

THE NEED TO USE INNOVATIVE TOOLS OF LEARNING IN ORDER TO GAIN RAPID AND UPDATED KNOWLEDGE AND SKILLS REQUIRED ON THE LABOUR MARKET

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Abstract

The labour market has become global and very competitive in terms of requirements for jobs' applicants. Although there are many cases which seeks a compatibility of national education systems and the use of converged educational systems, capable of providing a similar set of knowledge and skills for future employees which to provide equal opportunities for employment, only in certain situations this it was obtained. The idea of an unpredictable dynamic on requirements and knowledge required to the candidates on the labour market confirms the necessity of integration in school, at various levels of training, of innovative learning tools that facilitate the transfer of knowledge and to acquire new skills which fully correspond to the needs expressed by employers. Such an approach is intended that, on the one hand, to generate motivation among applicants and, on the other hand to overcome the lack of practical experience of the candidates. These innovative tools palette is quite large: Enterprises' piloting, management simulations, simulated enterprise, business incubators and business games.

Keywords: innovative tools, knowledge, skills, employment, educational systems

Rezumat

Piața forței de muncă a devenit globală și foarte competitivă sub aspectul cerințelor aplicate solicitanților de locuri de muncă. Deși există nenumărate cazuri prin care se încearcă o compatibilizare a sistemelor educaționale naționale și utilizarea unor sisteme educaționale convergente, capabile să furnizeze un același set de cunoștințe și abilități pentru viitorii angajați prin care să se ofere oportunități egale de angajare, doar în anumite situații acest lucru s-a obținut. În ideea unei dinamici imprevizibile privind cerințe și cunoștințe solicitate candidaților de pe piața forței de muncă se confirmă necesitatea integrării în școală, la diverse nivele de instruire, a unor instrumente inovative de învățare care să faciliteze transferul de cunoștințe și să permită dobândirea de noi abilități care să corespundă pe deplin nevoilor exprimate de angajatori. O astfel de abordare are rolul ca, pe de o parte, să genereze motivare în rândul solicitanților, iar pe de altă parte să suplinească lipsa unei experiențe practice a candidaților. Paleta acestor instrumente inovative este destul de largă: pilotarea întreprinderilor, simulări manageriale, întreprinderi simulate, incubatoare de afaceri, jocuri de afaceri.

Cuvinte-cheie: instrumente inovative, cunoștințe, abilități, angajare, sisteme educaționale

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1. Introduction

Human resources are a fundamental component of the economic potential of any society. Work resources are the main source of economic growth and social development.

Nationally, any program of social and economic development must take into account the scientific knowledge of human resources in order to use them more rational. Currently is manifesting information society model. This model is running based on: science development, reform of training programs to achieve changes in professional structure and implicit in occupations code, extension of computerization' degree of the national economy, demand segmentation etc.

Economic development relies on human resources development, subject to raising living standards, life expectancy and social education level. In connection with the efficient use of labor rule the government proposes different economic policies. The State should support increasing the employability of the workforce. Therefore, the State has the responsibility for public policies in order to stimulate the creation of new jobs.

Starting from the objectives formulated by the European Council in March 2005, namely: "Europe must renew the basis of its competitiveness economic to increase its growth potential and productivity and strengthen social cohesion, putting greater emphasis on knowledge, innovation and optimization of human capital ", each country is obliged to resort to concrete measures by which to generate knowledge and skills updated to every person who is trying to find a job.

Within these measures could be considered many options such as: upgrading initial and continuous education, capacity development of human resources in education, increasing participation in continuing vocational training, promoting active employment measures for persons looking for a job, increased integration labor market of the vulnerable groups, promotion of innovative methods etc.

In the particular case of Romania many of these solutions must be implemented in order to eliminate some existing weaknesses and that are manifesting for some time:

- low levels of educational offers' adjustment to workforce demand and training network providers of professional training underdeveloped;
- relatively high dropout and early school leaving;
- insufficient development of the National Qualifications Framework and work skills mismatch;
- lack of internal systems of quality assurance and management in education;
- low levels of adult participation in continuous professional training and lack of continuous training offers tailored to the needs of adults in the initial education system;
- insufficient involvement of social partners in specific human resource development programs;
- limited entrepreneurial culture and low mobility in the labour market;
- high unemployment and especially of the long-term youth unemployment;
- low integration in the labour market and low participation in education of persons belonging to vulnerable groups;
- an objective correlation between labour markets requirements and the labour offer.

2. Significant demographic aspects for Romania

Changing population status in time generates pressure on other components of a company: economic, educational etc., requiring the creation and implementation of social programs, demographic etc. In addition, the number and especially the quality of labour resources determine the economic and social activities' size. The concept of human resources at the level of spaces actually makes the connection between the number and demographic structure of individuals who make up a community and their level of competence (knowledge, skills, abilities etc.).

Human potential shows a heterogeneous distribution in Romania. It shows a link between levels of development and size of labour resources, without there being still an identity of their territorial distribution as shown in Table 1.

Table 1. Active population by development region

		thousands persons				
Year	2009	2010	2011	2012	2013	2014
Development region						
North-West	1240,6	1226,7	1209,7	1241,9	1239,2	1232,4
Center	1107,2	1089,3	1071,8	1109,4	1110,6	1086,7
North-East	1322,2	1309,5	1266	1302,9	1289	1263,1
South-East	1104,1	1082,8	1050,7	1080,5	1076	1059,6
Bucuresti-Ilfov	1250,4	1244,1	1248,9	1264,1	1282,2	1278,6
South Muntenia	1280,3	1265,9	1234,7	1270,4	1263,6	1236,3
South-West Oltenia	933,7	917,4	898,2	923,7	911,1	886,7
West	881,6	862,6	846,5	870,5	871,2	866,6

Source: Statistical Yearbook of Romania, <http://statistici.insse.ro>, accessed 14.01.2016

Looking at the figures it can be said that the whole country and in most geographic areas, labour resources are found mostly in urban areas.

On the other hand analyzing the employment levels of workforce development regions can be seen a reduction (table 2). This reduction did not affect the major urban centres, especially Bucharest, Cluj and Constanța.

Table 2. Occupied population by development region

		thousands persons				
Year	2009	2010	2011	2012	2013	2014
Development region						
North-West	1156,5	1153,7	1156,7	1187,2	1188	1186,4
Center	1001,8	1001,8	1006,8	1040,7	1040,8	1026,4
North-East	1208,2	1207,2	1192,8	1224,7	1203,7	1180,2
South-East	1011,1	994,9	986,2	1011	1003,9	986,8

Bucuresti-Ilfov	1220,3	1214,8	1224,5	1239	1256,9	1254,3
South Muntenia	1159,9	1154,8	1154,5	1182,6	1168,8	1146,5
South-West Oltenia	836,1	832,8	828,9	848	832	813,8
West	816,8	811,3	815,1	836,4	836,5	837,3

Source: Statistical Yearbook of Romania, <http://statistici.insse.ro>, accessed 14.01.2016

On the European labour market, Romania has some advantages in terms of quality-cost relationship. In Romania there is a significant potential workforce younger than in the EU countries, while skill level is compatible with most of these countries in many fields.

For Romania, in the category of regional development policies that help combating unemployment growth are taken into account the following actions:

- modernization of infrastructure;
- development of rural areas;
- stimulate the development of small and medium enterprises, which have a vital role in the development of human resources at the local level.

This last line of action can be supported by developing entrepreneurial skills to the people that are unemployed, especially youth.

Regionally, employment rates above the national average are registered in less developed regions: North-East, South-West and South Muntenia caused by high rates of employment in agriculture (Table 3). In the case of Bucharest-Ilfov region the values are above the national average, due to much higher labour supply and more diversified. In order to give people more opportunities to get a job is compulsory to find practical solutions to complete the knowledge gained in the formal education and use creative possibilities to improve their qualifications, abilities and/or competences.

Table 3. Employment rate by development region compared with national level
%

Development region \ Year	2009	2010	2011	2012	2013	2014
Romania	52,1	51,1	50,2	50,9	50,7	51,1
North-West	51,1	51,2	51,2	52,9	53	53,6
Center	47,2	44,9	43,7	44,3	44,6	44,8
North-East	57,7	55,0	56,3	57	57,2	57,6
South-East	48,8	47,8	46,4	46,9	45,8	44,8
Bucuresti-Ilfov	53,7	53,8	54,2	53,6	52,6	53,8
South Muntenia	52	51,2	47,1	48,5	49,8	50,5
South-West Oltenia	54,6	53,1	53,5	53,8	51,4	52,8
West	49,9	48,7	48,6	48,6	48,7	49,1

Source: Statistical Yearbook of Romania, <http://statistici.insse.ro>, accessed 14.01.2016

3. Educational systems

Although apparently is attempted to create a compatibility and an uniformity of the structure of education systems across Europe (e.g. the Bologna system or imposing an International Standard Classification of Education called ISCED), each country is trying to adapt the educational offer to the evolution of markets workforce with the purpose of acquiring additional and updated knowledge and skills so that people trained to be able to find a job easier and faster.

An extensive global survey conducted by Organisation for Economic Co-operation and Development (OECD) show that Romania has the worst education system in the European Union. According to the study, Romanian education suffers from lack of radical reforms, especially funding and investment in the system. Asian countries that began much later than us, but they were better organized, nowadays they be found on the first places in the rankings on education. Thus, this study shows that in 1960 Singapore recorded the highest illiteracy and primary education became mandatory only in 2000. Currently Singapore has reached one of the highest literacy rates in Asia: 95%. The explanation for this result is given by the value of massive investment in education, infrastructure, and a careful selection of teachers and educators.

In this study, the most advanced country in terms of education is Finland. Thus, even teachers who teach at the elementary school must have a master's degree. Besides competent teachers, Finns have developed educational programs competitive and are not very strict with the national curriculum - this can be changed at municipality or school, according to the needs that exist in the community.

On the other hand, until 2020, Finland will give up dividing the school curriculum in classical subjects, such as history or mathematics, and will move to the interdisciplinary theme or of complex phenomena.

Another example to follow is Japan, which ranks in the top two. Equally concerned are teachers and Japan. Japanese teachers undertook a duty, which is to create *model citizens*. The entire Japanese society and culture is known for its values, honor, responsibility, honesty. They learn from the earliest years of life, and at the school all of these are strengthened. Japanese students and pupils make their own cleaning in schools, dining and actively participate in all activities, from educational to administrative. Japan wants in turn to implement a major reform in education, one which they called a "change manly". This involves the study in schools of main disciplines, really important for the further development of students': Business mathematics (basic operations and use of computers in business), reading (binding a book read weekly), civics (rule of law, citizenship, ethics, respect for the rules of coexistence, tolerance, altruism and respect for ecology), computer science (office programs, internet, social networks and online business) and, not least, four languages, for each of them alphabet, culture and religion.

Also, the British educational system focuses on developing children's creativity, the formation and expression of their views - as opposed Romanian schools that still promotes teaching and memorizing lessons dictation. At the British and to the other developed countries in this regard, the theory never comes to be stored, but is always put into practice. Students learn from examples and can see immediately during the lesson, how they use information received from school later.

South Korea appears in the international charts with a good education system. This country focus on exams and curriculum is structured in such a way as to meet the strict requirements of national examinations. Interesting is that exams are considered very important events in the society at national level. There are special days set clear, when the exams are given.

Equally important is education in China, where education is monitored and regularly evaluated. The topics are important and students are treated carefully, family - all members participate in education to children and devotes much of his time to this end. Teachers seek to develop the capabilities of students, rather than force them to accumulate a lot of information theory. They strive pretty much to engage and stimulate students to so that they do not ever get bored in class. In this way, education in China began to appear in the international charts and analyzes, such as those made by Pearson - although there are some persons who point out that the reform was done in Shanghai, not across the country. Anyway, the fact is that invested heavily in infrastructure, many schools have been rehabilitated, renovated and equipped to the highest standards. Teachers in China have to be very well prepared - those who teach primary school must necessarily be university graduates and from middle up, all teachers must have an additional professional qualification. Many of them have master degrees and every teacher should do about 240 hours of training over a period of five years.

In the Swedish school pupils are given only scores since sixth grade and until the college time, virtually there are no exams. Homework is lacking in the sense that children should study more than 30 minutes per week per discipline. Schools are funded from the local budget and are free. Teachers have great freedom in the classroom, "juggling" with the program; and students can choose the school where they study. However, the Swedish system is not considered very powerful, because students are too relaxed and not get great results in international tests.

4. Innovative tools of learning

To create a direct link with the labour market and employers' requirements, educational systems try to be adapted under way, in order to promote innovative learning tools. Lately in many countries, including Romania, have widely promoted the concept of simulated enterprise (especially in universities) and the concept of practice firms – so called "*firme de exercitiu*" (especially in secondary education). Also there are many other tools that could help to get knowledge and new skills: the concept of driven' enterprise, business game, management simulation. By using these tools, people are trained in a specific way that offers additional and updated knowledge and skills. In many cases existing educational systems are outdated and there is a need to find means of procedures' replacement or additional training. In many cases is necessary for a practical approach in creating and offering specialized training in order to adapt the learning process to the labour markets requirements and to the employers' demands.

4.1. Simulated enterprise

Simulated enterprise (1) is an interactive method of learning for entrepreneurship, a modern concept of integration and application of interdisciplinary knowledge, an approach to teaching and learning that ensures conditions for testing and deepens

practical skills acquired by pupils / students in vocational training.

A more pragmatic definition of simulated company is "simulated enterprise can be defined as a practical training tool that uses the information process procedures and identical means used in real companies, except money and products which are simulated."

The operational purpose of these simulated enterprises (Ciuca, Pîrciog et.al 2013, pp.103-117) can be described on two levels:

- Faster integration of employees into a real enterprise;
- Fluency instruction-production relationship.

The fundamental objective of the company is to develop entrepreneurship simulated by some concrete actions:

- familiarize students with the specific activities of a real company;
- simulation of economic processes and operations specific to real business environment;
- development of entrepreneurial skills and attitudes necessary for a dynamic entrepreneur: creativity, critical thinking, problem solving, decision making, responsibility' assuming, teamwork, initiative, perseverance, self-organization and self-evaluation of individual resources, flexibility;
- improvement of business language.

From this fundamental objective are generated some specific objectives that are addressed through the creation and functioning simulated enterprises (Ciuca, Pîrciog et.al 2013, pp.103-117):

- facilitate the transition of graduates from school education to working life;
- entrepreneurship of pupils / students;
- entrepreneurship adults through continuous training vocational programs.

Simulated enterprise intends to create tangible results:

- increasing the rate of graduates entering on the labour market;
- reduction of the intake at work;
- better adaptability to change jobs;
- initiative and risk-taking.

Also, by specific infrastructure of simulated enterprises can be generated other benefits for society and business:

- ensuring proper means for practical training of students in a simulated enterprise;
- consultancy for the development of small and medium enterprises;
- formation of a group of specialists able to manage a real business (training of trainers);

4.2. Driven' enterprise

A productive enterprise shows a particular system that has a number of components, which represents sub-systems of the enterprise system. To function properly, a company with all the subsystems contained therein, must ensure a proper piloting of these subsystems.

The driven' company (Bărbulescu, 2000, pp.21-29) means a set of activities performed by the company' management to achieve the mission of enterprise by using strategies and objectives clearly defined, to ensure the provision of activities of different beneficiaries in terms of quantity, quality, at certain terms stipulated in the contract,

activities that take place in competition with the activities of other companies.

Driven' Enterprise (Bărbulescu, 2000, pp.21-29) is performed on a pilot model adopted by each company based on the specificities which they perform now. Based on this pilot model is adopt a driven system of enterprise activity.

Driven system represents a concrete and evolving set of procedures used by the company to achieve the required performance conditions, procedures aimed to carry out actions that form a unit or a whole, which are subject to achieve the same purpose and obtaining the same results.

4.3. Enterprise' games

Enterprise' games are undertaking simulation models that include more participants engaged in a process of decision-making simulating a situation of genuine competition. A number of teams are organized as an oligopoly, each team trying to maximize their own profit through a sequence of decisions in areas such as: production, inventory, investments, marketing, maintenance, research or funding.

The concept of the business game is reflected as the driving game (game management) or business game, customizing them by name through the scope of applicability.

Enterprise' game (Dobre, Mustata et.al, 1996) is a dynamic simulation exercise of some decisions, took in a competitive situation and has the following objectives:

- to demonstrate what it means to create a situation in which game participants observe what is happening, thus gaining a deeper understanding than if, for instance, someone simply explained them;

- to distribute, i.e. to promote an exchange of knowledge within the group of participants in the game, so things known by one of them may become common to all;

- to examine, which means puts the participants to the game in a position to observe the decision-making behaviour of other partners;

- stimulate thinking, which means to use the game as an intellectual exercise, in the hope of growth ability of participants to play in solving specific problems;

- evaluate some of the skills and abilities of participants in the game;

- build a team, which mean to increase the cooperation effects of a group;

Enterprise' games (Dobre, Mustata et.al, 1996) offers a number of advantages, such as:

- help users to study a wide variety of decision-making situations;

- allow the possibility for participants to get experience in the simulated field;

- represents a tool in the hands of managers, which provides a more solid basis on which they could take decisions;

- it could be tested hypotheses about the nature of the decisions to be taken, is evaluated the effectiveness of decisions and is identified their likely effects;

- the games played on the computers give the possibility to a multiple replay of them by a multi scenario simulation;

On the other hand we have to be aware about the limits of enterprise' games:

- developing a game takes time and a heavy workload;

- designers do not have sufficient quantitative methods that allow them to quantify the influence of all the factors that concur in a given situation;

- complex enterprise' games performed on the computer require sometimes powerful computing configurations, up to computer networks with distributed resources;
- enterprise' games results are not 100% sure; is possible to obtain some wrong outcome; the only way to validate them is to compare them with the results generated by real events.

5. Conclusions

The need to use innovative tools of learning is proved by the fact of poor and difficult integrating of young people into the labour market, and in this respect, authorities' mission being hampered by poor training and lack of specific graduate skills.

Related to the formal content of existing educational systems all over the world the findings of this paper want to show the quality and importance of integrating these methods in a consistent and compulsory framework of the educational systems.

To achieve this, any country, including Romania, have to analyze and adapt the curricula by including disciplines that could promote these tools that are focused on practical issues and on improving participants' experience.

Note

(1) www.intreprinderesimulata.ro

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