

**Marek Kunasz**  
**Department of Microeconomics**  
**University of Szczecin**  
kunasz@wneiz.pl, <http://lama.edu.pl/kunasz/>

## **EDUCATION AS THE ELEMENT OF ENTREPRENEURSHIP SUPPORT SYSTEM**

### **Abstract**

The characteristic of the study is theoretical and substantial. It is focused on the issue concerning influence of the education system on forming a pro-entrepreneurial attitude among students. The study presents selected theoretical aspects of entrepreneurship stimulation issues in the education system. Further, there are presented results of international researches SES 2006 of entrepreneurship among full-time students. In this part of the study the following was performed: assessment of education influence on forming the entrepreneurial attitudes, determination of the level of fitting with the major (profile) of studies into requirements of labour market, analysis of compatibility of the theoretical knowledge transferred at universities with requirements of business practise as well as determination of the scope of activities in basic and non-compulsory sphere, that should be taken by universities in order to higher the level of knowledge transfer effectiveness.

**Keywords:** Personnel Economics (M5), Economic Development (O1), Entrepreneurship (M13)

### **Introduction**

The main target of herewith study was the analysis of education systems in chosen Central-Europe countries in the context of effectiveness in forming the pro-entrepreneurial attitudes. The study is theoretical and empirical. The used sources represent an existing theoretical material of literature regarding described issues. The international researches of entrepreneurship proceeded in 2006 with a group of full –time students (SES 2006) were, on the other hand, the basic source of empirical data.

### **Stimulation of entrepreneurship within the education system – theoretical issues**

Economical changes in Central-Europe countries concern mainly a great growth of entrepreneurship, because it is the driving force of social and economical development. In this case the state has to support the initiatives friendly for entrepreneurship stimulation. The economical systems practice has formed a wide instrumentation of development support for mainly small and average enterprises. The education units bare an essential responsibility here. It is the education that shapes and forms entrepreneurial units. After A.Shapero people are not borne entrepreneurs they become entrepreneurs. The distinctive features are neither determined by the genetic code nor established in the early childhood. They are happily taught during the education and they are a case of personal choice and decision” – quotation (Majerska 2003, page 96)

In this case what is the mythic entrepreneurship? The analysis of the great theoretical

achievements in this field of knowledge allows us to state that the entrepreneurship is defined multidimensional and ambiguously. (Drucker, 1992, page 30), who devoted lots of his work to entrepreneurship claims that there is a great confusion in this field. The reasons of such situation should be looked for instance in the fact that the category of entrepreneurship is interdisciplinary. It can be considered on the background of many social sciences: economy, sociology or psychology. The multiplicity of model or definitional approaches have caused that the entrepreneurship can be considered in various ways, e.g.: in the context of formation and running own business (Strojn, 2004, page 254). In this approach it might be associated with providing financial capital and being involved in management process of the business (Kraśnicka, 2002b, page 14). Entrepreneurship from the economical perspective is considered in the context of effective allocation of reserves (classical and neoclassical school) (Kraśnicka, 2002a, page 189-190) or relocation of reserves (modern approach).

Relocation of reserves might take place during the process of creative destruction of balanced market (Schumpeter, 1960); (Mikosik, 1993) or while finding the chances for entrepreneurial profit (Kirzner, 1979). In many approaches running a business is related with bearing the risk of uncertainty (Strojny 2004, page 252). Despite functional approach the attention is also drawn to the subjective character of analyzed category. In this case it is considered from the angle of characterological and personal characteristics of units deciding to take the business activity (Gaweł, 2005, page 16); (Mendel, 2002, page 75); (Błaszczuk, 2004, page 65). In many other perspectives the essence of entrepreneurship is also seen via prism of final result of entrepreneurial activities (amassing reaches, new work places or values) (Morris, Lewis, Sexton, 1994, s. 22).

In this context it seems to be ungrounded to associate the entrepreneurship with self-employment only, which is often met in the literature of the subject (Bratnicki, 2001, page 11); (Gaweł, 2005, page 16). The entrepreneurial activity might appear in many fields, in which it can be also stimulated. Formation of entrepreneurial attitudes might therefore take place in the sphere of education in plenty fields.

So is the education system in Central-Europe countries in favour for formation of entrepreneurial attitudes? How often will the knowledge and skills acquired at universities be applied in business activities? Which actions should the universities apply in order to rise effectiveness of the knowledge transfer process, taking into consideration the requirements of business practise? The answer to above questions seems to have a key meaning in the presented context. Herewith premises formed a base for proceeding with researches, which could find answers to above questions.

## Research results

Researches were proceeded with a group of full-time students from six Central-Europe countries: Lithuania, Latvia, Poland, Russia, Ukraine and Hungary. The method of partial researches found its application. Data was collected by the survey form distributed among units qualified to the sample. The selection of units was random. The survey researches were carried out in period of May – November 2006.

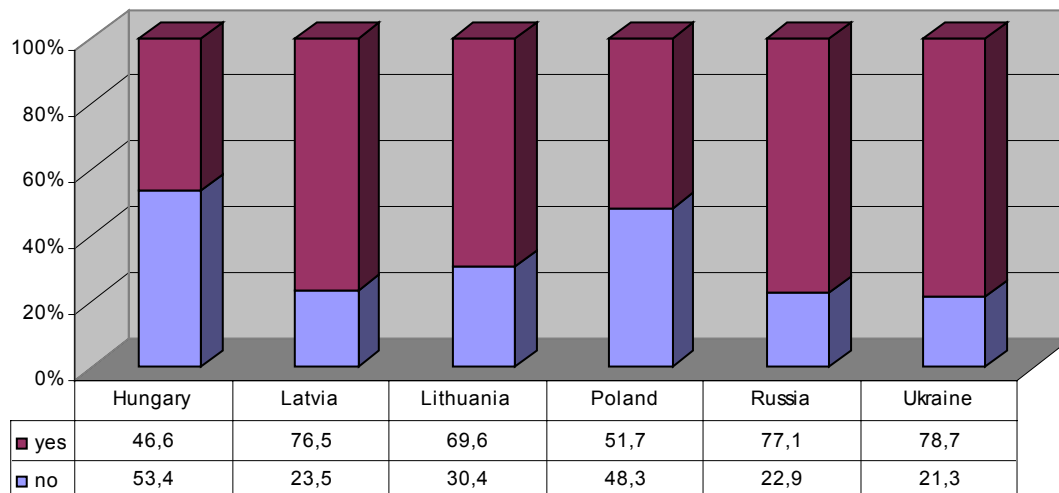
In order to meet the target of the study, the following was performed in the empirical part:

- assessment of education influence on shaping the entrepreneurial attitudes
- determination of the level of fitting with the major (profile) of studies into requirements of the labour market
- analysis of compatibility of the theoretical knowledge acquired at university with requirements of business
- determination of the scope of activities in the basic and optional sphere, that should be

taken by universities in order to higher the level of knowledge transfer effectiveness

At the beginning students were asked to asses the influence of education system on the entrepreneurial attitude formation. The structure of respondents' answers is presented in chart 1.

Chart 1. Question: In your opinion, does the education system have a positive effect on developing enterprising teenagers/students?



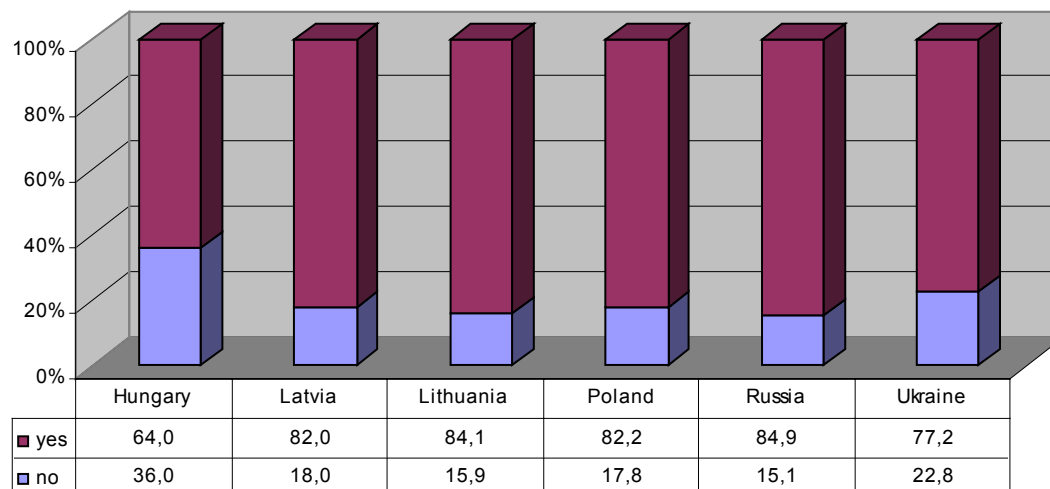
SSI=67,9

Source: own compilation based on the results of research.

Except for Hungarian students, more than a half of respondents noticed a positive connection in the analyzed subject, however the differences in respondents' declarations in particular countries are significant. It is proved by the structure similarity coefficient, which amounted to 67,9. Having analyzed the respondents' declarations two groups can be distinguished – Hungarian and Polish students and representatives of other countries involved in the research. Both groups differ approximately 20 percentage points in positive declarations regarding the assessment of education system in the context of entrepreneurial attitude formation. In the first of aforesaid groups, 46,6% of choices was recorded for described option in Hungary and 51,7% - in Poland. In other countries the relative index (in margin cases) was established at the level from 69,9% (Lithuania) to 78,7% (Ukraine – the difference is more than 32 percentage point in comparison with the Hungarian students' opinions)

Further, the respondents were asked to determine: weather the graduation of the major (study profile) they were doing gave them a chance to find a job? The answer to this question may be considered as a fit measure of the major and market requirements. The chart 2 illustrates the structure of collected responses.

Chart 2. Question: Do you think that graduating with the major (study profile) you are in now will give you more chance of finding a job?



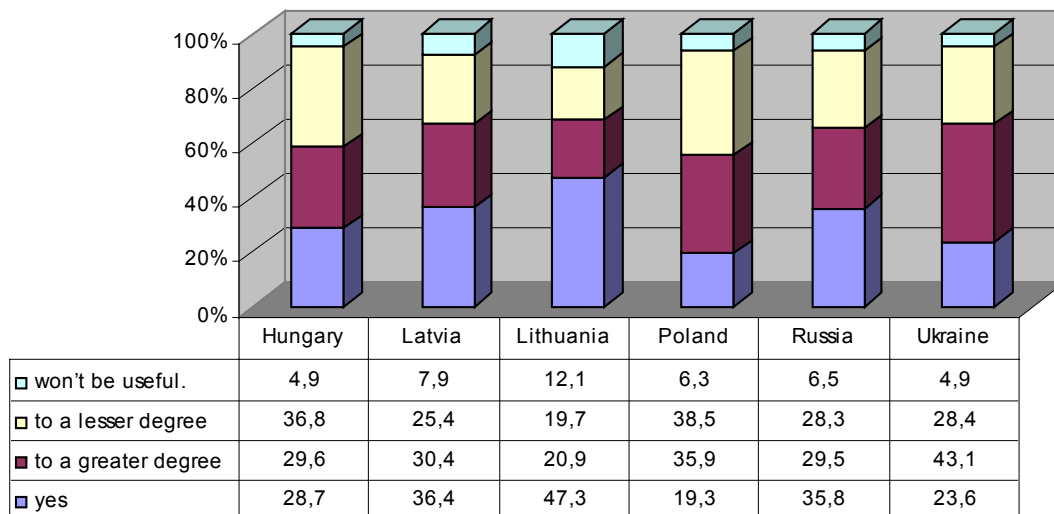
SSI=79,1

Source: own compilation based on the results of research.

Most of the respondents considered the graduation of major chosen by them, gave them a chance to find a job, however the attention should be drawn into the differences in declarations of students of particular countries. Also in this case the lowest index of “yes” answers was recorded in the group of Hungarian students. It seems that such situation does not comply with a high unemployment rate problem in Hungary – comparing the unemployment rate for instance in Hungary and in Poland. It can be a problem of lack of fitting with the major of chosen studies into the requirements of labour market. The next in order, comparable index regarding the declarations of Ukrainian students (whose appraisal of their education system in the context of formation of entrepreneurial attitudes was very high, however, as it can be seen, a bit less optimistic, relatively speaking, they were if the meeting the labour market by the profile of studies is concerned), was established at the level of over 10 percentage points higher (77,2%). Opinions of Polish students in the analyzed subject seem to be optimistic in the light of the assessment in the previous question. They don’t differ from the declarations collected from students of other countries (starting with Latvia, where 82% of respondents see chances for finding a job after graduation of current studies, and finishing with Russia, where the maximal index of choices was recorded for option representing positive opinions for fitting with the major of chosen studies into the requirements of labour market – 84,9%). Within the group of Polish students 82,2% of choices of adequate option were recorded.

The compatibility of the theoretical knowledge taught at the universities with requirements of business was also analyzed. The respondents answered the question: “Do you think that the capabilities and skills you are getting during university studies will be useful in running your own business (self-employment)? by choosing among four options: yes, they will be fully useful; they will be useful to a greater degree, they will be useful to a lesser degree, they won’t be useful. The chart No 3 presents the structure of responses to this question within the groups of students from particular countries.

Chart 3. Question: Do you think that the capabilities and skills you are getting during university studies will be useful in running your own business (self-employment)?



SSI=64,8

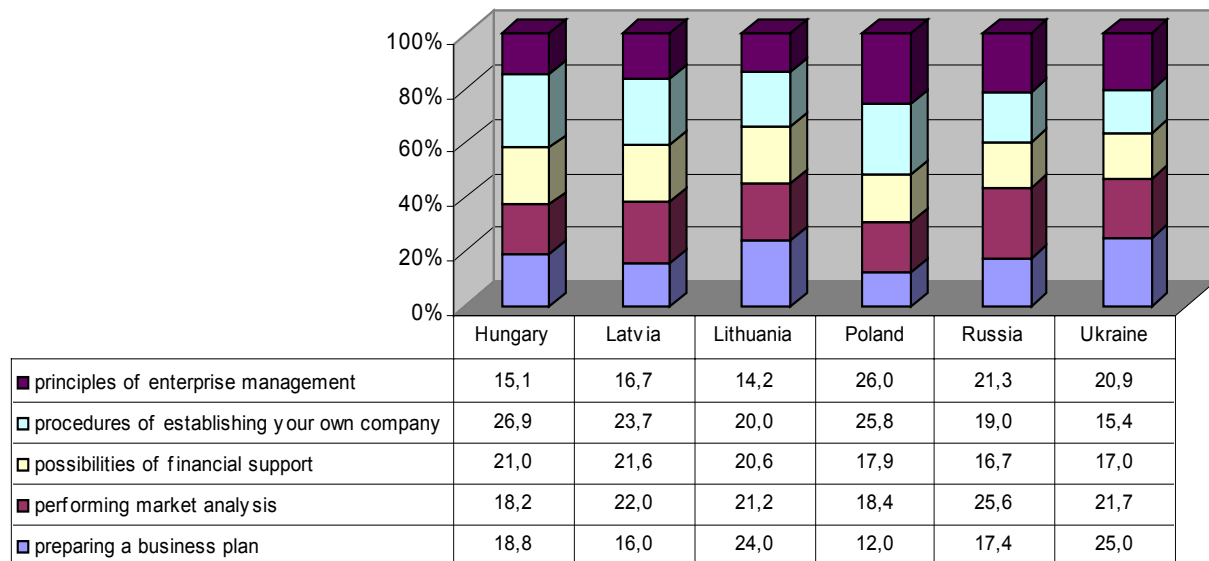
Source: own compilation based on the results of research.

Having analyzed the median calculated for structure coefficients of particular countries one should state that most of the respondents (62,3%) consider the knowledge and skills acquired at university to be fully useful or useful to a greater extent once the business activity is commenced by them. Only 6,4% of the respondents concur with the opinion that the knowledge acquired at university will be of no use in the future. 28% of respondents determined the knowledge and skills transferred at the university useful to a lesser degree.

Having analyzed the declarations of respondents in particular countries the attention should be drawn to the significant differences in opinions (structure similarity coefficient 64,8). The division line is exactly in the same place. Polish and Hungarian students, relatively speaking, assess the quality and compatibility of acquired knowledge and skills with requirements of business much worse. As many as 44,8% of Polish students determined the knowledge acquired at university as useless or useful to a lesser degree. The share of Polish students is also noticeable in minus, while analysing the opinion that transfer of knowledge at universities will be fully useful in running own business in the future (only 19,3% of choices, in comparison with e.g. 47,3% of choices of same option among Lithuanian students). In the group of Hungarian students 41,7% assess the acquired knowledge at university as useless or useful to a lesser degree in the context of needs related with taking up future professional activity. The full usefulness of acquired knowledge was pointed out by 28,7% of respondents (this factor does not differ much from the rest of the countries). In the group of remaining countries, the percentage of respondents thinking that the knowledge acquired at universities will be useless or useful to a lesser degree in the context of its application in business practice was established between 31,8% and 34,8% (extreme values respectively for Lithuania and Russia). Therefore one may state, that the views of this matter in this group are not diversified. The case of Lithuanian students is worth noticing. Despite the fact that they highly valued their educational system in the context of providing the useful knowledge, they pointed out its uselessness in the highest percentage of cases (12,1%). However, this type of categorical declarations were shown on the opposite end – in the group of students from this country, there was the highest percentage of respondents appraising acquired knowledge as fully useful (47,3%) compared to 36,4% of adequate indications of the next group of Lithuanian students.

What actions should be taken than by the universities, in the basic and non-compulsory sphere, in order to increase effectiveness of knowledge transfer from the needs of business practice perspective. At the beginning one concentrated on the basic activities, asking the respondents about the thematic areas concerning entrepreneurship, that should be emphasised in the programs of university courses. Respondents could choose from the following: preparing a business plan, performing market analysis, possibilities if financial support, procedures of establishing own company, principles of enterprise management. One may assume that the respondents' answers, indicating the need of emphasizing particular issue in the programs of university courses, inform that there is a gap in this scope that should be filled. The structure of answers in particular countries is presented in the chart 4.

Chart 4. Question: What knowledge would be most useful for you in establishing an enterprise?



SSI=76,6

Source: own compilation based on the results of research.

The analysis of median of structure coefficients for particular possible answers entitles to state that each of presented options was chosen by the similar percentage of respondents, however, taking into consideration the noticed differences in this range, one may come up with the hierarchy of educational needs. The need to acquire the knowledge concerning performing of market analysis was the most frequently chosen option (21,9% of cases). 21,5% of questioned pointed out the need to transfer the knowledge concerning the formal procedures of establishing own company. 19,3% of respondents chose the option "possibilities of financial support". 18,8% of questioned would more emphasize the issues of preparing of business plan in the programs of university courses. For 18,1% of the questioned population the knowledge referring to the principles of enterprise management is very useful from their own educational needs point of view. One have to pay the attention to the diversification of respondents opinions in particular countries – it is hard to name common elements and because of that in further deliberations they were limited to presenting needs hierarchy on the level of specific countries

Hungarian students point out the gap in the programs of university courses that concerns procedures of establishing own company (26,9% of choices) and possibilities of receiving the financial support for prospering business (21% of choices). The knowledge of the principles of business management turned out to be the least useful in the context of this

analysis (5<sup>th</sup> place in the needs hierarchy). Latvian students considered the knowledge of preparing of business plan and the principles of business management as the least important from their educational needs point of view (very similar percentage of these indications – ca. 16%). Remaining thematic areas were chosen by the similar percentage of respondents (from 21,6% to 23,7%). Lithuanian and Ukrainian students place the same thematic areas on the top of their hierarchy of needs: preparing of business plan (respectively 24% and 25% of cases – distinct disproportion in comparison with the results of this options in other countries) and performing market analysis (this option was chosen respectively 21,2% and 21,7% of cases). However their opinions differ, when concerning the least important issue. In this context, Lithuanian students chose the knowledge of principles of business management, Ukrainian, on the other hand - the knowledge of procedures of establishing own company (respectively 14,2% and 15,4% of cases). Polish students consider the subject concerning preparation of business plan the least useful due to their educational needs (only 12% of choices of this option). On the other hand they expect the education system to provide them the knowledge regarding principles of enterprise management and procedures of establishing their own company (similar level of choices of both options, respectively 26% and 25,8%). The education system in Russia should more evaluate towards the issue of proceeding with market analysis (25,6% of choices of this option) and principles of enterprise management (21,3% of options).

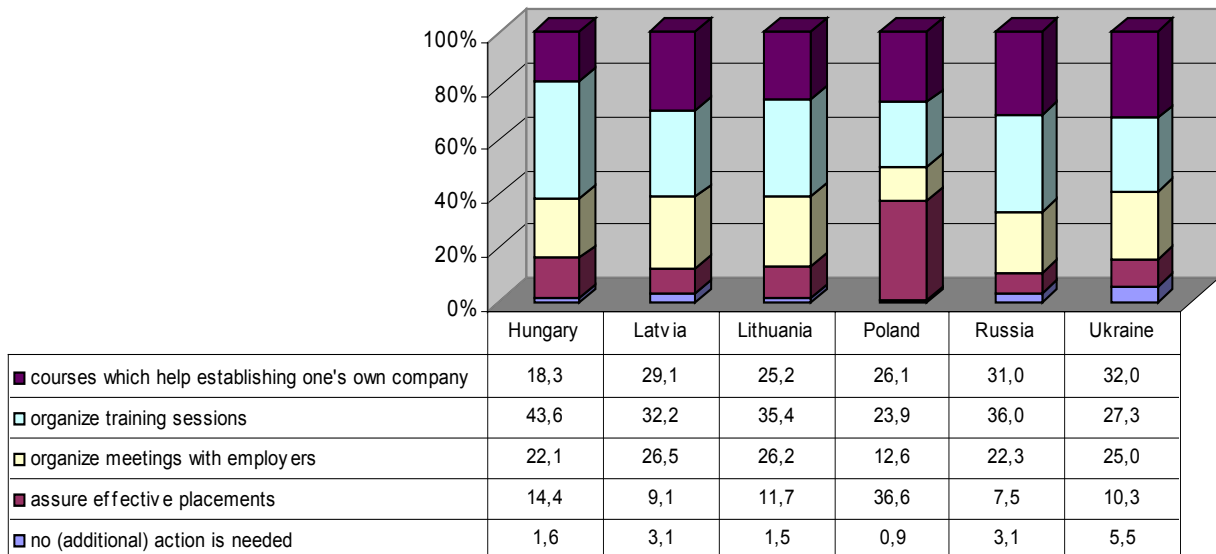
Further one concentrated on the non-compulsory activities of universities, presenting the following instrumentation:

- University should provide more traineeships
- University should organize meetings with employers
- University should organize more training sessions
- University should introduce courses which help establishing own company

Chart 5 presents the structure of respondents.

The attention should be drawn to the fact that the respondents could also choose the answer “University doesn’t have to take any additional actions”. Starting with 0,9% of Polish students up to 5,5% of Ukrainian students decided to chose this option. Respondents were the most interested in having more training sessions organized by university. This option happened to be at the top of the needs hierarchy formed for four countries (Hungary – 43,6% of choices of this option, Russia – 36% of choices, Lithuania – 35,4% of choices and Latvia – 32,2% of choices). Therefore one should sate that students are interested in participation not only in compulsory but also in non-compulsory training sessions, which allows to rise their competences potential. The least interested in this method of knowledge transfer were Polish students (23,9% of choices – 3<sup>rd</sup> place in ranking).

Chart 5. Question: What action could the university undertake in order to help you be better prepared for running your own business?



SSI=63,2

Source: own compilation based on the results of research.

Widening the sphere of subjects concentrated on preparation for own company establishment and management seems to be an essential activity of university as far as improvement of knowledge transfer in this scope is concerned. Mainly Ukrainian students spot the gap in this scope (32% of choices – also placed at the top of hierarchy over there). The lowest index of this option was recorded in the group of Hungarian students (mentioned need was spotted by 18,3% of respondents, which gave the 3<sup>rd</sup> place in ranking). Students called also for organization of meeting with employers by the university. Such suggestions recorded similar index of respondents (from 22,1% in Hungary to 26,5% in Latvia), Polish students exclusive. In Poland mentioned option did not get common acceptance (only 12,6% of choices). Therefore, one may assume that this type of meetings are organized quite often at Polish universities. However, what is shown in the survey results, contacts with potential employers or business partners, especially in Poland, may be limited to participation of both parties in occasional meetings. Less frequently, such contacts are made during training periods organized by the university. In Poland, increasing the number of training periods organized by the universities was suggested by 36,6 % of questioned (1<sup>st</sup> place in the hierarchy), when in other countries this demand was recorded for 7,5% (in Russia) to 14,4% of respondents (Hungary)

## Summary

The analysis of respondents answers shows great diversification concerning the appraisal of the quality and effectiveness of education in the context of forming pro-entrepreneurial attitudes in analysed countries and improving the system. However, summarizing the above deliberations one may attempt to come to some general conclusions concerning the whole analysed populations:

- In general, students think that the education system has positive influence on forming pro-entrepreneurial attitudes and the major chosen by them gives them chances to find a job.



However the index of respondents stating that the knowledge acquired at university might be useless for future professional activity (e.g. in running own business) is rather significant

- Evolution of education system should proceed in such direction which provides an essential knowledge for future professional activity. It should constitute not only a system of basic subjects (more pressure on subjects preparing for establishing own business) but also non-compulsory activities (organization of training sessions, meetings with employers).
- Taking into consideration the variety of opinions in particular countries one could distinguish two groups of respondents. The first is formed by Hungary and Poland. The second group is formed by the respondents coming from other countries (Latvia, Lithuania, Russia and Ukraine – former Soviet Union republics)
- Students from the first of mentioned group are critical upon their education systems in the context of formation pro-entrepreneurial attitudes, as well as usefulness of knowledge, which they acquire at universities with the perspective of future needs regarding taking up professional activity. Looking for directions of changes one should draw the attention to the fact that Hungarian students expect their universities to organize additional training sessions. In their point of view the most effective is knowledge of procedures regarding own company establishment and possibilities of financial aid. On the other hand Polish students expect their universities to be more active in organization of traineeships and the most effective knowledge is the one concerning the management methods of own company and procedures of establishing own company.
- Opinions of students from the second of mentioned groups in the analysed range contain much larger optimistic potential and are not much different from each other, however expectations of students towards their home universities may be different. Lithuanian, Russian and Ukrainian students expect mainly additional courses and introducing courses that help to establish one's own company. In the opinion of students from Lithuania and Ukraine the knowledge concerning preparing of business plan is the most important, for students from Russia the most useful will be the knowledge concerning performing of market analysis. Lithuanian students expect their universities to organize additional courses and meetings with employers. In their opinion the knowledge concerning preparing of business plan will be most useful for their further professional activity.

## REFERENCES:

1. Błaszczak W., (2004), Kreatywność i przedsiębiorczość jako cechy współczesnego menedżera, Prace Naukowe Akademii Ekonomicznej we Wrocławiu, nr 1032.
2. Bratnicki M., (2001), O właściwą formę przedsiębiorczości, *Ekonomika i Organizacja Przedsiębiorstwa* nr 6.
3. Drucker P.F., (1992), *Innowacja i przedsiębiorczość. Praktyka i zasady*, PWE, Warszawa.
4. Gawęł A., (2005), Bariery rozwoju przedsiębiorczości w Polsce, *Przegląd Organizacji*, nr 4.
5. Kirzner I., (1979), *Perception, Opportunity and Profit. Studies in Theory of Entrepreneurship*, The University of Chicago Press, Chicago.
6. Kraśnicka T., (2002a), Przedsiębiorczość jako przedmiot badań ekonomistów, *Ekonomia*, nr 4.
7. Kraśnicka T., (2002b), Wokół pojęcia przedsiębiorczości, *Przegląd Organizacji*, nr 6.
8. Majerska J., (2003), Własna firma – szansą na sukces, in: T. Bernat, *Przedsiębiorczość kluczem do sukcesu młodych*, Instytut Wiedzy, Szczecin-Warszawa.

9. Mendel T., (2002), Uwarunkowania małej przedsiębiorczości i podejmowania działalności gospodarczej w Polsce w początkach XXI wieku, Zeszyty Naukowe Akademii Ekonomicznej w Poznaniu, nr 20.
10. Mikosik S., (1993), Teoria rozwoju gospodarczego J.A.Schumpetera, PWN, Warszawa.
11. Morris M.H., Lewis P.S., Sexton D.L., (1994), Reconceptualizing Entrepreneurship: An Input-Output Perspective, SAM Advanced Management Journal nr 1.
12. Schumpeter J., (1960), Teoria rozwoju gospodarczego, PWN, Warszawa.
13. Strojny J., (2004), Przejawy identyfikacji przedsiębiorczości na terenie gmin w woj. podkarpackim, Prace Naukowe Akademii Ekonomicznej we Wrocławiu, nr 1030.