

SKILL MISMATCHES IMPORTANCE FOR DESIGNING HUMAN RESOURCES POLICIES

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Abstract: Skills mismatches represent an intense debated subject in the labour market literature and a proper approach in implementing the policies designed to reduce it can decisively contribute to productivity increase.

In this paper, we try to analyse the relevant external environment factors for the human resource strategy from the skills mismatches perspective. We carry out a study on the Romanian labour market aiming to identify skills mismatches roots in the differences recorded between vacancies, graduate and unemployed people.

1. INTRODUCTION

Nowadays, more and more attention is paid to the correlations between skills and organisational performance. Skills problem is very important for a company human resources policy because by a proper job analysis a best fitted employee profile can be identified. This profile, besides academic training requirements, asks for different personal qualities.

This issue is more and more discussed today because when a company decides to employ a person, it gives a great importance his/her soft and generic skills (e.g. team working, problem solving, and communication).

In our opinion skills partially consist in life experience (gained including in previous jobs) and native aptitudes, preponderantly trained in an informal manner.

It has to be paid attention to the skills mismatches due to the fact that they represent one of the main causes for job dissatisfaction. Actually, from our point of view, to avoid this kind of situations, the people aptitudes have to be carefully tested in order to help them improving their weaknesses.

Actually, generally speaking, labour market is directly connected to the education and extra scholar activities. A future job candidate has to own proper qualifications (in the most cases they are asked by the legal rules) and a certain number of different aptitudes that can be easily used in solving future tasks, some of them not even accurately known at the hiring moment.

Choosing the right employee is a very important decision because it implies lots of effects on medium and long term. During this process, testing the candidate skills can help designing a training strategy in correlation with already anticipated labour market and company demands.

In this paper, we try to analyse the relevant external environment factors for the human resource strategy from the skills mismatches perspective. Thus, we carry out a study on the Romanian labour market aiming to identify skills mismatches roots in the differences recorded between vacancies, graduate and unemployed people.

Our paper can be useful both for the companies involved in the training market and for the firms that organise improving competences programs for their own employees. Of course, the results could bring some answers to the questions from the educational system and for the authorities that acts on the labour market.

2. THEORETICAL APPROACHES OF THE SKILL MISMATCHES PROBLEM

The skills theme has been approached in a holistic manner by Peter Elias and Abigail McKnight in the paper *Skill measurement in official statistics: recent developments in the UK and the rest of Europe*, being emphasized the direct link between the nature and structure of skills and economic and technological evolution.

The technological progress and the shifts in the consumer's tastes are mentioned as causes for the size and structure of the occupational structure, in fact, in our opinion they represent an input for the new skills required in order to be competitive on the labour market.

Actually, skill is perceived as a person ability to fulfil its tasks in an appropriate manner, and there are made a skill ranking according to the education and work experience criteria. The authors consider that better earnings also represent an indicator for a higher level of skill.

Another interesting study *Skill Mismatch and Unemployment in OECD Countries*, written by Marco Manacorda and Barbara Petrongolo, analyses this specific problem of the labour market and emphasises the huge impact that the oil market shocks from 1970 had on the employment in USA and Europe (employment rate needed over 20 years to reach a comparable level with the pre-shock period).

It has been recorded a significant difference between USA and the most important European labour markets: while in USA the unemployment rate reached a comparable level with the pre-shock period within 20 years, in Europe it still remained two up to three times higher. But, the USA performance had an important cost: wage inequality. It was an effect of a more flexible labour market, which has allowed higher differences in income distribution and, in the same time, offered to more people the possibility to find a job. On the other hand, regulated labour markets were characterised by lower earnings dispersion and assumed a higher unemployment.

In their paper, the authors presented the relation existing between unemployment and wage differences, and paid attention to the causes of this phenomenon.

Other studies are focused on the link existing between the educational mismatches and skills mismatches. From this point of view, we would like to bring into attention the paper of Jim Allen and Rolf van der Velden entitled *Educational mismatches versus skill mismatches: effects on wages, job satisfaction, and on the job search (2001)*. One of the main ideas of the article is that not only a higher education raises the productivity, but also the match between the job characteristics and the educational level.

Dealing with this kind of problem, the authors make a critical overview of some important theories in this field as: the assignment theory (skill mismatches are tightly related to the educational mismatches recording a direct effect on wages and productivity), human capital theory (focused on explaining how the labour force, at the same level of education, is structured into the market, preponderantly according to the skills – but this theory didn't offer a satisfying answer to the underutilisation claimed by many workers) and screening theory (it takes from the human capital theory the idea of sorting the labour force in the market, but consider that the people are paid and ranked according to some factors connected to the productivity and not to the productivity itself. Among these factors it is included education, experience, gender etc.).

The main conclusion of the paper is related to the problem of job satisfaction and job search, proving that in the most cases the adjustments into the market are caused by the relations between worker aptitudes and jobs demands.

It worth to notice that the researches on this subject have been continued by the same Jim Allen and Egbert de Weert in their paper entitled *What do educational*

mismatches tell us about Skill mismatches? A cross country analysis (2007). They started from the idea of the imperfections recorded between the people's level of study and the necessary study level required for a certain job. They considered over-education, over-utilisation and underutilisation as main consequences of the situation mentioned above, understood as a mismatch between the required and available skills.

The paper is tightly linked to the human resources theories, because it treats education as an input for a future, higher productivity. The article has treated these problems in five countries (Germany, Netherlands, Spain, Japan and United Kingdom) and one of its conclusions is that in the first two the matching is very good. Spain instead, a Latin country, is characterised both by over-education and under-education. This aspect can indicate to us the possibility to meet a comparable situation for our country.

3. SKILLS AND LABOUR MARKETS' ACHIEVEMENTS IN THE EUROPEAN UNION

In February 2010, European Commission launched the report *New Skills for New Jobs: Action now* which emphasized the importance of possessing the adequate skills for ensuring economic growth and personal achievements: "Our prosperity, today and tomorrow, depends on how many people are in work and how satisfied and productive they are when they are in work. Skills, the right skills, are the key to moving us out of recession into recovery, and the best guarantee of our ability to sustain our growth and secure lasting economic success. Skills also underpin personal development and well being".

In this respect, even since 2002 the social partners at European level have shown the manner in which key competencies can influence a company's success: "The ability of organisations to identify key competencies, to mobilise them quickly, to recognise them and to encourage their development for all employees, represents the basis for new competitive strategies. This allows enterprises to keep in line with customer expectations and employees to improve their employability and career prospects" (ETUC, UNICE, CEEP, Framework of actions for the lifelong development of competencies and qualifications, February 2002).

In other words, skills mismatch can become an obstacle to increase the national economy competitiveness, to build competitive strategies for firms and to secure personal wealth. Thus, in the report *The skill matching challenge. Analysing skill mismatch & policy implications* CEDEFOP recognizes "that skill mismatch has come to the fore front of Europe's policy debate" and it "refers not only to skill shortages or gaps, but also to qualifications, knowledge and skills exceeding job requirements". Skills mismatch lead to less satisfied workers, lower productivity for companies and loss of output for the entire economy.

At the same time skilled workers' deficit leaves its mark on the effective functioning of the labour market. As it is expected unemployment mainly affects workers with a lower level of education. In many European countries unemployment rates of unskilled people (with pre-primary, primary and lower secondary education) were very high compared to the skilled ones (people completed at least upper secondary education): Slovakia, Czech Republic, Lithuania, Hungary, Estonia and Latvia with a difference that exceeds 10 percentage points. At the opposite side in countries such as Portugal, Romania, Cyprus the differences between skilled and unskilled unemployed are very small, while in Greece skilled people are the most affected by labour market transformation in the crisis context (Figure 1).

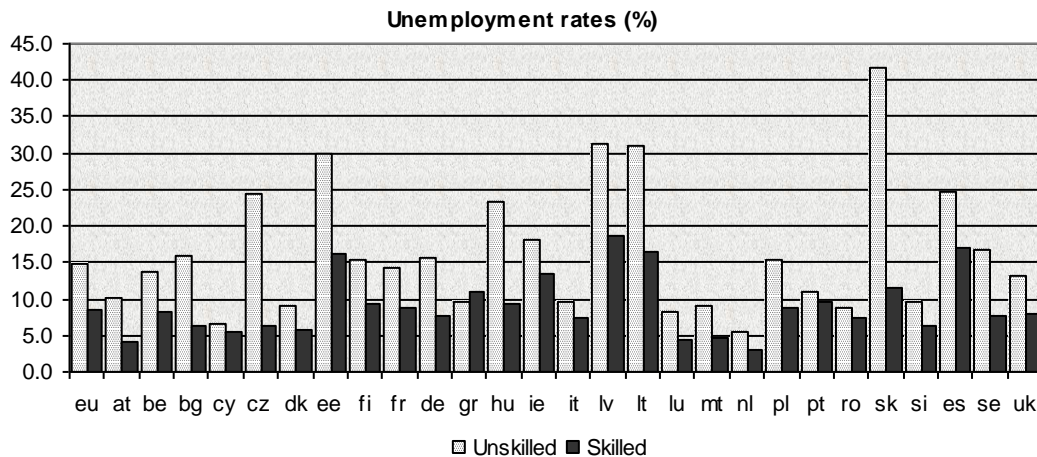


Figure 1. Unemployment rates by levels of education in 2009
 Source: EUROSTAT, Population and social conditions

Taking into account the importance of skilled people for the economic growth, it is worth noticing that the countries with the highest development potential from this point of view are: Czech Republic, Slovakia, Lithuania, Poland, and Estonia while in Portugal and Malta the proportion of skilled active or employed population is very low, i.e. around 30% compared to the leading group that has a share of over 80% (Figure 2 and 3).

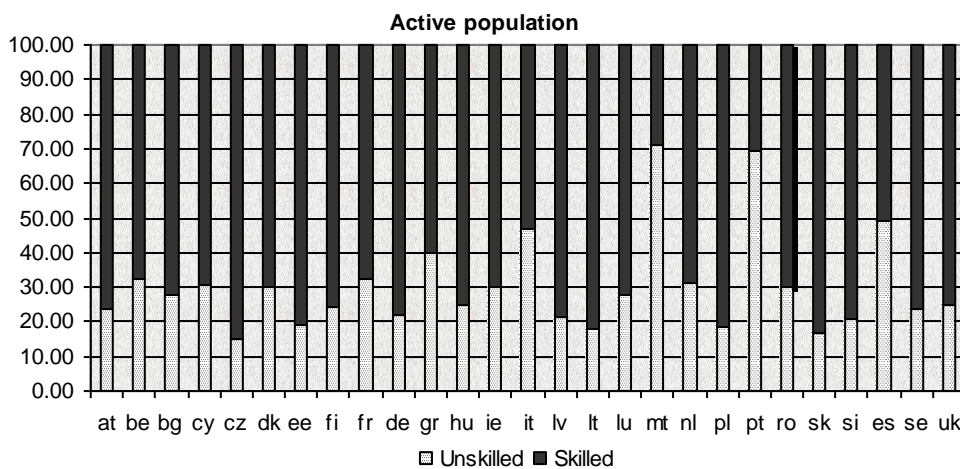


Figure 2. Active population by levels of education in 2009 (%)
 Source: EUROSTAT, Population and social conditions

As for Romania, from the point of view of skilled active or employed population our country is situated near the European Union average although its economic performance is currently quite low (GDP per capita below 50% of European Union average just like the labour productivity).

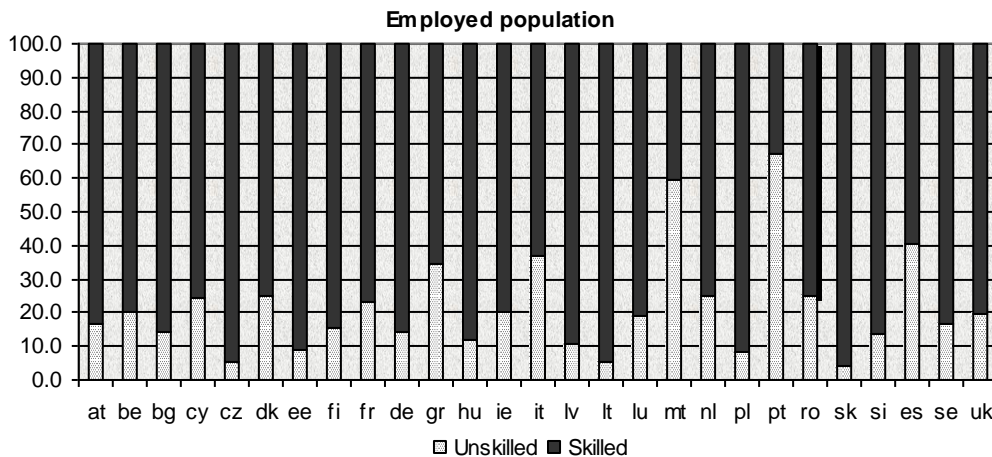


Figure 3. Employed population by levels of education in 2009 (%)
 Source: EUROSTAT, Population and social conditions

Even when we look at the differences between earnings in the other European countries and Romania we can see that they are reflecting the differences in productivity levels. That means whether qualified population in Romania is not as productive as in the other European Union countries or there are important differences between the qualifications held and those required by the jobs occupied (Figure 4).

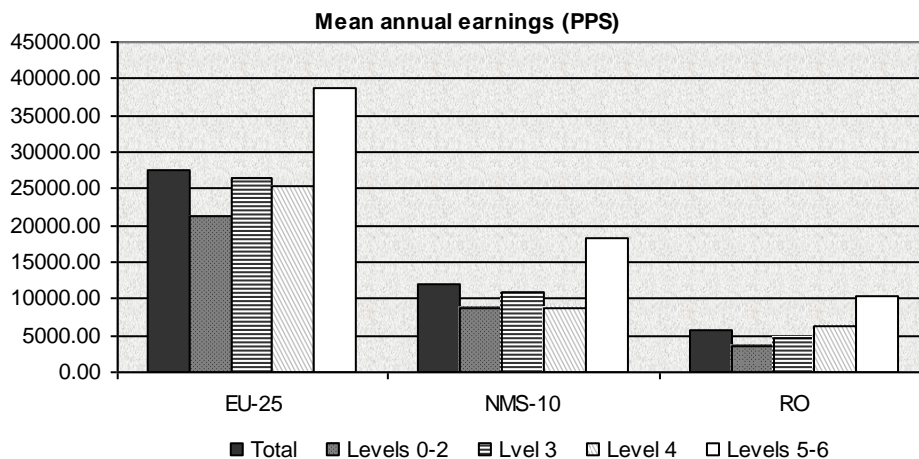


Figure 4. Mean annual earnings by educational attainment, in 2002
 Source: EUROSTAT, LFS ad-hoc modules

4. SKILLS AND UNEMPLOYMENT IN ROMANIA

The analysis of the supply and demand imbalances in the labour market concerns in particular the differences occurring between the characteristics of the unemployed and job vacancies in terms of education, occupations, sectors and regions.

The main differences in terms of education and occupation are determined by the changes in the production structure of an economy. The decline in some sectors and the advance of others due to structural shocks make necessary to adjust the labour supply to the new structure of demand. This process of adapting the new demanded skills to the requirements of jobs takes time, and mismatches can be persistent.

Regarding Romania, an indicator of the imbalance existent between the qualifications offered by schools and the requirements of job vacancies is the large number of young unemployed (Figure 5).

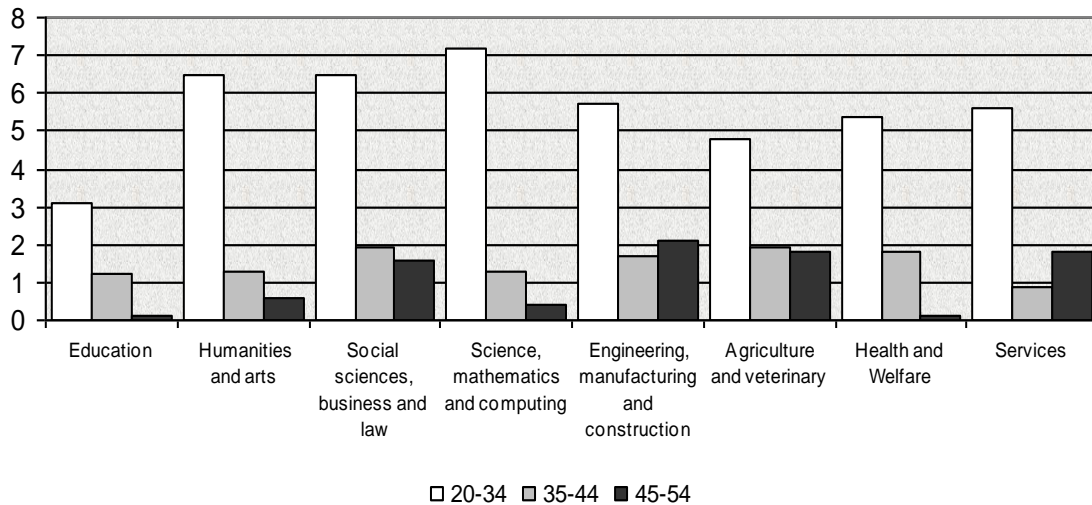


Figure 5. Unemployment rate by field of study (ISCED 5-6) and age (2003-2007) - %
 Source: EUROSTAT, Education and training

In addition, among young people, unlike other age groups, unemployment rate is highest for those who have completed higher education in science, mathematics and computing, humanities and social sciences (Figure 5).

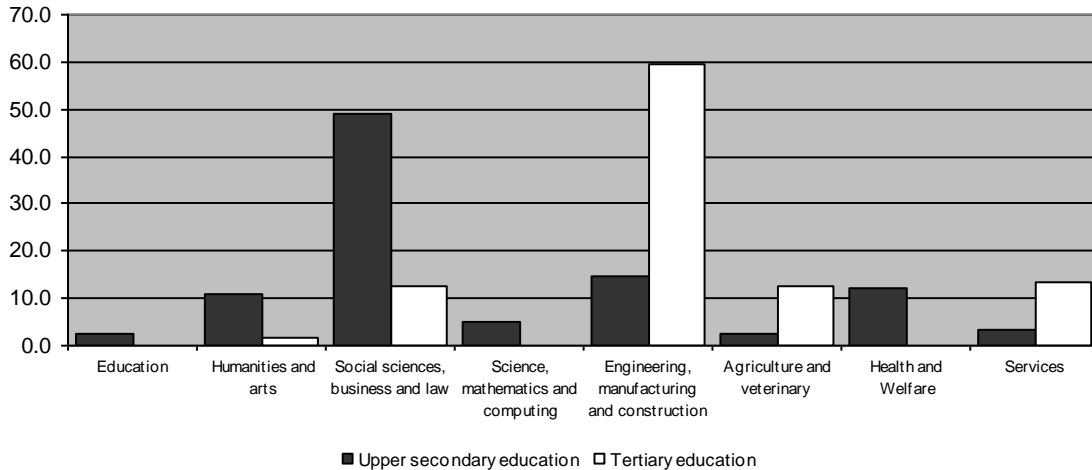


Figure 6. Graduates in ISCED 3 to 6 by field of education in 2007 - %
 Source: EUROSTAT, Education and training

In 2007, most of the post-graduate students came from universities with the profile of social sciences, business and law, while in case of pre-vocational and vocational graduates were specialized in engineering, manufacturing and construction (Figure 6).

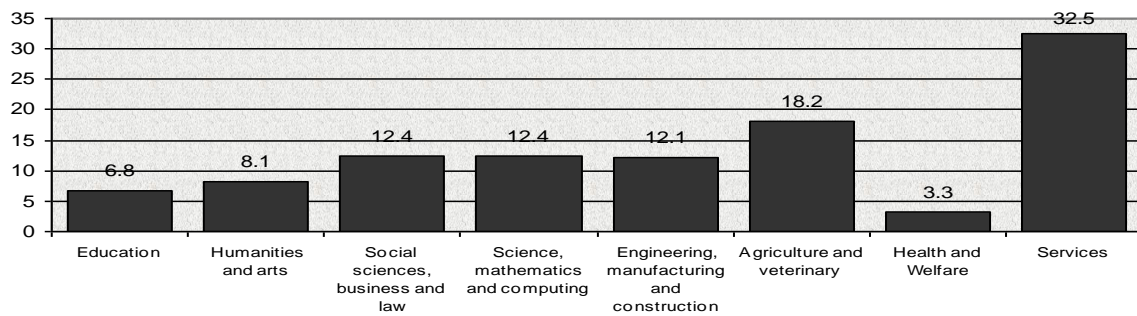


Figure 7. Education / occupation mismatch (ISCED 5-6) of persons aged 25-34 by study field and sex (2003-2007) - %

Source: EUROSTAT, Education and training

As regards the compatibility between labour market requirements and workforce qualifications the statistics for 2003-2007 show that the area most lacking is, as expected, the services with a 32.5% share, followed by agriculture and veterinary (Figure 7).

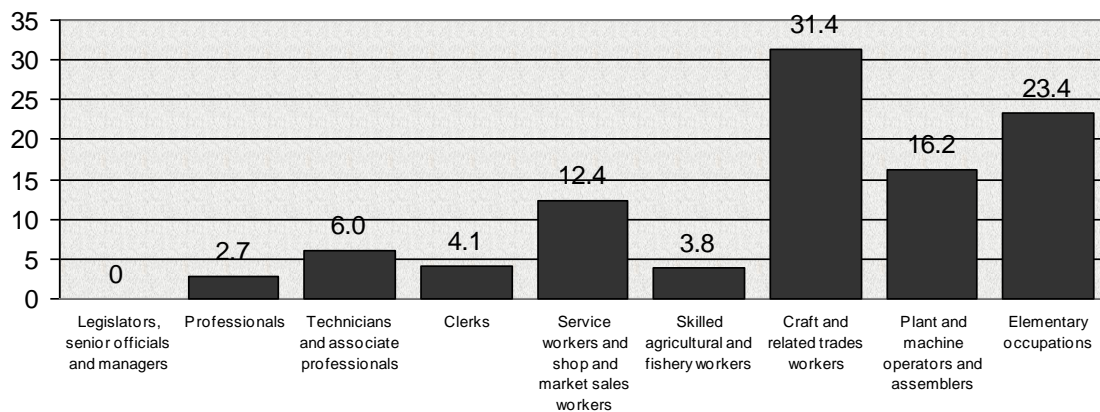


Figure 8. Previous occupations of the unemployed, by sex in 2007 - %

Source: EUROSTAT, Education and training

Unemployment structure analysis points to the types of declining occupations in Romania, before the crisis (2007): craft and related trades workers artisans and elementary occupations (Figure 8).

Meanwhile, the vacancy rate structure based on occupation is an indicator of the scarcity of supply in the labour market in the same year: professionals and technicians (Figure 9).

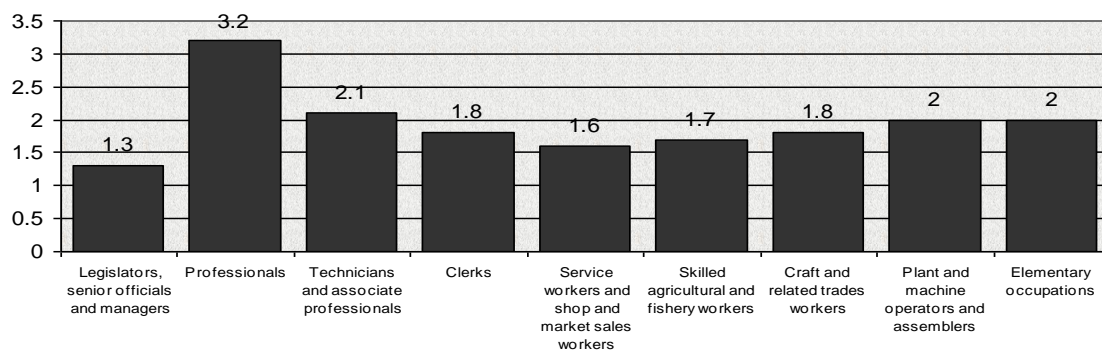


Figure 9. Job vacancy rate in 2007 (%)

Source: EUROSTAT, Labour market

5. CONCLUSIONS

Skills mismatches represent an intense debated subject in the labour market literature and a proper approach in implementing the policies designed to reduce it can decisively contribute to productivity increase.

We consider that skills mismatches are one of the most important points where labour market and education strategies must have an integrated perspective in order to help people to get suitable education and proper jobs.

These macroeconomic strategies have to be designed in a dynamic manner because in both areas (labour market and education) factors as technological progress and consumer's preference, which influence demand, are present.

In Romania, at the macroeconomic level, there are important mismatches from the skills perspective. One of the most affected categories is represented by the young people. Skill mismatch is due to the deficient linkage between the qualifications offered by education system and labour market requirements.

At the microeconomic level, from a company perspective it is important to design a proper human resource strategy. This has to take account of the skills needed in the future, the employee potential to develop new, anticipated skills and to plan and implement training programs, even offer some benefits to young students in order to specialise them in desired fields of activity.

It has been proved that skills mismatches generate job dissatisfaction, which finally determine the employee to live a certain company looking for new perspectives in his career.

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References:

1. Allen Jim, Van der Velden Rolf. Educational mismatches versus skill mismatches: effects on wages, job satisfaction, and on the job search: Oxford Economic Papers 3, 2001.
2. Allen Jim, De Weert Egbert. What do educational mismatches tell us about Skill mismatches? A cross country analysis: European Journal of Education, vol. 42, no. 1, 2007.
3. CEDEFOP. The skill matching challenge. Analysing skill mismatch & policy implications, Luxembourg: Publications Office of the European Union, 2010
4. COM. New Skills for New Jobs: Action now, a report by the Expert Group on New Skills for New Jobs prepared for the European Commission, 2010.
5. Dimian Gina Cristina, Iacob Andreea Iluzia. The Role of Education and Training in Fostering Labour Market Efficiency: Third International Conference *The Future of Europe The Economic and Financial Crisis Impact on The European Business Environment*, Faculty of International Business and Economics, Conference Papers, 2010.
6. Elias Peter, McKnight Abigail. Skill measurement in official statistics: recent developments in the UK and the rest of Europe: Oxford Economic Papers 3, Oxford University Press, 2001.
7. European Trade Union Confederation (ETUC), Union of Industrial **and** Employers' Confederations of Europe (UNICE), European Centre of Enterprises with Public Participation **and** of Enterprises of General Economic Interest (CEEP). Framework of actions for the lifelong development of competencies and qualifications, 2002.
8. Manacorda Marco, Petrongolo Barbara. Skill Mismatch and Unemployment in OECD Countries: *Economica*, 66, 1999.