30 % “monotonous”, 24.29 % “boring” and 17.14 % “very difficult”.

The pupils also evaluated individual aspects of teachers’ work within the Economy subjects by circling a grade in the following scale: 1 – fully agree; 2 – agree; 3 – more or less agree; 4 – disagree;

5 – totally disagree; 0 – do not know. The results are shown in Table VII.

Table VII: Teacher’s work

Teacher’s work / scale	1	2	3	4	5	0
Activating the pupils	8.6	32.9	32.9	17.1	5.7	2.9
Trying to develop critical thinking of students	8.6	21.4	45.8	15.7	2.8	5.7
Developing creative skills of students	10.0	34.3	34.3	12.9	4.3	4.3
Implementing the latest research results in education	18.6	38.6	22.9	12.8	4.3	4.3
Allowing pupils to express their opinions	27.1	45.7	17.1	4.3	4.3	1.4

Source: own research

It is important that teachers develop pupils and students’ determination, autonomy, flexibility, accountability, motivation for self-education, creativity, critical thinking, problem-solving etc.

The above-mentioned research revealed that the teachers do activate students, trying to develop their critical thinking and enabling them to express their opinions, yet there is still some space for more intensive development of the above-mentioned skills in the educational process [19].

VIII. PROPOSALS AND RECOMMENDATIONS

The carried out diagnostic research proved that it is necessary:

- ⇒ to combine theory with practice,
- ⇒ to introduce the topic of entrepreneurship into various subject or to introduce a specific subject devoted to this topic in secondary schools,
- ⇒ to develop the students and pupils’ autonomy, creativity and critical thinking,
- ⇒ to develop students’ ability to solve professional issues within the projects such as setting up a fictitious company,
- ⇒ to develop the students and pupils’ soft skills such as flexibility, risk-taking, self-motivation, stress-resistance etc.
- ⇒ to support competitiveness

IX. CONCLUSION

It is important that citizens of countries with market economy understood not only leading of households and personal finance but they should have also idea about possibilities of own active contribution in national industry from position of entrepreneurs as financially independent persons.

Therefore it is important to secure also a quality complex entrepreneurship education by a forming of basic financial and economical ability. The development of entrepreneurship has important benefits, both economically and socially. Entrepreneurship is not only a driving force for job creation, competitiveness and growth; it also contributes to personal fulfillment and the achievement of social objectives. The qualified contribution of individuals into market processes would not be possible without a developed entrepreneurship. The efficient functioning of national industry is secured in this way.

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