

# LESSONS LEARNED ON KEY ENTREPRENEURIAL COMPETENCIES AND THE LABOUR MARKET REQUIREMENTS

Gabriela Kolářková

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## Abstract

It was the outset to claim general statistics for description of labor market requirements. More details were presented for industrial fields, which were considered as innovational in Košice region in the time-span of Innovation strategy (2008-2013). Within this context two cases were examined. First case was examined ex post - the success of entrepreneurs from various educational backgrounds. Second case was examined ex ante - looking for the difference in using new educational tool called “simulation of business activities” as well as distance form of education. The group of entrepreneurs should differ in their educational backgrounds. The discussion was aimed to uncover the endogenous powers of graduates in order to enter successfully labour market as sole-traders or in other legal form of entrepreneurial life. The key competencies in continuous education were considered merit of the two cases. Recommendations derived from analysis and discussion were addressed to professionals working within the scope of the labour economics, to team members of the project „Creation of multimedia classroom to support distance forms of education in key competencies with an emphasis on entrepreneurial skills“ as well as to lay persons such as participants of the aforementioned project.

**Key words:** employment, key competences, regional development

**JEL Code:** J01, J21, J24

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## Introduction

In the context of Innovation strategy for Košice region (2008-2013) two cases were examined. First case was examined ex post the success of entrepreneurs from various secondary educational backgrounds. Second case was examined ex ante looking for the difference in using new educational tool called “simulation of business activities” as well as distance form of education. The two groups of entrepreneurs should differ in their educational

backgrounds, mostly tertiary and of non-economic character. The discussion was aimed to uncover the endogenous powers of graduates in order to enter successfully labour market as sole-traders or in other legal form of entrepreneurial life. The key competencies in continuous education were considered merit of the two cases.

## **1 Objective and methods**

Key competences definition by professor Turek (Turek, 2007) was translated: “Key competencies have to serve for solving many diversified problems, in different contexts, for achieving several goals, they have to be applied not only in various jobs, but also in various branches of human activities: at school, at work, in social and personal lives. One of the key competences is informational literacy.” Understanding and classification of competencies was sooner determined for instance by Hrmo and Turek (Hrmo, Turek, 2003) as the following six: informational, learning, cognitive, interpersonal, communication skills and personal skills. Mentioned definitions were found in Slovak context, in global competency it is understood as behavior leading to excellent results.

Based on this theoretical framework the objective of the paper was to identify the base-line for entrepreneurial behavior and then shifting it towards excellence. Furthermore the base-line was examined in case one (year 2007 and 2011) and the level for excellence was estimated and consulted for recommendations in case two (year 2013).

The paper was taking advantage of comparison of two cases. First case is reconsidering former activities and evaluating long-term results within project “Start-up entrepreneur”, which was supported by Slovak Ministry of Education, European Social Fund (ESF) for the years 2005-2006, see Annual Reports of Faculty of Economics TUKE (2005, 2006). Second case is similar in aim, but different in suggested tools. The tools were adjusted to new development of technologies and trends in education. This was a focus of newly initiated project „Creation of multimedia classroom to support distance forms of education in key competencies with an emphasis on entrepreneurial skills“, project No. 035TUKE-4/2012. The recommendations follow the lessons learned in years 2005-2006, when first case had finished. Recommendations scheme also have taken into account new trends as Kaňková (2010) or Krajňáková (2010) stated for society`s development during 2006-2011. These trends include: the questionable value of certificates (proclaimed competences) versus competences (proofed), which all tend to have behavioral keystone.

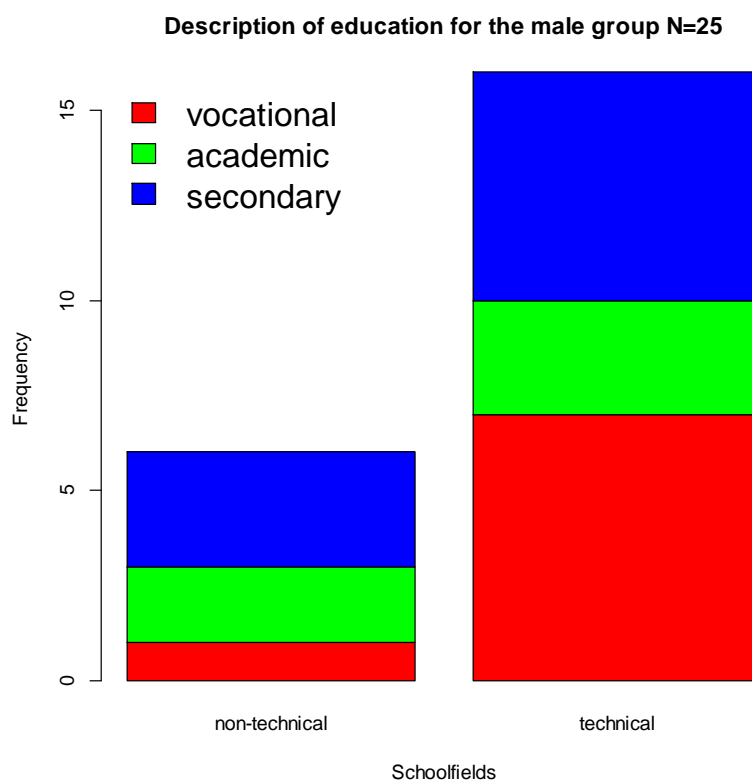
## **Outcomes**

The activities of the Start-up Entrepreneur project were aimed at decreasing unemployment during its two years of duration. The target groups of the project were graduates of the secondary schools and persons with insufficient qualification. The project included: general, vocational and special preparation for business, visiting sole traders in order to motivate, consultancy for “new” sole traders or Small and medium sized companies (SME`s) and final presentation of business plans. Measurable indicators were set: (1) as for results: number of educated participants, number of manuals created, number of entrepreneurial plans created by participants, (2) for impact: number of participants, who founded their companies, number of newly created jobs.

### Outcomes - Success of entrepreneurs from secondary educational backgrounds

The group was formed and its characteristics were summarized in Fig. 1 and 2. It was obvious that male prevailed in technical fields, contrary to females. Vocational schools were typical for males, General school was attended by 3 males and 8 females, which was not included in the bar charts for it could not be decided whether it was a technical or non-technical orientation. The group included also some participants from academic education.

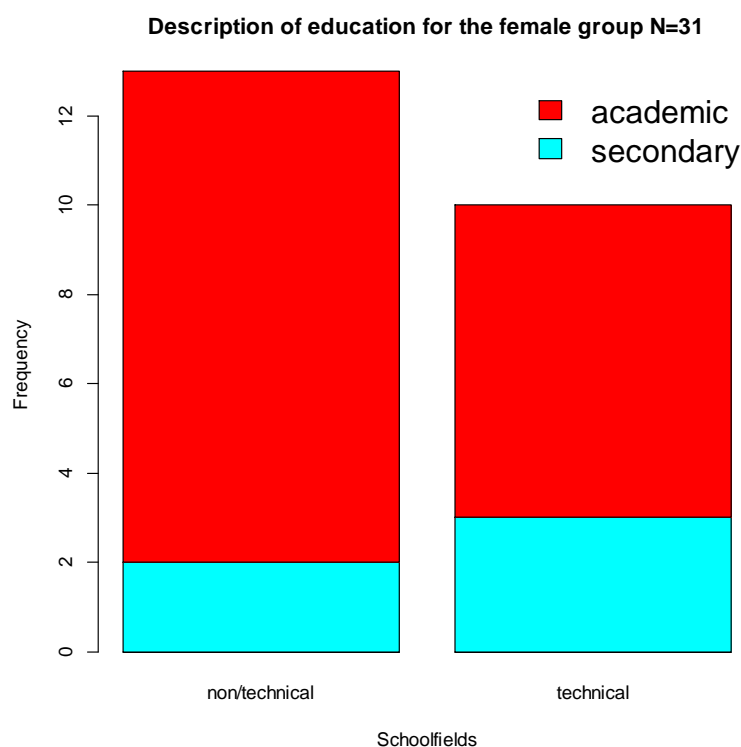
**Fig. 1: Description of male attendants in first case**



Source:own elaboration

Apart from indicators there was an interest to examine the long-term effect of the activity. Therefore in further examination success stories of case one were described with focus on deriving some lessons on key competencies. The presumption was that success story means excellence in entrepreneurial behavior in certain scale. The scale here was given by participants of the first case, who were selected from Košice region mostly from secondary educational backgrounds. The key competences, which were focus of the observation, were primarily: ICT, entrepreneurship, interpersonal competence and ability to learn.

**Fig. 2: Description of female attendants in first case**



Source:own elaboration

### **Success story one: IDA SANDOR – fashion designer**

There are plenty of fashion designers in Slovakia. The competition is tremendous, if we take into account also products imported from abroad (China, Italy and Turkey etc.). If we consider only Slovak original products, even then the situation is rather complicated. Most of the fashion designers would like to produce originals because that is a substance of their creativity. Contrary to price mechanism, which allows creative, original and high quality work only for higher prices. Thus there exist several options to decide upon, when getting on the right track in the fashion business, as we understand it in general. In reality we had been curios about such decisions and some of reasoning. Some reasoning was possible with news

about the fashion business, which stated "..., who wanted to learn something new and move on in creations..." must be active (translated, Slovak Fashion Council, 2012). This coincides with what was mentioned in the brief interview with Ida Sandor (personal conversation and emails, June 13, 2012):

Question (Q)1: When and how did you realized your skills were good enough to start the business? Answer (A)1: "It was when my work was appreciated more and more, my outcomes were appealing to people. The demand for my work was abundant and it was not possible to continue this as only a hobby."

Q2: What skills were the basic to convince you to take advantage of competitions (fashion competitions either in Trenčín city (Zlatá Fatima) or within fashion magazines etc.)? A2: "Well, in my case it were: good ideas, good quality of material, a superior one, originality of sewing.

Q3: What skills were the excellent ones and contributed to your success at competitions (fashion competitions either in Trenčín city (Zlatá Fatima) or within fashion magazines etc.)? A3: The same as in question two.

Q4: What sort of skills were necessary to stay in the business? A4: "Not to fall asleep, to keep moving on with new ideas, but also sustaining a high quality and originality."

Q5: What would you advice to a new start-up entrepreneur? A5: "Not to be afraid to start! Advices: To have a good grasp about your own situation as well as about market, then following step-by-step, going for the success, no matter of risks, difficulties or break-downs."

The tracing of the key competences in primary focus were ranked: entrepreneurship was as the first one, which should have been expected as the whole course was aimed on it. Second skill was distinguished as ability to learn, which was hidden behind words such as: original and high quality. Third were interpersonal competences, which were summed up in the advice to entrepreneurs as: being brave, having good merit at outer and inner factors, being diligent (in step-by step work) and again being brave. The one not mentioned was ICT skill, but it is self-evident from up-dated web-page (<http://www.idasandor.sk/>) of Ida Sandor, that ICT is included within key competences of her business. She also is taking advantage of Facebook communication. This statement means that not each and every competence is there for every entrepreneur as long as (s)he is aware of it and takes advantage of it by including it into "a competence of his/her business". Her entrepreneurial approach in behavioral meaning was observed as daring, which could be the base-line competence shifting towards the excellence.

**Success story two: “Woman, who did not want to do her job”**

Question (Q)1: When and how did you realized your skills were good enough to start the business? Answer (A)1: “It was my hobby. This was in competitions, when I realized it has got a business potential.”

Q2: What skills were the basic to convince you to take advantage of competitions? A2: “The most important was my fantasy. I was willing to show my creativity. I needed to let it out. But I did not want to do this as a job. It was a hobby, fun.”

Q3: What skills were the excellent ones and contributed to your success at competitions? A3: “The success at competitions depends on training and also your competitors.”

Q4: What sort of skills were necessary to stay in the business? A4: “The one important impulse was to get together with people, who also want to start a business. When I was surrounded by people talking about their ideas on starting business, it was quite supporting. Then I decided to have a try despite the fact that I did not want to turn my hobby to job. Then I was forced to accept compromise between dream and reality. I would say that my dream is now about 30% real. There is still something more I wish for.”

Q5: What would you advice to a new start-up entrepreneur? A5: “I have no advice to start-up entrepreneur, everyone must look for its own way.” (Anonymous respondent, personal conversations, June 2, 2012)

The tracing of the key competences in primary focus were ranked: ability to learn was seen as the first one as the respondent mentioned hobby and competitions and fantasy were the crux of the activity. The second was interpersonal competence, which was the kick-off for this lady. She was hesitating to accept her hobby as her business, but as a dream is coming true little by little it is clear to her that the support of other entrepreneurs was (during 2005-2006), and even after finished the meetings of Start-up entrepreneur project, still important. In this link the professional unions may play a significant role for the overall employment market. The words: “...everyone must look for its own way.” Were again rather of interpersonal competence and possibly about entrepreneurship. As for the ICT the same as in case one applies here (web-page and Facebook communication). Her entrepreneurial approach

in behavioral meaning was observed as very sensitive to individual customer with positive “side” effects. This again could be the base-line competence shifting towards the excellence.

## **2 Educational tool called "simulation of business activities"**

By the end of April, 2013 Faculty of Economics at Technical University of Košice will have up-dated classroom for multimedia work. This will give advantage to lecturers and students (esp. of life-long learning students) in their preparation for entrepreneurial activities. Simulation focus was plan to business activities in the scope of psychological and economy issues.

The multimedia classroom was planned to fulfill the many-fold functions:

- provide education within pilot course of KEGA project, which included simulation of entrepreneurial processes,
- teaching regular subjects (also in French and English) or state exams at Faculty of Economics,
- place for gathering for seminars, workshops for guests (professionals from cooperating institutions or children for Children University)

The equipment in the classroom was planned in order to support entrepreneurial skills and key competences via combination of distance learning and consultancy. The equipment included: personal computers, notebooks, videos, Virtual Room Videoconferencing System (VRVS), camera, video camera, microphones and other electronic devices and programmers typical for multimedia classrooms. This specially adapted (soundproofed) space will have provided a comfort to 20 participants plus lecturer at minimum. If necessary the room may be adjusted for gathering of 34 or even 40 participants. The classroom should be ready for further add-on functions as the development is in progress.

General idea for establishing multimedia classroom was to prepare a good quality shelter for life-long learning within the scope of combined education. This idea was broken down into eight processes, which could be labeled as: researches, workshops, web-page publicity, textbooks, on-line modules, consultancy and simulations. The last one was the aim to define and discuss here.

Primarily, the expectation of students after completing their secondary education can be in the scope of so-called “Cvičná firma” (translation: simulation of business activities). These activities are traditionally led by Slovenské centrum cvičných firiem (SCCF, translation: Slovak Centre for Simulation of Business Activities). Then the simulation for students, who considered some university education, can be in the scope of various

software's, for instance programme ADONIS<sup>1</sup>. Another possibility of practical understanding simulation of business activities could be identified as so-called Business Process Reengineering as presented by Bubeník (2002). Finally as for special methods one can consider Monte Carlo simulations and others. It is evident that especially start-ups do not need such complex tools as ADONIS right from beginning having in mind money and time constraint. On the other hand, it may be of advantage to some fields of business or to some businesspersons. On the top of it using this tool contributes to development of the skills.

Furthermore in trying to find the optimal tool a paper of Aldin and de Cesare (2009) was of advantage for it compares various business modeling techniques. The criteria for comparison were useful: flexibility, ease of use, understandability, simulation and scope. Quoted paper was comparing: flowcharts, Petri net, data flow diagram, role activity diagram, business process modeling notation, business use cases and business object integration diagram. Paper of the two authors and own search of existing tools may lead us to apply appropriate simulation for the future candidates in the distance learning program.

From the point of key competences was suggested and recommended following match of simulations:

- ICT competence – Petri net, data flow diagram,
- entrepreneurship - business process modeling notation (Adonis programme or Tibco business studio),
- interpersonal competence - use of role activity diagram or business use cases,
- and ability to learn – using Moodle system for distance learning.

Some expected results for the group of entrepreneurs with mostly tertiary and of non-economic character educational background were formulated as follows. The first case was a group, which could be considered as control group. While the second case group of students will become an experimental group. It is expected that the new tool called “simulation of business activities” and newly established multimedia classroom together with on-line modules and lecturers will have had better impact on results within the employment of students. Thus the planned courses focused on key competences will be anchored in uncovering the endogenous powers of graduates in order to enter successfully labor market as sole-traders or in other legal form of entrepreneurial life.

### **3 Recommendations for professionals and lay persons**

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<sup>1</sup> More examples can be found via Slovenská Asociácia Procesného riadenia (SAPRIA, [www.sapria.sk](http://www.sapria.sk)), translated: The Slovak Association of Business Process Management



Professionals or team member for KEGA project the distance learning efficiency can be higher, if an eye is kept on discussions and forums to provide stimulating atmosphere to communicate. Recommendation was to include such stimulations into mostly “passive” texts, for instance using “gap filling”. This method is traditional in learning foreign languages, but could be prompting the discussion forums in Moodle system. Afterwards finding and sharing various solutions applying creativity and fantasy, originality. On the top of it, when looking at the different fields of education (Fig. 1 and 2), these fields have different requirements as discussed at National system of professions (NSP, 2011-12). Then deriving the recommendation was trying to supply coaching for the future attendants of the course. The coaching was not part of any simulation tools mentioned, but from the first case study this was evaluated as important lesson learned.

Lay persons already noticed that in the two cases were similarities, which varied for the personality or the personal situation of the entrepreneur. But the generalization was valid for three of the main competences: interpersonal competence, ability to learn and entrepreneurship. The ICT was found to be a skill, which can be substituted in a way that not each and every competence is there for every entrepreneur as long as (s)he is aware of it and takes advantage of it by including it into “a competence of his/her business”.

## **Conclusion**

The looked for “baseline” of entrepreneurial behavior could be seen as key competences, discussed here, in real life situations supported by coaching esp. at the beginning. Coaching may help not to lose track on excellence as well as to shift it further. The will to succeed is substantial. The motivation, the will is not a competence; it is psychological substance, which can be supported by the group of people with similar desires or coach. If an potential entrepreneur devotes some time to individual sport, (s)he shows willingness for personal success, too. To be daring or sensitive derived from case one, those are the differences, which may vary as appropriate, but pursue excellence for each specific business field. As for the "simulation of business activities" it is up to the teachers and their abilities to take advantage of all offered options (e.g. ADONIS). These options must be reconsidered for the group of students possessing their fields of interest i.e. schooling and future scope of business. Matching property and attributes of each individual in the group with options in simulation will be a challenge and a new learned lesson itself.

At the end author appreciates all comments on lessons learned.

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## References

Aldin, Lade and Cesare, Sergio. *A comparative analysis of business process modeling techniques*. In: Proceedings of the UK Academy for Information Systems (UKAIS) 14<sup>th</sup> Annual Conference - UKAIS, April 2009. Oxford, UK. Brunel University Research Archive. June, 6<sup>th</sup> 2012. < <http://bura.brunel.ac.uk/handle/2438/4078>>.

Faculty of Economics TUKE. Annual Report of Faculty of Economics, Technical University of Košice. 2005, 2006.

Bubeník, Peter. Podporné nástroje pre modelovanie podnikových procesov. In: *Produktivita a inovácie*. Slovenské centrum produktivity. Vol. 3, 2/2002. ISSN 1335-5961.

Hrmo, Roman and Turek, Ivan. Návrh systému kľúčových kompetencií. In: *Materials Science and technology*. Slovenská Technická Univerzita v Bratislave. Materiálovotechnická fakulta. Trnava. 2/2003. ISSN 1335-9053.

Kaňková, Eva. Diplom a jeho hodnota. In: *Media4u Magazine*, 2010, Vol. 7, 4/2010. ISSN 1214-9187.

Krajňáková, Emília. „Kompetencia“ a „kompetentnosť“ v súčasnej pedagogickej praxi : neexistuje jednoznačná definícia. In: *Manažment školy v praxi*. 5/2010. ISSN 1336-9849.

NSP. 2011-12. Národná sústava povolání. Newsletters 2011-12, 1. April 2012. < <http://www.sustavapovolani.sk/> >.

Schoonover Associates: Competency Q&A. 2001. 4. May 2012. <[http://www.schoonover.com/resource Center/Q-A.htm](http://www.schoonover.com/resource%20Center/Q-A.htm)>.

Slovak Fashion Council. 2012. Are you ready – Ďakujeme. Published 2012. 9. June 2012. < <http://slovakfashioncouncil.wordpress.com/2012/04/25/are-you-ready-dakujeme/>>.

Turek, Ivan. "Informačná gramotnosť". In: *Technológia vzdelávania – vedecko – pedagogický časopis*. Vol. 10. 4/2010. ISSN 1335-003X.

**Contact**

Ing. Gabriela Kol'vecková, Ph.D.

Technical University of Košice, Faculty of Economics

Němcovej 32, 040 01 Košice, Slovak Republic

Email: Gabriela.Kolvekova@tuke.sk